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PRELIMINARY ECOLOGICAL APPRAISAL

At

Land at Pilch Lane

Dovecot

Liverpool

Merseyside

L14 0JG

NGR: SJ 41851 91136

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EXECUTIVE SUMMARY

United Environmental Services Ltd (UES) was commissioned by Breck Homes Ltd. to carry out a baseline ecological survey at Pilch Lane, Liverpool. A desk study and preliminary ecological appraisal (PEA) survey were undertaken on 6th May 2025, including searches using the Multi Agency Geographic Information Centre (MAGIC) and Merseyside BioBank.

The PEA provides an assessment of potential ecological impacts associated with the development of the land parcel. The proposed development will include the construction of 35 residential dwellings with associated landscaping.

The land parcel has an area of approximately 0.75ha and has recently been subject to vegetation clearance works. As such, the majority of the proposed development site comprises bare ground that has been encroached by ephemeral vegetation, with small areas of modified grassland and scattered scrub. The northern section of the site comprises a disused carpark. There are several brush piles throughout the site and the remnants of cleared vegetation.

The results of the survey combined with the results of the desk study have highlighted the requirement for further work in relation to the following habitats and species:

- **Amphibians** – reasonable avoidance measures (RAMs) to be implemented during the construction phase of the development.
- **Bats** – the redbrick wall contains an ivy *Hedera helix* covering and numerous cavities were identified within the mortar. If the wall will be impacted by the development, a bat scoping survey should be undertaken of the wall to determine its suitability to support roosting bats. This survey can be undertaken at any time of year.
- **Breeding birds** – site clearance, tree felling, arboricultural works and vegetation clearance are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If not possible and works need to take place during this period, a targeted nest survey is to be undertaken immediately prior to the works by a suitably qualified ecologist or an ecological clerk of works appointed to oversee the works.
- **Hedgehogs** – RAMs are to be implemented during the construction phase of the development.

Mitigation measures, as detailed in section 4, should be adhered to, which may in some cases negate the need for further survey work.

The development also presents an opportunity to improve the habitats on site for wildlife, such as bats and birds. The inclusion of nest boxes and bat boxes will provide suitable nesting and roosting features in the long term.

This report should be read with appendices 1 to 7, which include results of the desk study, GIS phase 1 habitat mapping, photographs of site and relevant statutory guidance.

1 INTRODUCTION

1.1 Author, surveyors, qualifications and scope of study area

This report is written by Ysobella Cox BSc MBiol, UES Ecologist. Ysobella holds a level 3 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC), which certifies her as competent to undertake phase 1 habitat and UKHab surveys. Ysobella is licensed by Natural England to survey all species of bats by observation using an artificial light under licence number 2024-12344-CL17-BAT (level 1).

The report provides an assessment of the potential ecological impacts associated with the proposed development at Pilch Lane, Liverpool.

The zone of influence considered within the scope of the survey includes all land within the red line boundary. Where relevant, other ecological resources, receptors and important habitats which are spatially separate from the site are considered.

1.2 Survey objectives

UES was commissioned in March 2025 to conduct a PEA of the proposed development site. This was completed in order to:

- Establish baseline conditions and determine the importance of ecological features present or potentially present within the survey area
- Identify key ecological constraints to the project
- Make recommendations for design options to avoid significant effects on important ecological resources at an early stage of development planning
- Identify potential requirement for further surveys for nationally or internationally protected species which may be present on site
- Identify potential requirement for mitigation or compensation, including measures that may be required based on further surveys

1.3 Proposed development

The proposed development is a housing scheme and will include the construction of 35 residential dwellings with associated landscaping.

1.4 Structure of the report

This report is a baseline appraisal that forms the basis for further ecological surveys and Environmental Impact Assessments (EIA) if required. In the majority of cases the preliminary ecological assessment will not provide all the ecological data required by the Local Planning Authority to determine an application, especially in the event that protected habitat or species issues are present or likely.



This report should be read with appendices 1 to 7, which include results of the desk study, GIS mapping, photographs of site and relevant statutory guidance.

2 METHODOLOGY

This PEA comprises a desk study and a field survey. The desk study is conducted in order to collate ecological information on species and / or habitats of interest that may be present. The field survey is conducted in order to assess the habitats and their importance, both on site and in the context of their wider surroundings.

2.1 Desk study

The following resources were used to inform the desk study:

- National – Using the UK government’s MAGIC website, statutorily protected sites were scoped to a distance of 10km from the application site.
- Local – A search for protected species or otherwise notable species and local designated sites was undertaken within a 2km radius of the proposed development site by Merseyside BioBank.

2.2 Field survey

An ecological walkover survey was carried out on 6th May 2025 by Ysobella Cox. The purpose of the survey was to identify, record and map dominant habitat types within the development area and highlight any further species surveys that may be required based on the quality of those habitats. When conducting the surveys particular focus was concentrated on the following species and habitat features:

- | | |
|------------------|-------------------------|
| • Amphibians | • Hedgerows |
| • Reptiles | • Plant communities |
| • Badger | • Invasive species |
| • Bats | • Otter |
| • Hazel dormouse | • Water vole |
| • Birds | • White-clawed crayfish |
| • Trees | |

The habitats were assessed by using the UKHab survey technique, which is a system for environmental audit widely used within the environmental consultancy field. The survey was undertaken in accordance with the methodology in the UK Habitat Classification Version 2.0 (UKHab Ltd, 2023) as recommended by Natural England, and in the “Guidelines for Preliminary Ecological Appraisal” (CIEEM, 2017).

The survey area encompasses all of the land within the development footprint and the land to a distance of 30m outside it where accessible. In line with recognised guidelines, ponds were also scoped to a distance of 500m (250m radius from the survey area).

The UKHab survey methodology was extended to record any signs of habitats suitable to support protected / invasive species and any incidental observations of other noteworthy species.



2.3 Survey limitations

The site has recently been cleared and as such, the existing and pre-degradation habitats have been determined based on a combination of walkover survey data and aerial imagery.

3 RESULTS

3.1 Desk study

A desk study was conducted for the proposed development site and surrounding area. Statutorily protected sites were scoped to a distance of 10km. Further results of the desk study can be found at Appendix 1 – Desk study.

3.1.1 Protected sites

There are no statutorily protected sites within 2km of the proposed development site and the site lies within a SSSI Impact Risk Zone (IRZ) within which Natural England do not request that they are consulted on residential developments.

There are five non-statutorily designated sites within 2km of the proposed development site.

