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Preliminary Ecological Appraisal

May 2023

Former British Legion
Woodhouse Lane
Wythenshawe
Manchester
M22 9TF

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Executive Summary

As part of a proposed planning application regarding a plot of at Former British Legion, Woodhouse Lane in Wythenshawe, Manchester, a Preliminary Ecological Appraisal (PEA) was undertaken by Tyrer Ecological Consultants Ltd during April 2023, in accordance with the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and other best practice guidance. The proposed development is understood to entail the construction of an apartment complex with associated parking, access and landscaping. This survey and report were commissioned by Arcus Consulting.

Extensive findings, conclusions and recommendations are presented throughout the report; however, the reader should be aware of the following Key recommendations.

Bats: No further surveys are recommended in relation to bats. *Owing to the presence of bats in the area and suitable foraging habitat adjacent to the application site further lighting recommendations have been given in Section 8.0 of this report.*

Breeding Birds: No impacts in regard to protected or common birds are foreseen. *Recommendations for the unlikely event that breeding birds are found on the application site during the demolition and/or construction phase of the works are given in Section 8.0 of this report.*

Biodiversity Enhancement: A series of recommendations have been given within section 8.0 and **Appendix III** which provide opportunities for biological enhancement at the development site and within the wider area. Enhancement opportunities include recommendations relative to the provision of favourable planting and landscaping, with wildlife boxes.

Table of Contents

1.0 Introduction & Scope

2.0 Legislation & Policy

3.0 Priority Habitats & Species

4.0 Survey Methods

5.0 Limitations

6.0 Desk Study Results

7.0 Field Study Results

- 7.1. Habitat Survey
- 7.2. Vegetation
- 7.3. Bats
- 7.4. Breeding Birds
- 7.5. Overwintering Birds
- 7.6. Other Terrestrial Mammals
- 7.7. Herptiles
- 7.8. Invertebrates

8.0 Conclusions & Recommendations

9.0 Bibliography

Appendix I: Site Photographs

Appendix II: Botanical Species List

Appendix III: Biodiversity Enhancement: Recommendations

Appendix IV: UKHabs Habitat Map

1.0 Introduction & Objectives

1.1 As part of a proposed planning application regarding a plot of land at Former British Legion, Woodhouse Lane, in Wythenshawe, Manchester, a Preliminary Ecological Appraisal (PEA) was undertaken by Tyrer Ecological Consultants Ltd during April 2023, in accordance with the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and other best practice guidance. The details of the proposed development are understood to entail the construction of an apartment complex with associated parking, access and landscaping; see **Figure 1.1**.

1.2 Ecological surveys, particularly where a specially protected / noteworthy species is or may be present, are generally required as part of the Local Authority's Planning Policies. This survey and report were commissioned by Arcus Consulting.

Figure 1.1: a) Site location plan; b) proposed site plan (Source: *Arcus Consulting*)

Aims & Objectives

1.3 The aim of the survey was to ascertain the nature of the land, and where possible obtain information on any priority wildlife habitats, or species, that may be present and if so determine if they will be affected by the proposals. The survey therefore includes the following objectives:

- Gather baseline ecological information on site/off site (as necessary),
- Identify any likely ecological constraints associated with the proposals for the site (i.e. the presence of protected/priority habitats or species that exist within the confines of the application boundary, or zone of influence (ZOI),
- Identify mitigation / compensation measures likely to be required in line with the mitigation hierarchy (i.e. avoidance > impact minimisation > mitigation > compensation),
- Identify additional survey requirements following on from this preliminary appraisal,
- Identify a series of enhancement opportunities for biodiversity in line with national and local planning policy following '*Biodiversity Net Gain: Good practice principles for development*' (CIEEM *et. al.*, 2019).

1.4 As part of this ecological appraisal:

- Habitats on site were identified, measured and mapped using the UK Habitat Classification – Habitat Definitions Version 1.1 (2020);

1.5 As part of the Local Planning Authorities (LPA) planning policies and obligations to the Planning Framework, ecological surveys are generally required prior to planning permission being granted, particularly where protected/priority species are, or may be present, that could be affected by the proposals for which the application seeks consent.

1.6 This report will therefore provide baseline information as derived from the diurnal appraisal process outlined above and recommend any necessary additional surveys, or work, where applicable, to provide a conclusive ecological impact assessment.

1.7 The Applicant should be aware that if during the appraisal:

- The application site/area was found to be suitable for any European Protected Species (EPS), otherwise protected, or priority habitats/species, or,
- Signs of use by particular protected species were found, or suspected, or,
- Seasonal constraints significantly limit the gathering of ecological information to arrive at an accurate conclusion on which the planning application can proceed,

Then more detailed surveys may be recommended where necessary, to allow the ecologist to arrive at a conclusive impact assessment.

1.8 If any protected species was subsequently found during detailed further surveys and / or may be affected by the development proposals, then a European Protected Species Mitigation Licence (EPSML) may be required to proceed with the development.

1.9 Where more detailed surveys are recommended by the ecologist, following ecological appraisal, then Local Planning Authorities (LPA's) on the advice of their ecological advisors,

may not grant permission until such time that all relevant material information is gathered in accordance with their obligations to the legislature.

1.10 Protected/priority species omitted from this report have been discounted due to factors including obvious absence/isolation of suitable habitats, and/or distributional aspects negating the necessity to survey for them, and/or the proposed works were not considered to negatively impact the species or encroach on areas where the species may be present.

2.0 Legislation & Policy

2.1 The legislature considered for the purposes of this report includes the following:

- Conservation of Habitats and Species Regulations (amendment) (2019) (EU Exit)
- Wildlife and Countryside Act (1981) (as amended)
- Countryside Rights of Way (CRoW) Act (2000)
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act (1992)
- The Hedgerow Regulations (1997)
- Town and Country Planning Act (1990)
- Wild Mammals Protection Act (1996)

2.2 These acts entail relevance to both protected and invasive species. The degree of protection offered to taxa provided within existing UK and EU legislature often varies depending on species/group, for example, some species may purely be protected during one of its life stages (e.g. common species of breeding bird whilst nesting/with eggs/young); some species may receive full protection within the EU (e.g. otter), whereas others may be protected solely on a national basis (e.g. grass snake).

2.3 **Table 2.1** contains appropriate legislature to each species/group specifically respective to the site and provides the relevance of said legislation.

Table 2.1 - Relevant Legislation

Species Group/Species	Relevant Legislature	Level of Protection
Badger	Protection of Badgers Act (1992), Wildlife and Countryside Act (1981) (as amended)	Illegal to wilfully kill, injure or take a badger (or attempt to do so). Cruelly ill-treat a badger. Dig for a badger. Intentionally or recklessly damage or destroy a badger sett, or obstruct access to it. Cause a dog to enter a badger sett. Disturb a badger when it is occupying a sett.
Bats	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended)	All British bats and their roosts are afforded full protection from damage/destruction and bats may not be injured/killed/taken at any life stage. Once identified, roosts are protected whether the bat is in occupation or not.

