Leigh Ecology Ltd
Protected Species and Habitat Surveys

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On behalf of Mr. Jeremy Pudge.

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Important Information to Readers

This report has been prepared for Mr. Jeremy Pudge, in accordance with the terms and conditions of appointment for a Preliminary Ecological Appraisal. Leigh Ecology Ltd cannot accept any responsibility for the use of or reliance on the content of this report by any third party.

The advice contained in this report is based on the information available and/or collected during the period of study. We cannot eliminate the possibility of important ecological features being found through further investigation and/or by survey at different times of the year or in different years.

Surveys and assessments are undertaken on the understanding that nothing in our reports will be omitted, amended or misrepresented by the client or any other interested party.

Please be aware the information contained within this report is valid for a period not exceeding two years. After this time, data contained within will require updating.

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1. Executive Summary

Leigh Ecology Ltd was commissioned to conduct a Preliminary walkover of a parcel of land located and building named unit 1, Redwither Business Park, Wrexham. The site is a formal haulage yard, and will be similarly used, on a slightly smaller scale than previously.

The site is exclusively a haulage yard with accompanying buildings, and therefore offers very limited ecological value.

The site features within Redwither Industrial estate, a large industrial estate to the east of Wrexham. The industrial estate comprises expected urban features, dominated by concrete roads and large corrugated buildings adjacent to each other. Despite this, important linear corridors intersect across the estate, as well as bordering the site offering ideal corridors for various species. Several prominent water bodies are dotted across the industrial estate also. The River Dee (SSSI) features around 3.4KM east from proposal site. Dee Cliffs, Farndon (SSSI) features around 4.4KM northeast from proposal site. Midland Meres & Mosses P2 (Ramsar) features 4.4KM northeast from proposal site. Several water bodies feature around 171m east from proposal site.

The development proposals are to maintain the building's broad function, changing the use from distribution to a waste processing site for electrical materials. with no changes to the building or site proposed. It is noted that less traffic is expected to visit the site.

The site is bounded by a mature hedgerow along the western and southwestern boundaries. 3 alder trees feature along the eastern boundary of site also. Both the hedgerow

2. Introduction

Background

Leigh Ecology Ltd was commissioned by Mr. Jeremy Pudge to undertake an Ecological Appraisal of a parcel of land identified for a proposed residential development. The site is located at approximate National Grid Reference (NGR) SJ384502, with the site boundary *shown in red on Figure 2.1 below.*



Figure 2.1; Site Location and Extent

Red line shows site boundary. (Google Satellite, 2025).
(Contains public sector information licensed under the Open Government License v3.0.)

This report presents baseline ecological information derived from the diurnal appraisal survey. It also provides recommendations for any additional surveys or works required to deliver a comprehensive ecological impact assessment.

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

- The site is found to be suitable habitat for any European Protected Species (EPS), other protected species, or priority habitats/species, or
- Evidence of use by protected species is observed or suspected, or
- Seasonal constraints limit the ability to gather sufficient ecological data for a robust assessment,

then further detailed surveys may be recommended to enable a conclusive assessment of potential ecological impacts.

If protected species are subsequently confirmed during these additional surveys and may be affected by the development, it is likely that a European Protected Species Mitigation Licence (EPSML) will be required to proceed with development works.

Certain protected or priority species have been omitted from this report, as they were discounted based on factors such as absence or isolation of suitable habitat, known species distribution, or because the proposed works are unlikely to negatively impact these species or their habitats.

2.1 Legislation & Policy

This report considers the following key legislation and policy relevant to ecological assessment and protection:

Legislation

- Planning Policy Wales (8th Ed. January 2016)
- Technical Advice Note 5 (TAN5) Nature Conservation and Planning 2009
- Local planning policies (Wrexham City Council).
- The Conservation of Habitats and Species Regulations 2017.
- The Wildlife and Countryside Act 1981 (as amended).
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC.
- National Parks and Access to the Countryside Act 1949.
- The Protection of Badgers Act 1992.
- The Countryside and Rights of Way Act 2000.
- The Hedgerow Regulations 1997.
- The Natural Environment and Rural Communities Act 2006; and
- Local Biodiversity Action Plan for Wrexham.