- Court Hey Park, SBI¹ – located approximately 664m to the south of the proposed development site. It is a small area of parkland with woodland, stream and grassland habitats.
- Bowring Park Golf Course, SBI – located approximately 897m to the southeast of the proposed development site. It is a mixture of woodland, grassland, scrub and ponds, providing a diverse range of habitats and species.
- Loop Line and Adjacent Sites, LWS² – located approximately 1.06km to the east of the proposed development site. The Loopline stretches for 11 kilometres across Liverpool and is the longest unbroken wildlife corridor in the city, containing a diverse mosaic of habitats on the banks and floor of a disused railway cutting. Habitats include secondary broadleaved woodland, acid and neutral unimproved grasslands, and partly vegetated sandstone cliffs.
- River Alt, Seth Powell Way, SBI – located approximately 1.93km to the east of the proposed development site.
- Grassland West of Seth Powell Way, SBI – located approximately 1.94km to the northeast of the proposed development site. It is a neutral grassland recently created by Landlife with high plant diversity. Invertebrate interests are increasing as the site develops.

There are thirteen statutorily protected sites (designated for ecological reasons) within 2 – 10km of site:

- | | |
|--------------------------------------|---|
| • Acorn Plantation, LNR ³ | • Croxteth, LNR |
| • Allerton (Eric Hardy), LNR | • Hale Road Woodland, LNR |
| • Childwall Woods & Fields, LNR | • Mersey Estuary, SPA ⁴ , SSSI ⁵ & Ramsar |
| • Clinton Wood, LNR | |

¹ SBI – Site of Biological Importance

² LWS – Local Wildlife Site

³ LNR – Local Nature Reserve

⁴ SPA – Special Protection Area

⁵ SSSI – Site of Special Scientific Interest



- Mersey Narrows & North Wirral Foreshore, SPA & Ramsar
- Mersey Narrows, SSSI
- Mill Brow, LNR
- Millwood & Alder Wood, LNR
- New Ferry, SSSI
- Thatto Heath Meadows, LNR

3.1.2 Protected species

The following records of protected or otherwise notable species were highlighted by the environmental records search:

- Amphibians: eleven records of GCNs were returned from within 2km of the proposed development site. The closest record is located approximately 1.03km to the south of the site in 2016. The only other amphibian records returned are of common toad *Bufo bufo*, common frog *Rana temporaria*, and smooth newt *Lissotriton vulgaris*.
- Badgers: records of badger *Meles meles* were returned by the local record search. However, all of the records are located beyond 1km of the site.
- Bats: records of an unknown bat, brown-long eared *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, a *Pipistrellus* sp., whiskered bat *Myotis mystacinus*, and a *Myotis* sp. bat species were returned. The closest record is a common pipistrelle located approximately 168m to the south of the site in 2014.
- Birds: various species, including several NERC Section 41, Wildlife and Countryside Act 1981 Schedule 1, and the most recent Birds of Conservation Concern “red and amber” list species.
- Hazel dormouse: no records of hazel dormouse *Muscardinus avellanarius* were returned from within 2km of the proposed development site.
- Hedgehog: numerous records of hedgehog *Erinaceus europaeus* were returned from within 2km of the proposed development site, the closest of which is approximately 214m to the south of the site in 2016.
- Otter: one record of otter *Lutra lutra* was returned from within 2km of the proposed development site, which is located approximately 1.96km to the northeast of the site in 2009.
- Reptiles: no records of reptile species were returned from within 2km of the proposed development site.
- Water vole: records of water vole *Arvicola amphibius* were returned from within 2km of the proposed development site, the closest of which is located approximately 1.1km to the east of the site in 2014.
- White clawed-crayfish: no records of white-clawed crayfish *Austropotamobius pallipes* were returned from within 2km of the proposed development site.

3.2 Baseline conditions – Habitats

The results of the PEA are also shown on the accompanying map at Appendix 2 – UK habitat classification plan. Habitats are colour-coded in accordance with the UKHab standard. A full botanical species list for each habitat is provided at Appendix 5.

The local area predominantly consists of residential dwellings. The following principal habitat types were characterised on site:

- g4 Modified grassland
- u1b6 Other developed land
- u1c Artificial unvegetated, unsealed surface
- u1e Built linear features
- u1f Sparsely vegetated urban land
- 10 Scattered scrub
- 32 Scattered trees

3.2.1 g4 Modified grassland

Secondary codes: 10

The majority of the proposed development site has recently been cleared. However, there are areas of bare ground within the northern and southeastern sections of the site that have started to develop into modified grassland due to a higher percentage cover of grass and forb species in comparison the remainder of the development site (see Appendix 4 – Photographs, Photograph 3). The grassland has a varied sward height and grass species present include red fescue *Festuca rubra*, creeping bent *Agrostis stolonifera*, Yorkshire fog *Holcus lanatus*, and perennial rye grass *Lolium perenne*.

Other species present include yarrow *Achillea millefolium*, ribwort plantain *Plantago lanceolata*, common ragwort *Senecio jacobaea*, dandelion *Taraxacum officinale* agg., white clover *Trifolium repens*, bramble *Rubus fruticosus* agg., creeping thistle *Cirsium arvense*, lesser trefoil *Trifolium dubium*, and black medick *Medicago lupulina*.

Secondary codes: 16

The southern section of the proposed development site consists of numerous spoils mounds that contain a higher quantity of ruderal species such as field horsetail *Equisetum arvense*, common nettle *Urtica dioica*, broadleaved dock *Rumex obtusifolius*, and cleavers *Galium aparine* (Photograph 4). However, the grassland surrounding the spoil mounds is dominated by rosebay willowherb *Epilobium angustifolium*, and field horsetail (Photograph 5).

Other species present include those within the grassland located to the north of the site, with the addition of common vetch *Vicia sativa*, bristly oxtongue *Helminthotheca echioides*, cock's foot grass *Dactylis glomerata*, bindweed *Calystegia* sp., creeping buttercup *Ranunculus repens*, cow parsley *Anthriscus sylvestris*, bluebell *Hyacinthoides* sp., and great willowherb *Epilobium hirsutum*.

3.2.2 u1b6 Other developed land

Secondary codes: 10 and 81

There is an area of hardstanding located within the northern section of the site which appears to be a disused car park (Photograph 6). The hardstanding has been encroached by ephemeral vegetation from the surrounding habitats; a full species list is included in section 3.2.5 of this report (Photograph 7).

Brash piles were identified within the eastern section of the site which may provide sheltering opportunities for wildlife (see Appendix 2 – Site Plan, Target note 1; Photograph 8). In addition, there is scattered, discarded waste throughout.

3.2.3 u1c Artificial unvegetated, unsealed surface

Secondary codes: 10, 81 and 510

The majority of the proposed development site appears to have recently been cleared as evidenced by vehicular damage, cleared vegetation and bare ground, with scattered rubble throughout (Photographs 9 to 11).