Birds (Breeding)	CRoW Act (2000) Wildlife and Countryside Act (1981) (as amended)	All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected. Birds listed on Schedule 1 Wildlife & Countryside Act (1981) (as amended) are afforded a greater level of protection.
Great Crested Newt (GCN)	CRoW Act (2000) Conservation of Habitats and Species Regulations (2019) (EU Exit) Wildlife and Countryside Act (1981) (as amended)	Great Crested Newts (GCN's) are fully protected from disturbance, killing, injuring or possession at any life stage. Confirmed breeding ponds and resting places are afforded the same protection.
Invasive Plant Species	Wildlife and Countryside Act (1981) (as amended) The Invasive Alien Species (Enforcement and Permitting) Order 2019	Species listed within Schedule 9/Schedule 2 as invasive, including Japanese Knotweed (*Reynoutria japonica*) and Himalayan Balsam (*Impatiens glandulifera*), for example, carry notoriety regarding development. The Acts make it an offence for any person to grow or cause to grow in the wild any plants listed as invasive.
Reptiles	Conservation of Habitats and Species Regulations (2019) (EU Exit) - SL/SS Wildlife and Countryside Act (1981) (as amended) - SL/SS CRoW Act (2000)	All native reptile species have some degree of protection in the UK, through section 8(1) and (5) (specified in Schedule 5) of the Wildlife and Countryside Act 1981 (as amended). Sand lizard (SL) and smooth snake (SS) are species of principal importance however with greater protection(s).

Policy

2.4 Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

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.

2.5 This is supported by Policies EN3 The Open Countryside & EN7 Environmentally important Areas which states:

'The Council has designated areas of open countryside that define the rural context of the district. Any development proposals located within the open countryside should have due regard to all relevant policies contained within the Local Plan, in particular policies within the Development Management DPD relating to development in the rural areas'

And:

'There are a number of sites within the district that have been designated at International, National and Regional level for their environmental importance. These have been identified on the Local Plan Policies Map and will be protected from development proposals that have a detrimental impact on their designation.'

3.0 Priority Habitats & Species

National context

3.1 In the United Kingdom, legal protection and otherwise legislative recognition is afforded to particular habitats and species. Certain habitats and species are considered to hold nature conservation importance and are thus protected due to factors such as their ecological functionality, their rarity, their vulnerability, environmental importance or declining population/status. They are referred to as priority habitats and priority species.

3.2 The UK Biodiversity Action Plan (UKBAP) provided a statutory basis for lists of habitats and species of national conservation importance - now transposed under section 41 (s.41) of the Natural Environment Rural Communities Act 2006 (NERC Act).

3.3 The following species are considered relevant to the survey area:

Species:

- Bats: brown long-eared (*Plecotus auritus*), soprano pipistrelle (*Pipistrellus pygmaeus*) and common noctule (*Nyctalus noctula*),
- s.41 Bird species that include but not limited to: grey partridge (*Perdix perdix*), dunnock (*Prunella modularis*), bullfinch (*Pyrrhula pyrrhula*), song thrush (*Turdus philomelos*), tree sparrow (*Passer montanus*), house sparrow (*Passer domesticus*), Starling (*Sturnus vulgaris*), Willow Tit (*Poecile montanus*)., curlew (*Numenius arquata*), pink footed goose (*Anser brachyrhynchus*),
- Land mammals that include: hedgehog (*Erinaceus europaeus*), brown hare (*Lepus europaeus*), for e.g.,
- Herpetofauna that include: great crested newt (GCN) (*Triturus cristatus*), common toad (*Bufo bufo*), slow worm (*Anguis fragilis*) for e.g.,
- Botanical species that includes purple ramping-fumitory (*Fumaria purpurea*), bluebell (*Hyacinthoides non-scripta*), cornflower (*Centaurea cyanus*) for e.g.

District context

3.4 Local Biodiversity Action Plans (LBAP's) are a way of encouraging people to work together and deliver a program of continuing action for biodiversity at a local level. LBAPs also embrace the idea of 'local distinctiveness'; habitats and species which are not considered UK conservation priorities can be catered for by LBAPs if they are of particular local significance.

LBAP's set out practical steps that aim to:

- Help protect biodiversity,
- Enhance and improve biodiversity where possible, and,
- Promote biodiversity at a local level

3.5 The Greater Manchester Biodiversity Action Plan (GMBAP, 2009) lists key local habitats/species considered to be rare or declining in the area; some may be of national concern while others are significant at local level. The following local plans are considered of potential relevance to the survey:

Species

- Bats (all);
- Black Redstart (*Phoenicurus ochruros*)
- Native Black Poplar (*Populus nigra subsp. betulifolia*);
- Twite (*Carduelis flavirostris*);
- Willow Tit (*Poecile montanus*).

Habitats

- Hedgerows

4.0 Survey Methods

4.1 As part of the Preliminary Ecological Appraisal report, desk-top and field-based studies were conducted. Methods for both components of the appraisal are given below.

Desktop Study

4.2 Prior to a site visit a desktop study was conducted using online resources to obtain information pertaining to any sites afforded statutory (e.g. SSSI) and non-statutory (e.g. LWS) designations within 2.0km of the site boundary. To do so, the 'Multi Agency Geographic Information for the Countryside (MAGIC – provided by Defra)' along with data from the 'Natural England Open Data Geoportal' was accessed to gather such information; this interactive mapping service was also used to locate any European Protected Species Mitigation Licenses (EPSML) and species records to further inform conclusions concerning protected species in the context of the study site and its proposed development.

4.3 Historic satellite imagery was reviewed using sources such as Google Earth (© 2022/23) to help establish past use of the land and determine the nature of adjoining and extending habitats; such information aids in the understanding of how the site might interact with its surroundings ecologically and its value in that context, and how the development may impact at a wider scale.

4.4 In addition the Council Planning Portal 'Search for planning applications' function was utilised to help inform the desktop study by analysis of existing publicly accessible ecological survey results that have been carried out locally within the previous five years.

4.5 A commercial data request to the Local Environment Records Centre serving the area has not been sourced during this preliminary appraisal assessment and is justified through application of the following recent guidance:

1) The Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK (CIEEM, 2020) states: "It is generally expected that a desk study, including a data search, will be a key part of the ecological surveys or reports produced to inform a planning application. **Freely available web-based sources of data and contextual information should always be used**; in some cases, it may be acceptable to not undertake a data search with the LERC or other relevant NSS or local interest groups, for example:

*ii) Situations where the data search would be extremely unlikely to provide information needed to inform the assessment; due to the **scale** and **location** of the proposed development. The appropriateness of excluding a data search will need to be judged on a case-by-case basis as, in most situations, it will be essential to carry out such a search even if the development is very small or is likely to have a low impact. It can be very difficult to demonstrate that a data search would not have provided relevant information without obtaining and reviewing those data.*

iii) In some cases for Preliminary Roost Assessments of buildings in low impact / small-scale scenarios, such as an extension to a residential property, loft conversions (full or partial), installation of Velux/dormer windows, single modern agricultural or similar building conversion or demolition; however, it should not be assumed that data searches are never required for such scenarios and this must be judged on a case by case basis and justified accordingly.