These laws protect both native and invasive species, with varying levels of protection depending on the species or group. For example, some species receive protection only during specific life stages (such as breeding birds during nesting), while others have full protection across their lifecycle under national or European law (e.g., otters). Some species are protected solely under UK law (e.g., grass snake).

Policy

The National Planning Policy Framework (NPPF, revised July 2021) provides key

guidance on biodiversity and planning decisions. Paragraph 180 states:

- **a**) Planning permission should be refused if significant harm to biodiversity resulting from a development cannot be avoided, mitigated, or—only as a last resort—compensated for.
- **b**) Development likely to have an adverse effect on a Site of Special Scientific Interest (SSSI), individually or in combination with other developments, should not normally be permitted unless the benefits clearly outweigh the impacts on the site and the wider network of SSSIs.
- **c**) Development resulting in the loss or deterioration of irreplaceable habitats (e.g., ancient woodland or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists.
- **d**) Developments whose primary objective is to conserve or enhance biodiversity should be supported, and opportunities to improve biodiversity within and around developments should be integrated into design, especially where measurable net gains or public access improvements can be secured.

This national policy is reflected and supported within the relevant local planning policy framework.

Scope of Study

This report includes:

- A preliminary ecological baseline assessment for the site
- An assessment of protected mammals on site
- A desk study including data search via Magic Map and local ecological records
- Identification of potential ecological constraints to development
- Recommendations for any further ecological work required to support a planning application

All work was conducted in accordance with the Chartered Institute of Ecology and

Environmental Management's (CIEEM) Code of Professional Conduct and Good Practice Guidelines.

3. Methodology

A daytime Preliminary Ecological Appraisal (PEA) was conducted on the 21st of August 2025 under dry and sunny conditions by Christian Leigh, a Natural England licensed bat surveyor and a qualifying member of CIEEM.

Floristic Assessment

The survey employed the UK Habitat Classification Version 1.1 (Butcher et al., 2020), aligning with the Biodiversity Net Gain framework, and referred to the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Survey methodology (JNCC, 2010). The approach also followed guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal, 2nd Edition (CIEEM, 2017).

During the walkover, botanical assemblages were recorded, focusing on the presence of red-listed species (Stroh et al., 2014; Hodgetts, 2011), Section 41 species of the NERC Act, Local Biodiversity Action Plan (LBAP) species, and specially protected species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 5 of the Conservation of Habitats and Species Regulations (2019, post-EU Exit). Species nomenclature follows Stace (2019) for vascular plants, Smith (2004) for mosses, and Dobson (2018) for lichens.

The site was also assessed for invasive non-native species (INNS), as listed under Schedule 9 (Part II) of the Wildlife and Countryside Act (1981, as amended).

Faunal Assessment

Fauna presence and evidence were documented alongside an assessment of the

site's suitability for priority species. The walkover also included searching for ephemeral pools or unmapped waterbodies that could be ecologically significant.

Bats

The site was surveyed for bats, including inspection of buildings (where present) for potential roosting features (PRFs) and signs of use such as droppings, incidental sightings, or prey remains. The inspection utilized a high-powered torch to examine internal and external features, including roofs, eaves, and crevices.

All trees were also assessed for bat roost potential using close-focus binoculars and torches. Potential roost features include woodpecker holes, rot holes, cracks or splits, lifted bark, knot holes, cavities, ivy cover on stems >50mm diameter, and bat or bird boxes.

The assessment criteria followed the Bat Conservation Trust's Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th Edition (2023).

Landscape Assessment for Bats

Linear features such as hedgerows and watercourses, which often serve as bat commuting and foraging routes, were identified and evaluated for potential impacts from development activities.

Breeding Birds

The survey checked buildings, trees, hedgerows, and scrub for nesting birds and nesting suitability. Bird species observed and heard were recorded, along with searches for nests or nesting materials. Special attention was given to species protected under Schedule 1 of the Wildlife and Countryside Act (1981, as amended), including priority species such as Barn Owl (*Tyto alba*).

Other Mammals

The walkover included a search for signs of Badger (*Meles meles*), such as setts, runs, digging, latrines, and snuffle holes. Evidence or habitat suitability for European Hedgehog (*Erinaceus europaeus*) was also recorded.