Due to the presence of cleared scrub within the western section of the site and along the boundaries, it is assumed that the previous habitat would have been mixed scrub. Brash piles were identified within the centre of the habitat which may provide sheltering opportunities for wildlife (Target note 1; Photograph 12).

The soil has been encroached by ephemeral vegetation and scattered scrub from the surrounding habitats; a full species list is included in section 3.2.5 of this report.

3.2.4 u1e Built linear features

Secondary codes: 853

The boundaries of the proposed development site are demarcated by a combination of metal palisade fencing, redbrick walls and wooden panel fencing, some of which have an ivy *Hedera helix* covering (Photograph 13).

Numerous cavities were identified within the mortar of the redbrick wall located along the eastern boundary (Target note 2; Photograph 14).

3.2.5 u1f Sparsely vegetated urban land

Secondary codes: 10 and 81

Some areas of gravel, hardstanding and bare ground have a larger percentage cover of ephemeral and ruderal vegetation and as such, have been classified as sparsely vegetated urban land.

Species present include yarrow, dandelion, Yorkshire fog, cleavers, a bindweed species, groundsel *Senecio vulgaris*, bramble, common nettle, smooth sow thistle *Sonchus oleraceus*, common comfrey *Symphytum officinale*, broadleaved dock, ribwort plantain, black medick, perennial rye grass, bristly ox-tongue, common chickweed *Stellaria media*, ivy, hawthorn sapling *Crataegus monogyna*, red fescue, common mouse-ear *Cerastium fontanum*, common

ragwort, red clover *Trifolium pratense*, sycamore sapling *Acer pseudoplatanus*, spear thistle *Cirsium vulgare*, thalecress *Arabidopsis thaliana*, shepherd's purse *Capsella bursa-pastoris*, willowherb *Epilobium* sp., common cat's-ear *Hypochaeris radicata*, barren brome *Bromus sterilis*, rose *Rosa* sp., herb Robert *Geranium robertianum*, creeping thistle, butterfly bush *Buddleja* sp., white clover, great willowherb, bluebell, spurge *Euphorbia* sp., lesser trefoil, field horsetail, rosebay willowherb, bittercress *Cardamine* sp., cherry laurel *Prunus laurocerasus*, green alkanet *Pentaglottis sempervirens*, a *Carex* sp., common male fern *Dryopteris filix-mas*, creeping buttercup and common vetch.

There is a small amount of scattered waste throughout this section of the site (Photograph 15) and brash piles were identified within the eastern corner which may provide sheltering opportunities for wildlife (Target note 1).

3.2.6 10 Scattered scrub

There is a small amount of scattered scrub located within the modified grassland and sparsely vegetated urban land, with additional areas present along the margins of the site (Photograph 16). Species present include hawthorn, rose, bramble, elder *Sambucus nigra*, sycamore, cherry laurel, hazel *Corylus avellana*, rowan *Sorbus aucuparia*, a *Prunus* sp., holly *Ilex aquifolium*, and butterfly bush.

3.2.3 32 Scattered trees

There are two tree stumps located within the western section of the site, which appear to have been multi-stemmed trees (Photographs 11 and 17).

3.3 Baseline conditions – Protected species or resources

As part of the PEA, specific observations of wildlife were also recorded. Wildlife observations focused on protected species, invasive species or species of conservation concern. Habitats with potential to support protected species were noted with a view to follow up surveys if required.

3.3.1 Amphibians

There are no ponds located within 250m of the proposed development site, but there is a single pond located approximately 414m to the south of the site.

The habitats onsite are relatively unsuitable for GCN as the site has recently been cleared and subject to disturbance. The ruderal vegetation and grassland may provide commuting and foraging opportunities for common amphibians, whilst the brush piles may provide sheltering opportunities (Target note 1).

3.3.2 Reptiles

The proposed development site has recently been cleared and mainly comprises bare ground with spoil mounds vegetated in ruderal / ephemeral vegetation and modified grassland. Although the grassland has a varied sward height, it is still relatively short and does not connect to suitable commuting corridors such as hedgerows, woodland or the margins of dense scrub. In addition, the surrounding area is predominantly urban. Therefore, it is considered unlikely that reptiles will be present onsite.

3.3.3 Badger

No evidence of badger activity such as footprints, mammal paths, latrines or burrows were identified onsite during the walkover survey.

The proposed development site is relatively unsuitable for badgers as it has recently been cleared and as such, subject to disturbance. The remaining habitats comprise ruderal and ephemeral vegetation with modified grassland and spoil mounds. Due to the predominantly urban nature of the surrounding area and the low-quality habitats within the development site, it is considered unlikely that badgers will be present onsite.

3.3.4 Bats

The redbrick wall located along the eastern and southern boundaries of the site has an ivy covering and numerous cavities were identified within the mortar of the wall which may provide potential roosting features (PRFs) for bats (Target note 2).

There are no trees within the proposed development site, but two tree stumps were identified within the western section of the site which appear to have recently been felled. The grassland, ruderal and ephemeral vegetation may provide limited foraging opportunities for bats.

3.3.5 Hazel dormouse

The habitats on site are unsuitable for dormice *Muscardinus avellanarius* as there are no hedgerows or woodland, and the scrub has recently been cleared. Furthermore, hazel dormice have a limited distribution nationally. Therefore, hazel dormice are not considered to be present onsite.



3.3.6 Birds

The scattered scrub, ivy coverage along the walls and brash piles onsite may provide nesting opportunities for breeding birds in the summer.

3.3.7 Trees

There are no trees within the proposed development site. However, two recently felled tree stumps were identified onsite during the walkover survey.

3.3.8 Hedgerows

There are no hedgerows within the proposed development site.

3.3.9 Plant communities

No plant communities or individual species were recorded on site which are afforded statutory protection in their own right.

3.3.10 Invasive species

No invasive species were identified onsite during the walkover survey.

3.3.11 Otter, water vole and white-clawed crayfish

There are no watercourses within, or directly adjacent to, the proposed development site. As such, otter, water vole and white-clawed crayfish are not considered to be present onsite.

3.3.12 Hedgehog

The areas of grassland and ruderal vegetation may provide limited foraging and commuting opportunities for hedgehogs, whilst the brash piles may provide sheltering opportunities (Target note 1).

4 EVALUATION AND RECOMMENDATIONS

This section provides a brief assessment of the likely impacts associated with the proposed development on the receptors identified during the walkover survey and desk study. It also includes any mitigation and compensation measures which may be required for the proposed development to proceed.

4.1 Habitats

4.1.1 Designated sites

The sites identified during the desk study were cross-referenced with the survey area relevant to this report. The closest statutorily protected site is Childwall Woods and Fields LNR, which lies approximately 2.14km to the south of the proposed development site.