2) The Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) states: *"Very occasionally it might be possible to carry out a robust PEA without obtaining LERC/NBDC/CEDaR data; this will usually only apply to* ***low impact or small-scale projects*** *(e.g. by virtue of size, extent, duration of works, magnitude and locality), and should be determined on a case-by-case basis."*

As exemptions as made **bold** above can be applied for the proposed development in good practice, it is considered unnecessary to conduct a commercial data request at this time, however, if a data search is considered to be necessary by the Local Authority or advisory body to better inform the appraisal, a proportionate data search should be commissioned with results interpreted into the conclusions and recommendations of a re-issued/updated report.

Field Survey

4.6 A daytime preliminary ecological appraisal was conducted on 13th April 2023 in dry conditions following rain (8ºC), wind 1/12 (Beaufort scale), 95% cloud by Miss. K. Judson Qualifying CIEEM, a Consultant Ecologist with 3 years professional experience, and FISC 5 botanist who is additionally an accredited agent on the Class 2 bat licence of Mrs. K. Wilding.

Floristic assessment

4.7 The survey followed the UK Habitat Classification Version 1.1 (Butcher, et.al., 2020) being introduced as part of the roll out of Biodiversity Net-gain with reference to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Methodology standards (JNCC, 2010) and reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Technical Guidance Series "*Guidelines for Preliminary Ecological Appraisal*, *2nd Edition"* (CIEEM, 2017).

4.8 During the survey walkover, botanical assemblages were assessed, and the land was inspected for the presence of red-listed (Stroh *et al*, 2014; Hodgetts, 2011), s.41 and LBAP species alongside specially protected species as listed under Schedule 8 of the Wildlife and Countryside Act (WCA) (1981) (as amended) and / or Schedule 5 The Conservation of Habitats and Species (amendment) (EU exit) Regulations (2019). Species nomenclature follows Stace, C. (2019) – definitive English names.

4.9 Additional to attributing ecological value to red-listed / BAP species, in accordance with existing CIEEM guidance, a geographic frame of reference is also adopted. Plant species and habitats may be recognised for their ecological notoriety on a geographical scale which is adopted on a site-to-site basis (see **Figure 4.1** overleaf).

For a site-relevant species list, see **Appendix II**.

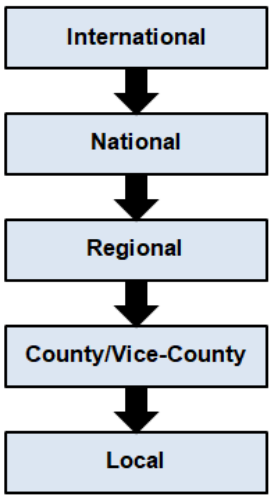

Figure 4.1 - Geographic Frame of Reference entailing degrees of conservation importance

4.10 In combination with assessing the area in relation to flora and habitats of conservation importance, the land was also assessed in relation to the presence of invasive non-native species (INNS) as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981) (as amended) and The Invasive Alien Species (Enforcement and Permitting) Order 2019.

Faunal assessment

4.11 The identification and/or evidence of fauna encountered would be documented whilst in tandem the area was assessed for the potential to support the priority species covered in the previous tables. The 'walkover' also aimed to identify any ephemeral pools or unmapped waterbodies.

Bats

4.12 The site would be assessed for bats, buildings (where present) would be inspected for potential places that may be of value to bats and to determine evidence of use. This typically involves a search for potential roost features (PRF) both internally (investigation of loft spaces/upper floors/internal elevations) as well as externally, comprising an investigation of features (roof material, building components) using a high-powered torch. Field signs of bats typically comprise bat droppings, incidental animal presence, dead specimens and/or prey items.

4.13 Trees (where present) would be inspected for places that may be of value to bats and to determine if evidence of use was present; this typically involves a search for potential roost features along with an investigation of those features using a high-powered torch or close focus binoculars. Potential roost features can include woodpecker holes, rot holes, hazard beams, other vertical or horizontal cracks or splits in stems and branches, partially decayed lifted bark, knot holes, man-made holes, tear-outs, cankers in which cavities have developed, other hollows or cavities, including butt-rots, double-leaders forming compression forks with included bark, gaps between overlapping stems or branches, partially detached Ivy with stem diameters in excess of 50mm or bat/bird boxes. Several mature trees are present along the survey boundaries; it is not anticipated that these will be impacted by the proposed works these were investigated in full.

4.14 Criteria for preliminary bat roost assessment are based upon the determinants given in the Bat Conservation Trust - Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed. (2016): (see **Figure 4.2**).

Table 4.1 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure 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 conditions[a] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation[b]). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.[c]	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[a] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or 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[a] and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Figure 4.2 - Bat Conservation Trust (BCT) guidelines extract

4.15 Factors considered during the preliminary roost assessment include:

- Knowledge of bat species relevant to the site location and geographical range,
- Nature of the immediate / surrounding habitat in relation to foraging opportunities,
- Presence and conditions of loft spaces, upper floors, roof linings where present,
- Presence / absence of roost potential,
- Value of roost potential if present.

Breeding Birds

4.16 Habitats would be checked for evidence of nesting birds and suitability for relevant species. Bird species observed and heard were recorded on site, and a search was made for nest material, or areas suitable for nesting. Additional to the site's capacity to support generally common species for breeding, the area was also subject to an assessment for the site's capacity to support species especially protected under Schedule 1 of the Wildlife &

Countryside Act (1981) (as amended), for example black redstart (*Phoenicurus ochruros*) and other priority species.

Other terrestrial mammals

4.17 The walkover included a search for field signs of badger (*Meles meles*) which includes signs of activity such as digging, setts, 'runs' leading to and from a sett and the existence of latrines or 'snuffle' holes where badgers have foraged in the ground. Any signs indicative of use of the site by European hedgehogs (*Erinaceus europaeus*) and brown hare (*Lepus europaeus*) or habitats of value to them, were also recorded.

GCN

4.18 During desktop assessment a 250m search was undertaken from a site-central grid reference in relation to the presence of ponds, ditches or other water bodies that may support great crested newts (GCN). The information gathered would then be used to aid in establishing if more detailed surveys are required.

