

**Outline Ecological Impact Assessment (retrospective)
of
extension to Unit 2, Oakwood House, Blackwood Business
Park (ref: P/2023/0358)**

**September 2023
v2**

1 Introduction

1.1 Terms of Reference

This report retrospectively considers the likely impacts on biodiversity conservation of the now built extension to Unit 2, Oakwood House, Blackwood Business Park (approximate NGR SJ3764550142).

Eco Tech was commissioned to compile this report for submission with the planning application, utilising information derived from historic aerial, a Phase 1 habitat classification survey, outline protected species surveys and consideration of existing information.

Existing and likely previous habitats and species are evaluated. Potential sources of impact on features of biodiversity conservation importance are outlined and potential effects of the development are described. Further survey and/or mitigation measures are outlined, as appropriate.

Net Biodiversity Benefit (NBB) in relation to the development is also considered.

1.2 Survey Methodology

Information used in the production of this report was derived from surveys carried out by Robert Mileto on the 21st August 2023. The surveys comprised:

- Phase 1 habitat classification survey (JNCC, 1993)
- Outline protected species survey/assessment as follows:
 - Great crested newt (search for suitable breeding habitat in the locality, including the use of online maps and aerial photography; visual search under any on-site refuges).
 - Reptiles (assessment of habitat suitability; visual search under any on-site refuges);
 - Wild birds (assessment of potential breeding habitat and obvious signs of previous or current breeding and incidental records);
 - Bats (preliminary roost assessments of any trees, essentially as per Collins, J. (ed.), 2016);
 - Badger (search for setts and signs of activity e.g., paths, latrines within the application area and within some 30m of its boundary, where access permission allowed);
 - Other protected species and species of principal importance for biodiversity conservation (assessment of habitat suitability and outline search for signs);
 - Survey for invasive non-native species (such as those listed on Schedule 9 of the 1981 Wildlife and Countryside Act (as amended)).

In all cases above, the likely situation before the extension was informed by historical aerial photos (from Google Earth Pro). In addition, existing ecological information was obtained from the North Wales Environmental Information Service (Cofnod) with regard to non-statutory sites and notable species records within a 1km radius of the centre of the application area. See associated existing records submitted with this report for a summary of these data. Statutory site information was obtained from the MAGIC map at <https://magic.defra.gov.uk/magicmap.aspx> (accessed September 2023)

1.3 Constraints to survey

Other than being retrospective, no significant constraints to survey were encountered.

2 Results

2.1 General ecological context

The application area is within Wrexham Industrial Estate and extends to approximately 500 m sq of which some 95 m sq is understood to be the extension. The application area is roughly square in shape and bounded on three sides by built development. On the remaining side (at the south), there is a thin strip of bramble scrub, then a block of broadleaved semi-natural woodland.

Table 1 gives a list of the Phase 1 habitats currently present within the application boundary. An outline description for each habitat is given below and photographs 1 to 4 show current views of them.

Table 1: Inventory of Phase 1 habitats currently present within the application area

Habitat
Scattered broadleaved trees
Bare ground
Buildings

Map 1 shows the location and extent of current habitats within the application area.

2.2 Habitats (current and historical)

Scattered broadleaved trees

There are four young ash trees on the application boundary at the north-west corner of the application area.

Historically, these seem to have been present since at least 2006. See photo 8.

Bare ground

The areas around the building comprises bare ground of various sorts including gravel and concrete.