Given the distances from site and the scale of development, it is considered unlikely that the proposed development will have any direct or indirect impact on this or any other local designated sites.

4.2 Species

4.2.1 Amphibians

Although the presence of GCNs on site is considered unlikely, the works should be completed under RAMs to protect common amphibian species in the event they are present onsite.

Construction impacts

Potential impacts include direct harm, injury and / or death to individuals.

Mitigation

The following RAMs should be implemented on site during the construction phase of the development:

- The grassland, scattered scrub and ruderal / ephemeral vegetation is to be mown / cleared to have a sward length below 10cm. The sward length is to be reduced gradually in order to give any amphibians present time to move off site of their own accord. The mown / cleared area will then be maintained with a short sward until the works on site have been completed.
- The brash piles and any other potential hibernacula will be removed from the working area by a suitably experienced ecologist, and placed in a suitable area close to site. Hibernacula could include piles of rubble, bricks, loose soil, debris, brash piles etc.
- No excavations are to be left open overnight. If this is not feasible a plank should be left within the excavation at a 45 degree angle to allow amphibians to escape. Any open excavations should be checked for amphibians in the morning prior to start of works on site.



- Materials will be stored on pallets off the ground in order to reduce the risk of amphibians sheltering underneath them.
- Hedgerows and trees along the site boundaries should remain, where feasible, to continue to provide shelter and connectivity across site for amphibians and other fauna.
- UES will remain on-call throughout the development and if any newts are encountered, work on site is to stop immediately and ecological advice is to be sought. UES can be contacted directly on **01565 757788**.

Operational impacts

No operational impacts are envisaged.

4.2.2 Bats

There are no trees or buildings within the proposed development site. However, the redbrick wall along the boundaries of the site has an ivy covering and cavities associated with missing mortar that may provide a PRF for bats.

Construction impacts

If bats are roosting within the wall during site clearance or demolition, they are at risk of direct harm and disturbance and the roosts will be lost permanently.

Inappropriate lighting could cause unnecessary disturbance to roosting & foraging bats, which could result in the abandonment of bat roosts, and the diminishment of foraging opportunities. Inappropriate landscaping could result in the severing of commuting corridors used by bats as well as the loss of foraging habitats.

Mitigation

A bat scoping survey should be undertaken of the wall onsite to determine its suitability to support roosting bats. This survey can be undertaken at any time of year.

Enhancements

The provision of bat boxes as part of the development proposals would increase the roosting opportunities for bats on site but would also increase the ecological value of the site. At the time of writing this report no detailed plans are available, but bat boxes that could be used on site include:

- Schwegler 1FF box (affixed to buildings)
- Schwegler 2F box (affixed to buildings)
- Schwegler 2FR bat tube (installed in connected pairs or threes into the external walls of buildings)

The bat boxes affixed to, or installed into the external walls of buildings should be installed just below the eaves / roof height. No detailed lighting proposals are as yet available to UES, however care must be taken when installing any new lighting to ensure that light spillage onto



the bat boxes is minimised. This may require the use of cowling or relocation of the bat box or lighting.

It should be noted that once bat inhabits a bat box, they may only be disturbed by a licensed bat worker.

Operational impacts

To be assessed following the further surveys.

4.2.3 Birds

The areas of scattered scrub, ivy coverage along the walls and brash piles may provide nesting opportunities for breeding birds.

Construction impacts

Tree felling, arboricultural works and vegetation removal could result in the direct loss of nests, any individuals within the nests and of available nesting territories if conducted during the breeding season.

Mitigation

Site clearance, tree felling, arboricultural works and vegetation removal (including enabling works) are to take place outside of the breeding bird season and should not be undertaken from March to August inclusive. If this is not possible and works need to take place between this period, a targeted breeding bird nest scoping survey should be conducted by a suitably qualified ecologist immediately prior to the works, or an ecological clerk of works appointed to oversee the works.

Compensation and enhancement

If extensive areas of vegetation are to be removed, consideration should be given to providing replacement habitat for foraging and nesting birds by incorporating tree, shrub or scrub planting as part of the landscaping proposals.

Landscaping can also be used to promote biodiversity through the appropriate design of habitats and creating habitat mosaics, which promote natural linkages and hence the dispersal of target species. Principles and landscaping ideas beneficial to wildlife and relevant to this site include:

- Planting and management of hedgerows
- Planting of berry and nut bearing shrub species to encourage winter birds
- Planting and management of shrubs which develop a mosaic of structures to support breeding birds
- Use of nectar bearing flowers to encourage invertebrates (such as bees, flies, beetles and butterflies)

Species are to be native, of local provenance or to have a proven benefit to biodiversity. Further information can be found at Appendix 6 – Landscape design for birds.

Compensation for the loss of nesting habitat and the enhancing of the nesting habitat on site can also be provided through the provision of bird nest boxes. At the time of writing this report no detailed plans are available, but bird boxes that could be used on site include:

- Schwegler 1SP sparrow terrace (affixed to buildings below the eaves)
- Schwegler 3S starling nest box (affixed to buildings)
- Schwegler 1MR Avianex box (affixed to buildings)
- Manthorpe swift nest brick (incorporated into the external walls of buildings)

The bird boxes should be sited at a minimum height of three metres. Unless there are trees which shade the box during the day, the boxes should be oriented between north and east, thus avoiding strong sunlight and the wettest winds.

Operational impacts

Inappropriate management of the habitats on site could degrade them and render them unsuitable for wildlife.

Mitigation

It is important to implement good horticultural practice in any landscaping scheme, including the use of peat-free composts, mulches and soil conditioners. The use of pesticides (herbicides, insecticides, fungicides and slug pellets) should be discouraged to prevent fatal effects on the food chain. Any pesticides used should be non-residual.

Excessive removal or pruning of trees and hedgerows should be avoided to maximise the growth and plant matter available to wildlife. Pruning should be left until late winter to leave seeds and berries for wintering wildlife and to ensure no impact on breeding and nesting birds.

4.2.5 Hedgehogs

No evidence of hedgehog activity was observed on site during the walkover survey. However, the areas of grassland and ruderal vegetation may provide foraging and commuting opportunities for hedgehogs, whilst the brash piles may provide sheltering opportunities

Construction impacts

Vegetation clearance works and construction activities without mitigation could result in direct harm, injury and / or death to individuals.

Mitigation

The following RAMs should be implemented on site during the construction phase of the development:

- No trenches or excavations will be left open overnight. They will be backfilled or covered with board, or alternatively fitted with a means of escape for any hedgehogs (or other animal) which may become trapped within, such as a plank or slope leading out of the bottom of the excavation at an angle of 45°. All excavations left open overnight will be checked for trapped wildlife in the morning.