NB: *English Nature's (now Natural England) Great Crested Newt Mitigation Guidelines (2001) states ponds within 500m of a proposed development site should be considered for their potential to support GCN, however, in some instances this distance may be reduced to 250m due to the presence of physical barriers and obstructions or based on the likely magnitude of impacts arising from the proposed development.*

4.19 Following current best practice considering the national roll out of District Level Licencing (DLL) across England and based on likely effects, a proportionate assessment of the water bodies range within 250m from site has been applied despite the small scale and low impact nature of the proposed development owing to the favourable surrounding habitat; ponds outside of this range and their associated flora/fauna are highly unlikely to be impacted. Where a development is anticipated to affect GCN the search can be extended up to 500m or more.

4.20 No ponds exist on the application site; nor do any ponds exist within 250m of the application site.

Reptiles

4.21 The site and its surroundings were assessed for suitability for use by reptiles, with particular attention paid to features that could be used as basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, piles of hardcore) and opportunities for foraging (*e.g.* rough grassland and scrub). Beebee & Griffiths (2000) state specific habitat preferences of common UK reptiles:

- Common Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to heaths, walls and pastures, as well as brownfield sites,
- Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land under refugia,
- Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards but with a greater reliance on ponds and wetlands, where they prey on amphibians.

In assessment of a site for reptiles important habitat characteristics are considered, outlined in **Table 4.2**, as derived from the Reptile Habitat Management Handbook (Edgar, 2010).

Table 4.2 - Important habitat characteristics for reptiles

1. Location (in respect of species range)	7. Connectivity to good quality habitat
2. Vegetation structure	8. Prey abundance
3. Insolation	9. Refuge opportunity
4. Aspect	10. Hibernation habitat potential
5. Topography	11. Disturbance regime
6. Surface geology	12. Egg-laying site potential

Invertebrates

4.22 The application site was assessed for the presence of features that should be considered of high value to invertebrates. Several important features were considered, based on the assemblage descriptions provided within the Research Report "Surveying terrestrial and freshwater invertebrates for conservation evaluation" (NERR005, 2007), including but not limited to:

- Wood decay,
- Early successional mosaic habitat,
- Shaded ground layer,
- Still and flowing water.

4.23 The results, conclusions and recommendations of this report are based on a number of factors i.e.

- Skills and experience of the surveyor,
- Knowledge of flora and fauna relevant to the site location and geographical range,
- Nature of the immediate and surrounding habitat in relation to shelter, foraging and commuting opportunities.

4.24 The results, conclusions and recommendations of this report have been assessed by Mrs. K. Wilding, Director of Tyrer Ecological Consultants Ltd, and her assessment concurs with the findings and recommendations of Miss. K. Judson.

5.0 Limitations

5.1 This report does not contain a comprehensive list entailing the totality of botanical taxa on site. Species listed within **Appendix II** are recorded from a combination of the seasonal timing the survey took place and botanical identification skills of the surveyor. Many plant species are only evident at certain times of the year; consequently, it is possible that some plant species may have gone undetected.

5.2 The optimal time of the year to carry out a preliminary ecological appraisal is April to October; therefore, the survey was carried out in the optimal period. Habitats were able to be identified and any further need for surveys would be recommended.

5.3 Taking everything into consideration no significant limitations affected the survey effort that would affect the results, conclusions, and recommendations in this report.

6.0 Desk Study Results

6.1 Former British Legion, Wythenshawe (hereafter referred to in-part as "the application site" or "the site", circa 1100m^2) is situated in Wythenshawe (**Figure 6.1**), approximately 10km south of Manchester city centre. The application site comprises hard standing and open modified grassland with minor presence of introduced shrub bordered by fencing and mortared wall(s).

Figure 6.1 - Location of application site within the surrounding landscape (Source: Google Earth 2023)

6.2 Immediate environs are relatively urban in that they are characterised by residential developments with associated amenity spaces and access roads in all directions, commercial infrastructure to the south, and education and community facilities to the east over Woodhouse Lane.

6.3 The extending environs broadly continue in similarity to those of the immediate with matrices of housing with associated gardens interspersed by public and commercial premises. With regard to features of ecological interest, gardens and green amenity spaces act as steppingstone habitats for fauna present in the local environment between pockets of priority deciduous woodland that feature sporadically throughout the extending environment, however, owing to the abundance of roads and infrastructure avian fauna are more likely to use such features than terrestrial fauna. The nearest pocket of priority deciduous woodland to the application site is located approximately 250m southeast of the site, though is isolated from the site by several minor roads and a tramway. To the northwest of the considered range are two areas of ancient woodland, namely Black Carr Wood and Round's Wood; both woodlands are isolated from the site by the M56 and at least 1.70km of housing hence connectivity between these areas of ancient woodland for terrestrial fauna and the application site is considered unlikely.

6.4 In respect to connectivity, despite the steppingstone habitats present in the form of residential and public gardens, overall, the site has moderately poor linkages to the

abovementioned habitats with abundant infrastructure providing a significant barrier to dispersal for most terrestrial species, though access to the application site by avian fauna is considered possible.

6.6 The protected species most typically associated with the habitats described is the common pipistrelle (*Pipistrellus pipistrellus*) bat, frequently associated with buildings in both urban and rural settings, and this species presence in surrounding landscape is likely.

6.7 No internationally or nationally designated sites are located within 2.0km of the application site boundary however one locally designated site falls within the considered radius, namely Gatley Carrs LNR (Local Nature Reserve. Gatley Carrs LNR is an 8.45ha site located approximately 1.85km northeast of the application site boundary and is designated for its bird, mammal, invertebrate and plant assemblages.

6.8 In relation to ponds none exist on site nor are any present within 250m of the application site. The Rochdale Canal is, however, located 35m southeast of the application site; the canal is separated from the application site by several multi-story buildings and streets.

6.9 **Bats:** One European Protected Species Mitigation Licence (EPSML) has been granted in relation to bats within 2.0km of the site boundary (**Figure 6.2**); this licence pertains to common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Natterer's (*Myotis nattereri*), and whiskered (*Myotis mystacinus*) bat day roosts and is located approximately 1.96km southwest of the site (Ref: 2015-9463-EPS-MIT).

6.10 **Great Crested Newt:** No EPSMLs in relation to GCN have been granted within the 2.0km buffer.