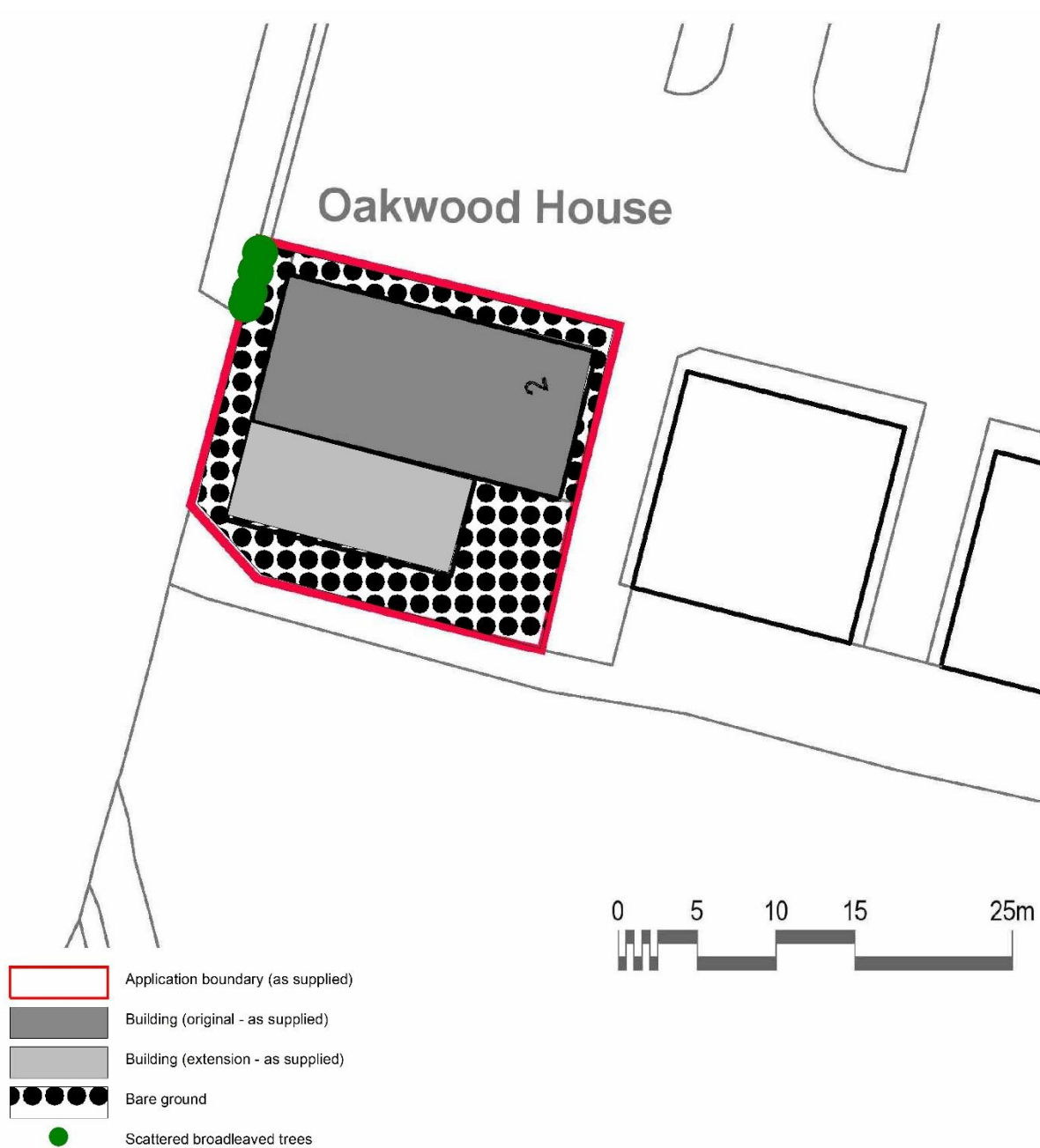
Historically, this bare ground seems to have been present since at least 2006. See photos 5 to 8.

Buildings

There is a modern building, the larger original unit and the more newly built extension joined to its south

Historically, the original building seems to have been present since at least 2006 See photo 8.

Map 1 Location and extent of current habitats within the application area



2.3 Species

Great Crested Newt (GCN)

No GCN were found within the application area at the time of survey. There appear to be no waterbodies (ponds) within 250m of the application area boundary.

Cofnod returned several records of great crested newt within 1km of the centre of the application area, the nearest being some 300m to the south-east (see associated existing records submitted with this report).

Reptiles

No reptiles were found at the time of survey. The habitats within the application area are considered to be and have been, very poorly suited to use by reptiles.