- Any potential refugia on site, including the brash piles, or those created as part of the works should be removed by hand or checked for sheltering hedgehogs prior to their removal by mechanical means or burning. Potential refugia can include piles of leaf litter, log piles and brash piles.
- Any pipes will be stored with caps on to prevent entry by hedgehogs and other animals, and materials such as barbed wire will be stored so that animals cannot become entangled in them.
- Any chemicals or harmful materials will be stored so that they cannot be accessed by hedgehogs or other animals.
- Excavations will be checked immediately before they are backfilled to ensure that no animals have become trapped.

Operational impacts

To allow continued use of the site by hedgehog and to ensure commuting routes aren't blocked, fences installed on site should be designed to allow passage of hedgehogs. This can either be through the choice of material e.g. choosing a fence style that naturally contains holes at the base or through the inclusion of hedgehog highways. Hedgehog highways are small 13cm x 13cm holes at the base of fences. A small sign (an example can be found at www.hedgehogstreet.org) should be provided above the hedgehog hole to encourage new residents to keep the holes open.



5 CONCLUSION

The land parcel has an area of approximately 0.75ha and has recently been subject to vegetation clearance works. As such, the majority of the proposed development site comprises bare ground that has been encroached by ephemeral vegetation, with small areas of modified grassland and scattered scrub. The northern section of the site comprises a disused carpark. There are several brash piles throughout the site and remnants of cleared vegetation.

The preliminary ecological appraisal has highlighted potential issues with the following ecological receptors on or adjacent to site: amphibians, bats, birds and hedgehogs. Provided these issues are addressed in accordance with the recommendations detailed in this report, the development may proceed without adversely impacting the aforementioned ecological receptors.

The development also presents an opportunity to enhance the habitats available to wildlife on site. The provisioning of bat and bird nest boxes on site will provide improved roosting and nesting opportunities into the long-term future of the site.



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APPENDICES

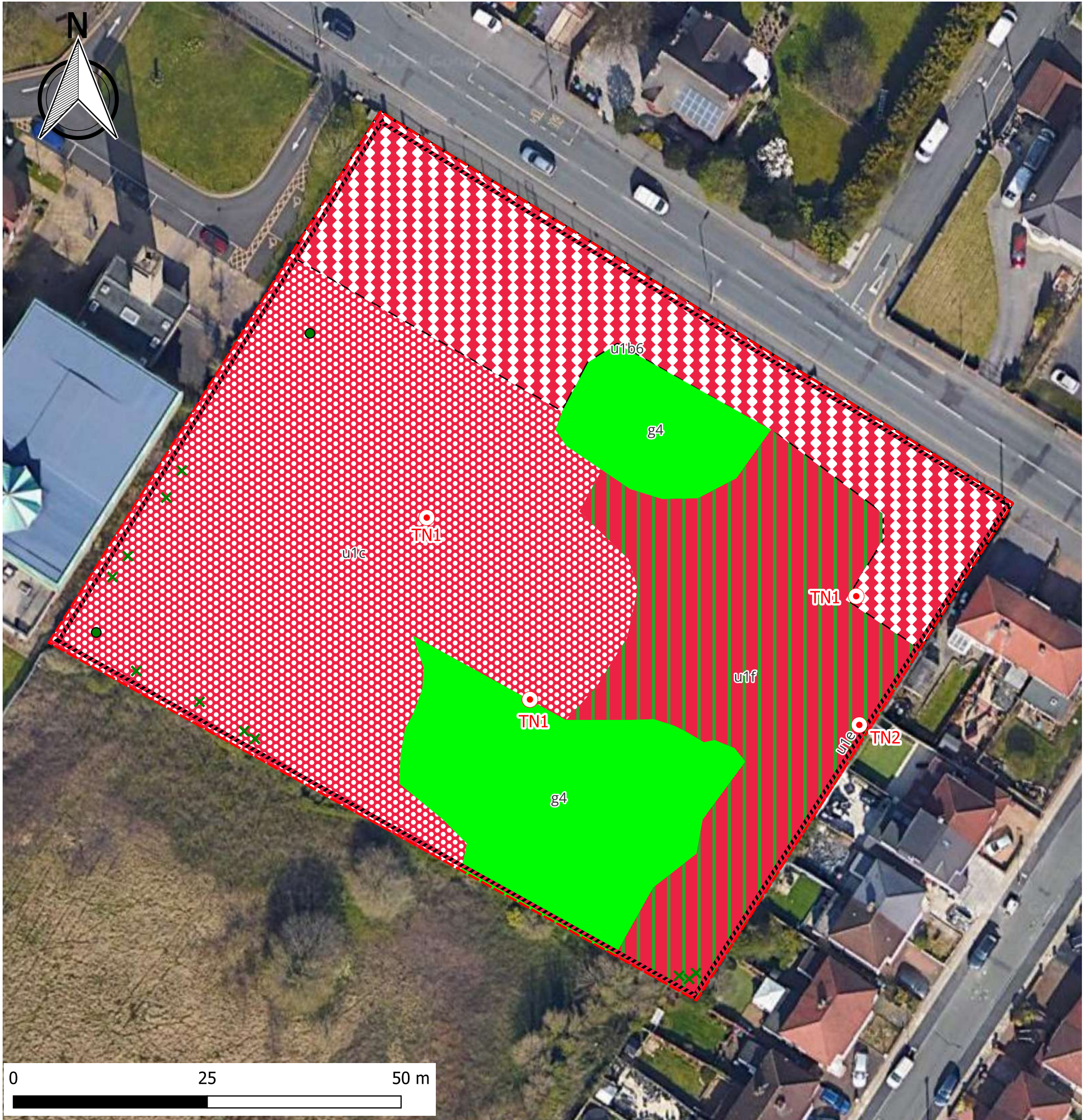
Appendix 1 – Desk study



Appendix 2 – UKHab plan

Target note 1 – Brash pile

Target note 2 – Cavities within the mortar of a redbrick wall



Preliminary Ecological Appraisal

Site: Land at Pilch Lane,
Liverpool
NGR: SJ 41851 91136
Author: Ysobella Cox
Date: 21/05/2025



Key

- g4 - modified grassland
- u1b6 - other developed land
- u1c - artificial unvegetated unsealed surface
- u1f - sparsely vegetated urban land
- Survey boundary
- 10 - scattered scrub
- 32 - scattered trees
- Target Notes

Map data © 2025 Google, Imagery © 2025 Google

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Appendix 3 – Aerial photographs



Land at Pilch Lane, Liverpool

Close aerial photograph

— Development boundary





Land at Pilch Lane, Liverpool

Wide aerial photograph



Site location



Appendix 4 – Photographs



Photograph 1. Looking south across the proposed development site.



Photograph 2. Looking southwest across the proposed development site.