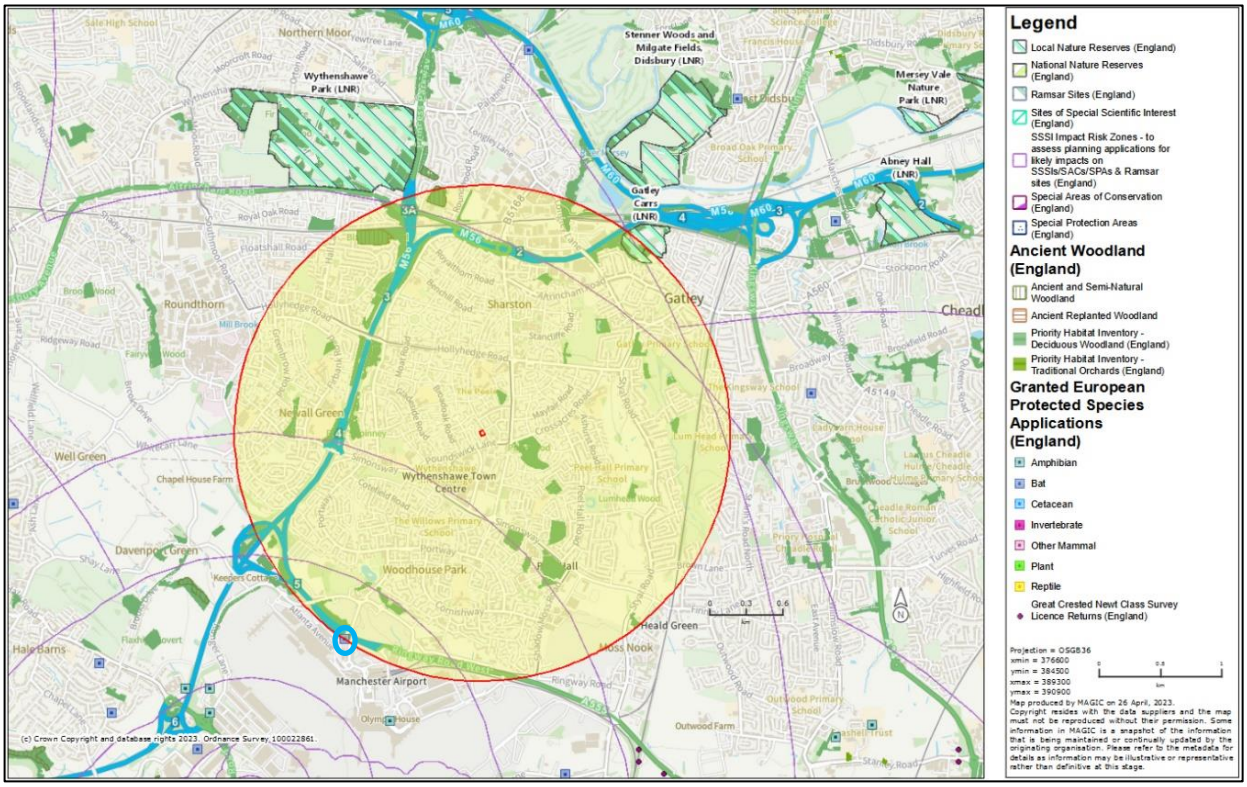

Figure 6.2 – Priority habitats, designated sites and EPSML record(s) (circled) located within 2.0km of the application site boundary.

7.0 Field Survey Results

7.1 Habitat Survey

7.1.1 See **Table 7.1** (below) for habitat descriptions. Refer to **Appendix IV** - UKHabs Habitat Map for the location of all described habitats & Target Notes (TN). Species nomenclature follows Stace, C. (2019) – definitive English names.

Table 7.1 - UKHabs habitat types within the survey area with target notes

Habitat Code	Description
Modified grassland – **g4**	The majority of the application site is characterised by circa 815m of open modified grassland, species present include perennial rye-grass (*Lolium perenne),* annual meadow-grass (*Poa annua*), Yorkshire fog (*Holcus lanatus*) and white clover (*Ranunculus repens*) which collectively dominate the sward; other species present, include dandelion (*Taraxacum* sp), dove's-foot crane's-bill (*Geranium molle*), self-heal (*Prunella vulgaris*), false oat-grass (*Arrhenatherum elatius*), herb-Robert (*Geranium robertianum*), common ragwort (*Jacobeae vulgaris*), cut-leaved crane's-bill (*Geranium dissectum*), and field wood-rush (*Luzula campestris*). At the eastern border of the site is a small strip of introduced species including flowering red currant (*Ribes sanguineum*), grape hyacinth (*Muscari sp*.). The ward at time of survey was of a low to medium length suggesting it is occasionally mown.
	Secondary Habitat Code(s): 64 mown
Developed sealed surface - **u1b**	At the south of the application site is an area of unvegetated sealed surface designed for parking that is currently being used for storage purposes.
Built linear feature – **u1e 68 69**	Fencing surrounds the majority of the application site whilst a mortared wall with metal fencing atop borders the eastern boundary of the site.
	Secondary Habitat Code(s): 68 mortared wall, 69 fence

7.2 Vegetation

7.2.1 No species of conservation importance or species listed as invasive under Schedule 9 of the WCA or Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 were identified anywhere within the site boundary.

7.3 Bats

7.3.1 No buildings or trees are present within the application site boundary.

7.4 Breeding Birds

7.4.1 In relation to WCA Schedule 1 specially protected bird species such as black redstart, which is associated with urban environments, no evidence was found to suggest the presence of this species.

7.4.2 In relation to wider breeding birds, no current or historic evidence of nesting birds was identified anywhere within the site though buildings adjacent may provide suitable nesting platforms, they, if present, are unlikely to be impacted by the proposed development.

7.6 Other Terrestrial Mammals

Badger

7.6.1 No field signs were located to suggest the presence of Badgers, including any setts, latrines, pathways, hairs, footprints or feeding signs such as snuffle holes and scratched trees/logs; the application site and surrounding habitat is considered highly unsuitable for this species and their presence on the application site is considered highly unlikely.

European Hedgehog

7.6.2 No areas that constitute suitable habitat for hedgehog (*Erinaceus europaeus*) for refuge, foraging, and commuting are present across the site, typically including scrub, dense vegetation, hedgerow and trees. The presence of European hedgehog on the application site is highly unlikely.

7.7 Herptiles

Great Crested Newt (GCN)

7.7.1 No ponds are present within 250m of the application site, the site offers unfavourable habitat for GCN and the surrounding land is considered highly hostile to GCN and hence GCN are not considered a material consideration in this planning proposal.

Other Herptiles

7.7.6 Given the habitat present on site and the surrounding habitats, as described, which are highly urbanised and predominantly devoid of vegetation or waterbodies suitable for supporting common and widespread herptiles such as common frog (*Rana temporaria*) and common toad (*Bufo bufo*). The presence of this species group on the application site is considered highly unlikely.

Reptiles

7.7.7 With regards to reptiles, the application site does not provide a suitable diversity of habitat structures required for this species group and is highly fragmented from any suitable surrounding habitat hence reptiles are not a material consideration in this planning application.

7.8 Invertebrates

7.8.1 An assessment of habitats and features on site found no ecotones to be present and an absence of deadwood or any other such feature likely to be of local significance to invertebrate assemblages or specially protected invertebrates; no impacts are foreseen for this taxon.

8.0 Conclusions & Recommendations

Habitats

8.1 No habitats of conservation importance were identified on the application site.

Vegetation

8.2 No botanical species of conservation importance, nor species of conservation importance or species listed as invasive under Schedule 9 of the WCA and/or Schedule 2 of The Invasive Alien Species (Enforcement and Permitting) Order 2019 were identified within the site boundary and no further recommendations are applied at this time.