Amphibians and Reptiles

A 250m radius desktop search from the site's central grid reference identified nearby ponds, ditches, or waterbodies potentially supporting Great Crested Newts (GCN). This informed recommendations for any further detailed surveys.

The site was evaluated for reptile suitability by examining features such as south-facing slopes (basking), hibernation sites (e.g., banks, walls, rubble piles), and foraging habitat (e.g., rough grassland and scrub).

Professional Judgement

The conclusions and recommendations in this report are based on the surveyor's skills, experience, and knowledge of the site's flora and fauna within the local and regional ecological context.

4. Results

Site Survey

Habitats within the survey area

The results of the Phase 1 Habitat survey are detailed in Appendix 1, with supporting photographs integrated within the text. Habitat descriptions are provided using English plant names for clarity.

Building Assessment

The building on site is a large, brick building with a flat concrete roof atop. The building condition was good, and no evidence of features associated with bat roosting were identified across the building. The building is to remain in its current composition also.

Site Overview

The survey site encompasses the full extent of land shown in Figure 2.1. The site is to remain the same usage and appearance as present, with this survey and subsequent report being undertaken to understand the ecological context of the site.

The site is a hard standing yard with standard brick, flat roof building and corrugated attached sections. The building is large and directly accompanies the haulage yard adjacent. The site features a mature bordering hedgerow along some of the southern and western boundary, and large mature alder trees along the western boundary.

Site Boundaries

As aforementioned, a mature hedgerow features along a section of the southern boundary and the western boundary. Some walling features as the northern and eastern boundaries, to secure the site.

Surrounding Habitats

The site sits within Redwither Industrial Estate, a large industrial estate to the east of Wrexham. The estate is dominated by standard urban habitat, but important tree lines and linear corridors feature intersecting the estate and surrounding the estate. These corridors are ideal for species such as GCN, bat species, birds of prey and bird nesting habitat.



Photograph 1, A front view of the existing McCarthy Distribution building. The building is standard brick with mixed clad and differing flat concrete roof.



Photograph 2, A view of the southern boundary hedge. The hedge is mostly hawthorn, laurel with dotted mature trees, mostly alder.



Photograph 3, A view of 3 mature alder trees on the eastern boundary of the site.



Photograph 4, A view of the adjacent haulage yard, which is to be retained in use. The building itself features a concrete flat roof, which may be suitable for bird species, particularly gull species.

Protected and notable species

Invertebrates. The site offers no suitability for invertebrate species.

Amphibians

Great crested newts (GCN) are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2010 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). These regulations afford protection to both individual newts and the habitats they utilise for shelter, rest, or breeding. GCN are also listed as a priority species under both the UK and local (LBAP) Biodiversity Action Plans.

The site is set within Redwither industrial estate, a dense urban industrial estate featuring intersecting and surrounding corridors for GCN, linking the dotted water bodies and important features across the estate. The proposal plans are to keep the site as it is, in its exact current composition and usage, with notably less traffic presence to and from site.

Breeding Birds

The site features a bordering mature hedgerow acting as the southern and western boundaries, comprising hawthorn and laurel predominately. This hedge offers features suitable for bird nesting, due to the dense, wide hedge. The hedgerow obviously borders a very busy haulage yard, and therefore may not be suitable in location but will remain untouched.

Mammals

The building on site is a large, mixed section brick building with an attached corrugated section. The main brick section features a concrete flat roof, with no instances of damage or designed entry points being identified across the building. The building is to remain unchanged. The rest of site is hard standing yard, or the few ecologically important features on site which are all to remain.

5. Constraints And Recommendations

The proposed development (within the red line site boundary as shown in *Figure 2.1*) will strictly be the acquisition of the building and change of use to a waste site for electrical goods, resulting in less traffic.

Therefore, given the ecologically important features on site are to remain and the site is to remain unchanged, there are no ecological constraints. It is recommended that faunal enhancements be implemented to boost the biodiversity of the site, with some scope for additions along the boundaries being possible.

Ecological Enhancements

These ecological enhancements could include;

- Installation of bat boxes on retained trees or new buildings.
- Bird nesting boxes.
- Hedgehog highways and hibernacula.
- Amphibian hibernacula (e.g. log piles) in the ecological enhancement area.
- Invertebrate features such as insect hotels and bee bricks.

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