Photograph 3. Modified grassland within the northern section of the proposed development site.



Photograph 4. Showing brash piles adjacent to the modified grassland.



Photograph 5. Spoil mounds within the southern section of the site that have been encroached by ruderal vegetation.



Photograph 6. Disused carpark within the northern section of the site.



Photograph 7. Ephemeral vegetation along the margins of the site.



Photograph 8. Example of a brash pile.



Photograph 9. Bare ground within the western section of the site.



Photograph 10. Recently cleared scrub.



Photograph 11. Discarded waste within the site and a recently felled tree.



Photograph 12. Example of a brash pile and cleared scrub.



Photograph 13. Redbrick wall with an ivy *Hedera helix* covering.



Photograph 14. Example of a cavity within the mortar of the redbrick wall.



Photograph 15. Sparsely vegetated urban land within the eastern section of the site.



Photograph 16. Example of scattered scrub along the boundaries of the site.



Photograph 17. Example of a recently felled tree.



Appendix 5 – Botanical species list

Scientific name	Common name
<i>Acer pseudoplatanus</i>	Sycamore
<i>Achillea millefolium</i>	Yarrow
<i>Agrostis stolonifera</i>	Creeping Bent
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Arabidopsis thaliana</i>	Thale Cress
<i>Bromus sterilis</i>	Baron Brome
<i>Buddleja sp.</i>	Butterfly bush
<i>Calystegia sp.</i>	Bindweed Species
<i>Capsella bursa-pastoris</i>	Shepherd's Purse
<i>Cardamine sp.</i>	Bittercress Species
<i>Cerastium fontanum</i>	Common Mouse-ear
<i>Chamerion angustifolium</i>	Rosebay Willowherb
<i>Cirsium arvense</i>	Creeping Thistle
<i>Cirsium vulgare</i>	Spear Thistle
<i>Corylus avellana</i>	Hazel
<i>Crataegus monogyna</i>	Hawthorn
<i>Dactylis glomerata</i>	Cock's Foot Grass
<i>Dryopteris filix-mas</i>	Common Male-fern
<i>Epilobium hirsutum</i>	Great Willowherb
<i>Epilobium sp.</i>	Willowherb Species
<i>Equisetum arvense</i>	Field Horsetail
<i>Euphorbia sp.</i>	Spurge Species
<i>Festuca rubra</i>	Red Fescue
<i>Galium aparine</i>	Cleavers
<i>Geranium robertianum</i>	Herb Robert
<i>Hedera helix</i>	Ivy
<i>Helminthotheca echinoides</i>	Bristley Oxtongue
<i>Holcus lanatus</i>	Yorkshire Fog
<i>Hyacinthoides sp.</i>	Bluebell
<i>Hypochaeris radicata</i>	Common Cat's-ear
<i>Ilex aquifolium</i>	Holly
<i>Lolium perenne</i>	Perennial Rye-grass
<i>Medicago lupulina</i>	Black Medick
<i>Pentaglottis sempervirens</i>	Green Alkanet
<i>Plantago lanceolata</i>	Ribwort Plantain
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Prunus sp.</i>	Cherry Species
<i>Ranunculus repens</i>	Creeping Buttercup
<i>Rosa sp.</i>	Rose species
<i>Rubus fruticosus agg.</i>	Bramble
<i>Rumex obtusifolius</i>	Broadleaved Dock
<i>Sambucus nigra</i>	Elder
<i>Senecio jacobaea</i>	Common Ragwort
<i>Senecio vulgaris</i>	Groundsel
<i>Sonchus oleraceus</i>	Smooth Sowthistle
<i>Sorbus aucuparia</i>	Rowan
<i>Stellaria media</i>	Common Chickweed
<i>Symphytum officinale</i>	Common Comfrey
<i>Taraxacum officinale agg.</i>	Dandelion
<i>Trifolium dubium</i>	Lesser Trefoil
<i>Trifolium pratense</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Urtica dioica</i>	Common Nettle
<i>Vicia sativa</i>	Common Vetch



Appendix 6 – Landscape design for birds

SPECIES	F	SIZE				LOCATION			SOIL MOISTURE	BENEFITS TO WILDLIFE
		T	S	M	L	H	W	Su/Sh		
TREES										
Alder*	D				Y			Su	M	Seed food for birds
Beech*	D			Y	Y	Y		Su	D	Seed food for birds
Birch*	D		Y	Y	Y			Su	D	Seed food for birds
Bird cherry *	D			Y	Y			Su	D	Food for birds, flowers attract insects
Crab apple*	D		Y	Y	Y			Su	D	Food for birds, flowers attract insects
English oak*	D				Y			Su	D	Food for birds, insects and mammals, nesting sites
European larch*	D				Y			Su	M	Seed food for birds
Holly*	E		Y	Y	Y	Y		Su	D	Fruits eaten by birds, food plant of holly blue butterfly
Juniper*	E							Su	D	Shelter and nest sites, fruits eaten by thrushes
Lime*	D				Y	Y		Su	D	Seed food for birds
Rowan*	D			Y	Y			Su	D	Fruits eaten by birds
Scot's pine*	E				Y			Su	D	Seed food for birds
Swedish whitebeam	D		Y	Y	Y			Su	D	Food for birds, flowers attract insects
Wild cherry*	D			Y	Y			Su	D	Food for birds, flowers attract insects
Yew*	E		Y	Y	Y	Y		Su	D	Food for birds, nesting sites
SHRUBS										
Barberry	B	Y	Y	Y	Y	Y		Su	D	Good shelter and nest cover for birds, berries may provide food
Blackthorn*	D			Y	Y	Y		Su	M	Attracts insects, food for birds, nesting sites
Buckthorn*	D			Y	Y	Y		Su/Sh	D	Food plant of brimstone butterfly, fruits eaten by birds
Butterfly bush	E	Y	Y	Y	Y	Y		Su	D	Attracts insects
Californian lilac	E			Y	Y	Y	Y	Su	D	Flowers attractive to various insects
Dogwood*	D			Y	Y	Y		Su	D	Food for birds, winter stem colour
Elder*	D		Y	Y	Y	Y		Su	D	Food for birds
Escallonia	E			Y	Y	Y		Su	M	Flowers attractive to various insects, tolerant of salt - good in coastal areas
Field maple*	D		Y	Y	Y	Y		Su	D	Good source of insect food for birds
Firethorn	E	Y	Y	Y	Y	Y	Y	Su	D	Berries popular with many bird species
Flowering current	D		Y	Y	Y			Su	D	Early flowers attractive to insects
Forsythia	D		Y	Y	Y	Y	Y	Su	D	Early flowers attractive to insects
Garria	E	Y	Y	Y	Y		Y	Su	D	Winter catkins, early cover for nesting birds
Goat willow*	D	Y	Y	Y	Y			Su	D	Catkins attractive to bees, good source of insect food for birds
Gorse*	E			Y	Y	Y		Su	D	Early flowers attractive to insects, good protection for birds
Rhytismatales	E			Y	Y	Y		Su	D	Good cover, tolerant of salt - good in coastal areas
Guelder-rose*	D			Y	Y	Y		Su	D	Food for birds & insects
Hawthorn*	D		Y	Y	Y	Y		Su	D	Flowers attractive to insects, fruits eaten by birds, good shelter and nesting site
Hazel*	D	Y		Y	Y	Y		Su	D	Food for birds, insects and mammals, nesting sites
Laurel-leaved vibumum	E		Y	Y	Y			Su	D	Early flowers good for insects, good cover for birds