8.3 To improve the value of the site for native wildlife, a list of appropriate native species that might be incorporated into the proposed development has been supplied (see **Appendix III**).

Bats

8.4 No recommendations are necessary in relation to bats and trees as no vegetation on site was observed as having bat roost potential; however, trees and linear features in the immediate vicinity of the application site offer some minor foraging and commuting suitability for bats associate with urban environments hence lighting recommendations are provided below.

8.5 Installation of harsh artificial lighting as part of any development that exceeds current levels could have a negative impact upon foraging/commuting bats in the landscape, particularly if increased light spillage occurs in areas of that are currently free from illumination such as boundary features. A bat-sensitive lighting plan is recommended as part of the scheme, in order to avoid potential impacts to bats that may use the site. Several options to consider have been listed below, though the reader is referred to the Bat Conservation Lighting Guidelines for further information.

Appropriate luminaire specifications
Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires.

All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Lighting should be directed to where it is needed and light spillage avoided. This can be achieved by the design of the luminaire and by using accessories such as hoods, cowls, louvres and shields to direct the light to the intended area only. Planting can also be used as a barrier or manmade features that are required within the build can be positioned so as to form a barrier.

Predicting where the light cone and light spill will occur: There are lighting design computer programs that are widely in use which produce an image of the site in question, showing how the area will be affected by light spill when all the factors of the lighting components

listed above are taken into consideration. This should be a useful tool to inform the mitigation process.

Light levels: The light should be as low as guidelines permit. If lighting is not needed in any particular area, do not light. Numerous software programmes are currently available which can be used inform lighting plans, demonstrating how lighting decisions will illuminate a site.

Please refer to the 'Landscape and urban design for bats and biodiversity' (*Gunnell et. al.*, 2012, Bat Conservation Trust)
Guidance Note 8 'Bats and Artificial Lighting' 2018, Bat Conservation Trust for further information.

Breeding Birds

8.6 No suitable nesting habitat or evidence of breeding was identified at the application site, and no further surveys are required in relation to breeding birds. However, the applicant should be aware that all breeding birds and their actively used nests are protected, and therefore it is recommended that during any works which occur outside the breeding bird season (1st March to 31st August inclusive) all contractors should be aware that where/if active nests are located then any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally. This can be aided, for example, via implementation of appropriate buffer zone(s) around the nest site (typically 5-10 metres) in which no disturbance is permitted until the nest is no longer in use, as confirmed by a professional ecologist.

Point 3.24 of the British Standards Publication 42020:2013 defines a professional ecologist as: "*a person who has, through relevant education, training or experience, gained recognised qualifications and expertise in the field of ecology and environmental management.*"

NB: *All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected from destruction, damage and disturbance under the Wildlife & Countryside Act 1981* (*as amended*)*. It is a punishable offence to interfere in any way with an active nest.*

8.7 It is recommended enhancement for nesting birds be incorporated into the proposed development, as per **Appendix III**.

Other Terrestrial Mammals

8.8 No field signs were located to suggest the presence of Badgers or any other specially protected species; no further surveys are required nor impacts likely to occur to any specially protected mammal species.

8.9 In relation to hedgehog, habitats present no suitability for refuge or hibernation, and are furthermore unlikely to be used for foraging or commuting given the urban nature of the site. Strictly as a precautionary measure it is recommended that if hedgehogs are encountered during working operations, particularly if there is a risk of danger to the animals, they should be carefully placed in like-for-like habitat away from the working area. Low-angled, sloping boards of approximately 300mm width should be placed within any excavations at the end of each working day to facilitate a means of escape for small mammals.

Herpetofauna

Great crested newt

8.10 The area surrounding the application site is absent of records of GCN or a pond network that could support a population of GCN, and this species can be reasonably ruled out as an ecological constraint in relation to the development proposals. Similarly, other more common, robust amphibian species such as common toad and common frog are unlikely to utilise the site.

8.11 The site is unlikely to host a population of any reptile species based on habitat types and its suburban location, and there are no further recommendations in relation to this taxon.

Invertebrates

8.12 No impacts to local populations of invertebrates are foreseen; no further surveys are recommended, though enhancement measures for invertebrates as provided within **Appendix III** should be considered by that applicant to improve the biodiversity value of the site.

Biodiversity Enhancement

8.13 General recommended ideas to enhance the site in accordance with the principles of '*Biodiversity Net Gain: Good practice principles for development*' (CIEEM *et. al.*, 2019), are presented in **Appendix III**.

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Appendix I: Site Photographs

Plate 1 – Overview of the application site

Plate 2 – Introduced and native species located at the east of the application site

Plate 3 – Character of the northern fence

Plate 4 – Character of the hardstanding section of the application site

Plate 5 – Character of the hardstanding section of the application site

Appendix II: Site-Specific Botanical Species List

Each species recorded was given an abundance value according to the standard DAFOR scale, where:

- D = Dominant
- A = Abundant
- F = Frequent*
- Occasional*
- R = Rare*

*These values can be prefixed by the letter L (locally) to provide more subtle biogeographical data.

Taxon	Common Name	Scientific Name	DAFOR
Anthophyta (Flowering plants)	Annual Meadow-grass	*Poa annua*	F
	Common Daisy	*Bellis perennis*	O
	Common Mouse-ear	*Cerastium fontanum*	R
	Common Ragwort	*Jacobaea vulgaris*	O
	Creeping Buttercup	*Ranunculus repens*	F
	Cut-leaved Crane's-bill	*Geranium dissectum*	R
	Dandelion	*Taraxacum sp.*	F
	Field Woodrush	*Luzula campestris*	F
	Flowering Red Currant	*Ribes sanguineum*	LA
	Grape Hyacinth	*Muscari sp.*	O
	Greater Celandine	*Chelidonium majus*	R
	Hedge Woundwort	*Stachys sylvatica*	O
	Herb-Robert	*Geranium robertianum*	O
	Nipplewort	*Lapsana communis*	O
	Perennial Rye-grass	*Lolium perenne*	A
	Selfheal	*Prunella vulgaris*	F
	Shining Crane's-bill	*Geranium lucidum*	R
	Spanish Bluebell	*Hyacinthoides hispanica*	O
	Spear Thistle	*Cirsium vulgare*	O
	Sycamore	*Acer pseudoplatanus*	O
	Tutsan	*Hypericum androsaemum*	O
	White Clover	*Trifolium repens*	F
	Yorkshire Fog	*Holcus lanatus*	F

Appendix III: Biodiversity Enhancement

Proposed - Native Landscaping

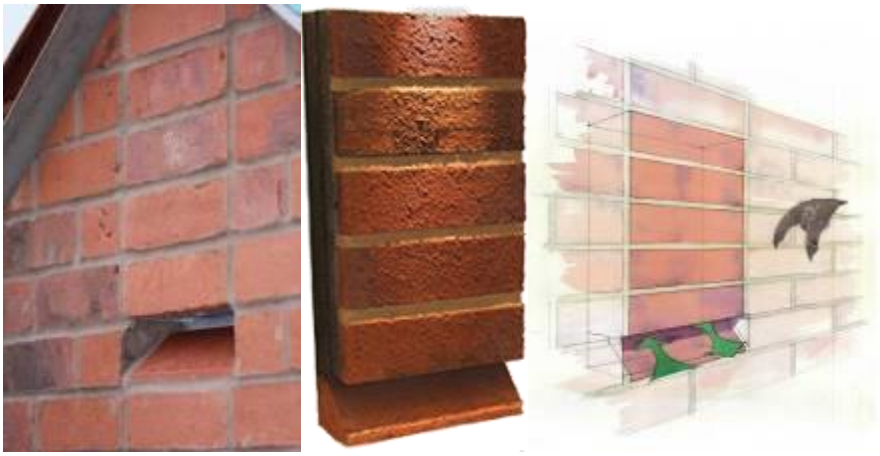
A series of trees, woody shrubs, climbers, herbaceous plants and ferns have been given within the table below which are suitable for incorporation into the proposed development; the list of plants given below are readily commercially available.

	Common Name	Scientific Name	Planting Preference
Ferns	Male Fern	*Dryopteris filix-mas*	Semi-shade or shaded
	Soft Shied-fern	*Polystichum setiferum*	Semi-shade or shaded
	Maidenhair Fern	*Adiantum capillus-veneris*	Suitable for rockeries / walled gardens
	Royal Fern	*Osmunda regalis*	Full sun in moist-damp areas
Herbaceous plants	Bloody Crane's-bill	*Geranium sanguineum*	Dry soils - suitable for rockeries
	Columbine	*Aquilegia vulgaris*	Semi-shade or open areas
	English Bluebell	*Hyacinthoides non-scripta*	Moist soils in semi-shade or open areas
	Giant Bellflower	*Campanula latifolia*	Semi-shade or open areas
	Greater Knapweed	*Centaurea scabiosa*	Dry-moist soils. Suitable for borders
	Greater Woodrush	*Luzula sylvatica*	Moist soils in semi-shade or open areas
	Meadow Crane's-bill	*Geranium pratense*	Humid-moist soils. Suitable for borders
	Musk Mallow	*Malva moschata*	Dry-moist soils. Suitable for borders and rockeries
	Sea Campion	*Silene uniflora*	Dry soils - suitable for rockeries
	Stinking Hellebore	*Helleborus foetidus*	Semi-shade or open areas
Climbers	Honeysuckle	*Lonicera periclymenum*	Dry-moist soils
	Hops	*Humulus lupulus*	Dry-moist soils
	Ivy	*Hedera helix*	Dry-moist soils
	Sweet-briar	*Rosa rubiginosa*	Dry-moist soils
Woody Shrubs	Blackthorn	*Prunus spinosa*	-
	Dogwood	*Cornus sanguinea*	-
	Guelder Rose	*Vibernum opulus*	-
	Hawthorn	*Crataegus monogyna*	-
	Hazel	*Corylus avellana*	-
	Holly	*Ilex aquifolium*	-
Trees	Alder Buckthorn	*Frangula alnus*	-
	Osier	*Salix viminalis*	-
	Pedunculate Oak	*Quercus robur*	-
	Purple Willow	*Salix purpurea*	-
	Rowan	*Sorbus aucuparia*	-
	Silver Birch	*Betula pendula*	-
	Wild Cherry	*Prunus avium*	-
Aquatic/marginal plants	Common Water-crowfoot	*Ranunculus aquatilis*	Ponds
	Marsh Marigold	*Caltha palustris*	Marginal vegetation
	Ragged Robin	*Silene flos-cucculi*	Marginal vegetation
	Water Mint	*Mentha aquatica*	Marginal vegetation
	Water-violet	*Hottonia palustris*	Ponds
	White Water-lily	*Nymphaea alba*	Ponds

Enhancing a development site for Bats

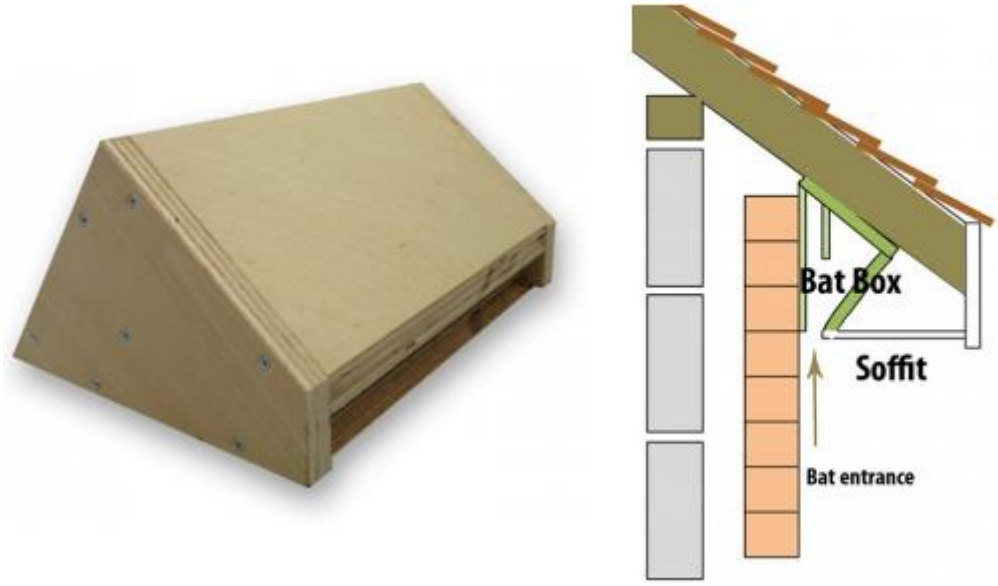
Integrated bat box

The Habibat Bat Box is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings, being best placed on gable elevations.



Soffit access

Where soffits are instated at gable elevations, roost provision may be instated in the form of a soffit bat box with internal roosting space.



Externally fitted boxes

A large number of externally fitted box models for bats exist for buildings and trees. Suitable models for both buildings and trees may include the Greenwoods Ecostyrocrete Bat Box.

See - https://www.greenwoodsecohabitats.co.uk/shop

Ridge access

Where appropriated, ridge tile access should be made with the incorporation of traditional Bitumen 1F underfelt immediately beneath ridge tiles. Breathable BRM membrane can cause significant problems where bats are in contact with it, whereby their fine claws become entangled within the fibres of the membrane, entrapping and killing bats.