Lavender	E	Y	Y	Y	Y	Su	D	Flowers attract many insects, seeds popular with finches		
Lilac	D	Y	Y	Y		Su	D	Flowers attractive to insects		
Oregon grape	E		Y	Y	Y	Su/Sh	M	Early flowers good for insects		
Pheasant berry	E		Y	Y		Su	D	Berries popular with many bird species		
Privet*	E		Y	Y	Y	Y	Su	D	Flowers attract butterflies, produces berries	
Rose	D	Y	Y	Y	Y	Y	Y	Su	D	Fruits of some varieties attractive to birds
Rosemary	E	Y	Y	Y	Y	Y		Su	D	Flower attract many insects
Shad bush	D		Y	Y				Su	M	Flowers attract insects, early forming berries good for thrushes
Snowberry	D			Y	Y	Y		Su/Sh	D	Flowers attractive to bees, fruits attractive to birds, dense stems provide cover
Spindle*	D		Y	Y	Y			Su	D	Berries eaten by birds, but poisonous to mammals
Tamarix	D			Y	Y	Y		Su	D	Flowers attractive to various insects, tolerant of salt - good in coastal areas
CLIMBERS & RAMBLERS										
Bramble*	D		Y	Y	Y	Y	Y	Su/Sh	D	Food for birds, insects and mammals, nesting sites
Clematis	D	Y	Y	Y	Y			Su	D	Nesting sites
Honeysuckle*	D	Y	Y	Y	Y	Y	Y	Su/Sh	D	Attractive to insects, good nesting site, food for birds
Ivy*	E	Y	Y	Y	Y	Y	Y	Su/Sh	D	Attractive to insects, good nesting site, food for birds
Rose	D	Y	Y	Y	Y	Y	Y	Su	D	Fruits of some varieties attractive to birds
Winter jasmin	E	Y	Y	Y	Y	Y	Y	Su	D	Early flowers attractive to insects
Wisteria	D	Y	Y	Y	Y		Y	Su	D	Attractive to insects, good nesting site

KEY			
*	Native (NB: some varieties are cultivars or non-native)	Location	H = may be used as a hedge plant
F	D = Deciduous		W = may be used as a wall shrub
Foliage type	E = Evergreen		Su = Sunny borders
	B = Both		Sh = Shade tolerant
Size	T = Terraces & balconies		Su/Sh = Grows in partial shade
Suitable for garden sizes	S = Small garden (<= 6m x 4m)	Soil mositure	D = Well drained
	M = Medium gardens (<= 12m x 6m)		M = Moist
	L = Large gardens (> 12m x 6m)		W = Wet soil



Appendix 7 – Planning and statutory context

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of legislative protection in relation to the following species and habitats:

Amphibians	Trees
Great crested newts	Hedgerows
Other amphibians	Invasive plant species
Reptiles	Otters
Badgers	Water voles
Hazel dormouse	White-clawed crayfish
Bats	Planning policy
Birds	

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Amendment (EU exit) Regulations 2019. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 41 of the NERC Act (see bats section for further details).

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural England team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by Natural England is required for the legal implementation of a mitigation scheme.

A Natural England mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation

works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack toad, common toad and pool frog are also listed under Section 41 of the NERC Act (see bats section for further details).

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Reptiles

Common lizard *Zootoca vivipara*, slow-worm *Anguis fragilis*, grass snake *Natrix natrix* and adder *Vipera berus* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure any of the species listed above
- Sell, offer, advertise or transport for sale a live or dead animal of the species listed above

If a proposed development is likely to have an impact on these reptiles the local statutory nature conservation organisation must be consulted.

Sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca* receive full protection under the Wildlife and Countryside Act 1981 (as amended) and Conservation of Habitats and Species Regulations 2017. Read together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture any sand lizards or smooth snakes
- Deliberately, intentionally or recklessly disturb sand lizards or smooth snakes in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of such an animal
- Damage or destroy breeding sites or resting places of such animals
- Intentionally or recklessly disturb sheltering sand lizards or smooth snakes, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead sand lizards or smooth snakes, any part of such an animal or anything derived from such an animal

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

All reptile species are also listed under Section 41 of the NERC Act (see bats section for further details).

Badgers

European badgers *Meles meles* and their habitat are protected under The Protection of Badgers Act 1992 and are also included on Schedule 6 of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention. The legislation affords badgers protection against deliberate harm or injury making it an offence to:

- Wilfully kill, injure, take, possess or cruelly ill-treat a badger (or attempt to do so)
- To interfere with a sett by damaging or destroying it
- To obstruct access to, or entrance of, a badger sett
- To disturb a badger whilst it is occupying a sett

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Works that disturb badgers whilst they are occupying a sett are illegal without a licence. Disturbance can occur even without direct interference or damage to the sett in question. In general, the following activities are likely to require a licence:

- Use of heavy machinery or significant earth moving within 30m of a sett
- Use of lighter machinery (usually any wheeled vehicles) within 20m of a sett
- Any digging, chain saw use or scrub clearance within 10m of a sett

Hazel dormouse

Hazel dormice *Muscardinus avellanarius* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture dormice
- Deliberately, intentionally or recklessly disturb dormice in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of dormice
- Intentionally or recklessly disturb sheltering dormice, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead dormouse, any part of a dormouse or anything derived from a dormouse

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Dormice are also listed under Section 41 of the NERC Act (see bats section for further details).

Bats

In the United Kingdom, all species of bat and their roosts are afforded full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (known as the "Habitats Regulations"). The Wildlife and Countryside Act is the domestic implementation of

the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) and was amended by the Countryside and Rights of Way Act 2000. This makes it an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture a bat
- Deliberately, intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection
- Deliberately, intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (even if the bat is not present at the time)
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead bat, any part of a bat or anything derived from a bat

Under UK law, a bat roost is *any structure or place which any wild [bat] ... uses for shelter or protection*. As bats often reuse the same roosts, legal opinion is that a roost is protected whether or not the bats are present at the time of the activity taking place.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

If an activity is likely to result in any of the above offences, a licence can be applied for to derogate from the protection afforded. These licences must provide appropriate mitigation and are issued by Natural England.