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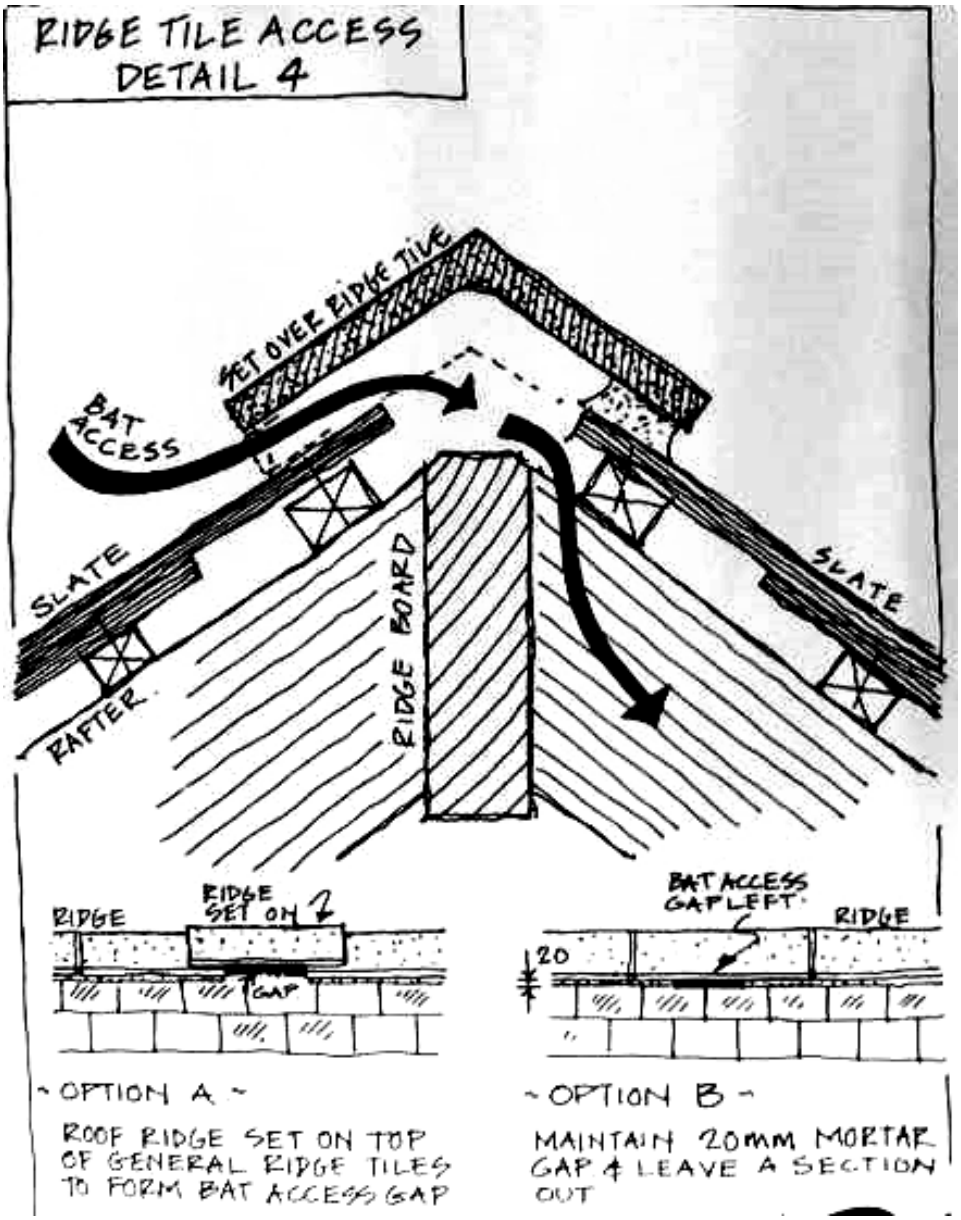
RIDGE TILE ACCESS
DETAIL 4
SET OVER RIDGE TILE
BAT ACCESS
SLATE
SLATE
RAFTER
RIDGE BOARD
RIDGE
RIDGE SET ON
GAP
BAT ACCESS GAP LEFT
RIDGE
20
~ OPTION A ~
ROOF RIDGE SET ON TOP OF GENERAL RIDGE TILES TO FORM BAT ACCESS GAP
~ OPTION B ~
MAINTAIN 20mm MORTAR GAP & LEAVE A SECTION OUT

Enhancing a development site for Breeding Birds

Nesting Birds - Common/Woodland/Garden

This traditional design has proved to be highly effective in attracting robins, as well as other small species such as black redstart, spotted flycatcher and wren. It is designed to be installed on the walls of houses, barns, garden sheds or other buildings and should be hung so that the entrance is to one side (at an angle of 90° to the wall). The front panel can be easily removed for cleaning.

This type of box should not be made conspicuous on a tree or bush because small predators can enter through the unprotected opening. By hanging on a wall, predators won't be able to reach the box. Alternatively hide the box in ivy, honeysuckle or other climbing plants.

See -**Error! Hyperlink reference not valid.**

Enhancing a development site for Invertebrates

Bee bricks

The Bee Brick can be used in place of a standard brick or block in construction to create habitat for solitary bees. Alternatively, it can be used as a standalone bee house in your garden or wild patch. It will provide much needed nesting space for solitary bee species such as red mason bees and leafcutter bees, both of which are non-aggressive.

Each Bee Brick contains cavities in which solitary bees can lay their eggs before sealing the entrance with mud and chewed-up vegetation. The offspring will emerge the following spring and the cycle will begin again. Each cavity goes part way into the brick, which is solid at the back. Bee Bricks should be placed in a warm sunny spot on a south-facing wall at a minimum height of 1m, with no vegetation obstructing the holes. It is highly recommended that bee-friendly plants should be located nearby so that the bees using the bricks have food, otherwise it is unlikely that the brick will be used.

Available in a choice of four colours: white grey, dark grey, yellow and red.

Specification
* Material: Concrete
* Origin: Cornwall, UK
* Dimensions: W 215mm x D 105mm x H 65mm
* Weight: 2.9kg
* Colours: White grey, yellow, dark grey and red

Proposed – Enhancement for Hedgehog

Hedgehog Home

Specification:

Exterior quality 12mm resin bonded ply. The box remains untreated on the inside. Best situated in a quiet corner of the garden, and covered with leaves and other garden debris. Removable lid for cleaning purposes and reinforced corners, manufactured with surface sunk nails to resist rusting.

Nest box size: Height 22cm x Width 38cms x Length 47cm

Environmentally positive: Direct action to help hedgehog survival rates, encouraging biodiversity; FSC timber; Zero carbon footprint in use.

Appendix IV: UKHabs Habitat Map

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Specialists in Protected Species

UKHabs Map Legend

- Boundary
- u1e 68 - Built Linear Feature
  68 Mortared wall
- u1e 69 - Built Linear Feature
  69 fence
- g4 64 - Modified grassland
  64 mown
- u1b - Developed land. sealed surface

Former British Legion - Wythenshaw

Survey Date: 13/04/2023
Drawn: Miss. K. Judson
Date Drawn: 27/04/2023
Checked & Approved: Mrs. K. Wilding
Size: A3
Scale: 1:250

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