A Natural England mitigation licence application requires a Mitigation Method Statement and, in many cases, a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

The Natural Environment and Rural Communities (NERC) Act 2006 lists the following bat species as species of principle importance under Section 41:

- Barbastelle *Barbastella barbastellus*
- Bechstein's bat *Myotis bechsteinii*
- Noctule *Nyctalus noctula*
- Soprano Pipistrelle *Pipistrellus pygmaeus*
- Brown Long-eared bat *Plecotus auritus*
- Greater Horseshoe *Rhinolophus ferrumequinum*
- Lesser Horseshoe *Rhinolophus hipposideros*

Section 40 requires every public body in the exercising of its functions 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity' (all biodiversity and not just section 41 species and habitats); therefore making these bats a material consideration in the planning process and requiring a detailed ecological bat survey before planning permission can be granted.

Birds

All wild birds, their nests and young are protected throughout England and Wales by the Wildlife & Countryside Act 1981 (as amended). It is illegal to kill, injure or take any wild bird, or damage or destroy the nest or eggs of breeding birds. The legislation applies to all bird species, common and rare.

In addition to the protection afforded to all wild birds, more vulnerable species listed on Schedule 1 of the Act receive enhanced protection when breeding. Schedule 1 species, including their dependent young, are protected from intentional or reckless disturbance whilst at or near the nest, in addition to the protection afforded the more common species.

The NERC Act offers further protection to the nests of some species that regularly re-use their nests, even when the nests are not in use.

The leading governmental and non-governmental conservation organisations in the UK have reviewed the population status' of 244 UK bird species. "Birds of Conservation Concern 4: the Red List for Birds" is the

most recent publication summarising their findings. Three lists, Red, Amber and Green, have been produced based on the most up-to-date evidence available and criteria include conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. These lists are a valuable resource when considering conservation priorities.

Trees

Trees may be protected on an individual or group level through a Tree Preservation Order (TPO). In order to carry out works to trees with a TPO, prior written consent must be obtained from the Local Planning Authority. Trees may also be protected through a condition of planning consent or designated conservation areas.

Hedgerows

The Hedgerow Regulations are made under Section 97 of the Environment Act 1995 and came into operation on 1st of June 1997. They aim to protect important hedgerows in the countryside by controlling their removal through a system of notification to the Local Planning Authority.

A hedgerow can only be considered for classification as “important” if it, or the hedgerow of which the section belongs to is over 20m in length (or which meets a hedgerow at either end) and has existed for 30 years or more.

Invasive plant species

A number of invasive, non-native plant species are listed under Schedule 9 (Part II) of the Wildlife and Countryside Act 1981 (as amended). The most commonly encountered listed species in ecological surveys are Japanese knotweed *Fallopia japonica*, Montbretia *Crocasmia x crocosmiiflora* and variegated yellow archangel *Lamiastrum galeobdolon subsp. argentatum*. Section 14(2) of this Act makes it an offence to *plant or otherwise cause to grow in the wild* any plant listed on Schedule 9 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

A number of invasive, non-native plants species are listed under Schedule 2 (Part II) of the Invasive Alien Species (Enforcement and Permitting) Order 2019. The most commonly encountered listed species in ecological surveys are Himalayan balsam *Impatiens glandulifera* and giant hogweed *Heracleum mantegazzianum*. Section 3 of this Act make it an offence to *plant or otherwise causes to grow in the wild* any plant which is listed on Schedule 2 (Part II). These provisions are necessary to prevent the establishment of non-native species which may be detrimental to our native wildlife.

Soil or plant material contaminated with non-native and invasive plants can cause ecological damage and may be classified as controlled waste. It is an offence to keep, treat or dispose of waste that could harm the environment or human health. If there is any doubt, contact the local authority or Environment Agency.

Otters

European otter *Lutra lutra* are offered full protection through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture otters
- Deliberately, intentionally or recklessly disturb otters in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to migrate
 - their local distribution or abundance
- Damage or destroy breeding sites or resting places of otters

- Intentionally or recklessly disturb sheltering otters, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead otter, any part of an otter or anything derived from otter

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Otters are also listed under Section 41 of the NERC Act (see bats section for further details).

Water voles

Water voles *Arvicola amphibius* are protected by the provisions of Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take water vole
- Possess or control live or dead water vole or any part of a water vole
- Intentionally or recklessly damage destroy or obstruct access to any structure or place which a water vole uses for shelter or protection, or disturb water vole using such a place
- Sell, offer, advertise or transport live or dead water voles for sale

Licences are available from Natural England to allow activities that would otherwise be an offence, including:

- Scientific or educational purposes
- For the purposes of ringing or marking
- Conserving wild animals or introducing them into particular areas
- Preserving public health or public safety
- Preventing the spread of disease
- Preventing serious damage to any form of property or to fisheries

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Water voles are also listed under Section 41 of the NERC Act (see bats section for further details).

White-clawed crayfish

White-clawed crayfish *Austropotomobius pallipes* are protected under the Wildlife and Countryside Act 1981 (as amended). They are listed as a Schedule 5 species therefore part of Section 9(1) and section 9(5) apply. The Countryside and Rights of Way Act 2000 also strengthens their protection. It is offence to:

- Intentionally or recklessly kill or injure white-clawed crayfish
- Sell, offer, advertise or transport for sale a live or dead white-clawed crayfish

If a proposed development is likely to have an impact on white-clawed crayfish then the local statutory nature conservation organisation must be consulted.

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

Their inclusion on the EC Habitats Directive allows areas to be designated as Special Areas of Conservation (SAC) for the presence of white-clawed crayfish. Such a designation brings legal protection under the Conservation of Habitats Regulations 2017, this includes how the site is managed and what development can occur on and in proximity to these sites.

White-clawed crayfish are also listed under Section 41 of the NERC Act (see bats section for further details).

Planning policy

The National Planning Policy Framework 2024 (NPPF) provides guidance on the interpretation of the law in relation to the natural environment and development.

National Planning Guidance is issued in the form of the National Planning Policy Framework 2024 (NPPF). The most relevant section is 15: Conserving and enhancing the natural environment.

Key relevant principles stated in 15: Conserving and enhancing the natural environment are;

- 187.** Planning policies and decisions should contribute to and enhance the natural and local environment by:
- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats, and hedgehogs;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 192.** To protect and enhance biodiversity and geodiversity, plans should:
- a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity⁶⁸; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation⁶⁹; and
 - b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity
- 193.** 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 reasons⁷⁰ 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.