Cofnod returned 2 reptile records both some 700m from the approximate centre of the application area. See associated existing records submitted with this report for details.

Wild Birds

No incidental birds observed on or over the application area. No evidence of previous nesting was found.

Cofnod returned 355 records (86 species) of wild birds within 1kmm of the centre of the application area. None of these records appear to be from within the application area. See associated existing records submitted with this report for details.

Bats

All trees within or immediately adjacent to the application boundary were considered to have negligible potential to support roosting bats. No trees with potential to support roosting bats appear to have been present since at least 2006. See photo 8,

Cofnod returned 11 records of 8 bat species within 1km of the centre of the application area. None of these records appear to have been from within the application area. See associated existing records submitted with this report for details.

Badger

No setts or other evidence of badgers was found within the application area, or within 30m of its boundary, where access was possible. No habitat with potential to support a sett appears to have been present since at least 2006. See photo 8,

Cofnod returned several records of badger from within 1km of the application area. None of these records appear to have been from within the application area. See associated existing records submitted with this report for details.

Other protected species and species of principal importance for biodiversity conservation

No habitat considered suitable for other protected species was found within the application area, including those species previously recorded as occurring in the locality. No habitat with potential to support such species appears to have been present since at least 2006. See photo 8,

Invasive non-native species

No such species were identified within, or immediately adjacent to the application area.

Cofnod returned several records for such species within 1km of the application area. None of these records appear to have been from within the application area. See associated existing records submitted with this report for details.

2.4 Statutory, non-statutory and other sites of biodiversity conservation value in the locality

Cofnod returned records for two non-statutory sites of biodiversity conservation value within 1km of the application area. The nearest is Wrexham Industrial Estate Local Wildlife Site (LWS), which is split into 3 parts. One part is the broadleaved semi-natural woodland adjacent to the southern boundary of the application area. This woodland is known as Erlas Black Wood.

The LWS is described at <https://safleol.lercwales.org.uk/Public?ID=3159> (accessed September 2023) as:

“This is a series of sites within the industrial estate which includes unmanaged grassland at Bryn Road and on Cefn Park land and ancient broadleaved woodland, Erlas Black Wood. The derelict land known as Cefn Park, on the southern edge of the Industrial Estate, consists of a complex mosaic of scrub, grassland and tall herb. Species-rich grassland occurs where there is rabbit grazing with cowslip, restharrow, yellowort, common centuary and bird'sfoot trefoil. Other species of interest include dyer's greenweed in among scrub and grass vetchling in rank grassland. Worn paths and motorbike tracks criss-cross the site and many species present such as prickly lettuce, smith's pepperwort and bristly ox-tongue typify disturbed ground. A mosaic of woodland and damp grassland occurs adjacent to the River Clywedog. The woodland is dominated by mature hawthorn with alder and crack willow along the river. The ground flora is sparse but dog's mercury, hart's tongue and male fern do occur. Meadowsweet, great willowherb, and canary reed grass occur in the damper patches. The strip of species-rich grassland beside a ditch on Bryn Road has similar grassland species including the uncommon grass vetchling. False fox sedge, yellow flag and bullrush are a few of the species which occur in the ditch. Erlas Black Wood is dominated by mature oak.”

According to MAGIC there are no statutory sites within 1km of the application area. The closest statutory site appears to be the River Dee Site of Special Scientific Interest (SSSI) which lies approximately 3.5km south-east of the application area at their closest points.

Current Photos



Photo 1 – from beyond the south-eastern corner looking west, showing the building (extension to the left), bare ground (gravel) and adjacent bramble scrub and broadleaved semi-natural woodland



Photo 2 – from the south-eastern corner looking north, showing the building (extension to the left), bare ground (gravel and concrete)

Current Photos (cont.)



Photo 3 – from the south-western corner looking north, showing bare ground (gravel) and the scattered broadleaved trees



Photo 4 – from the north-eastern corner looking west, showing bare ground (gravel and slabs)

Historical Photos

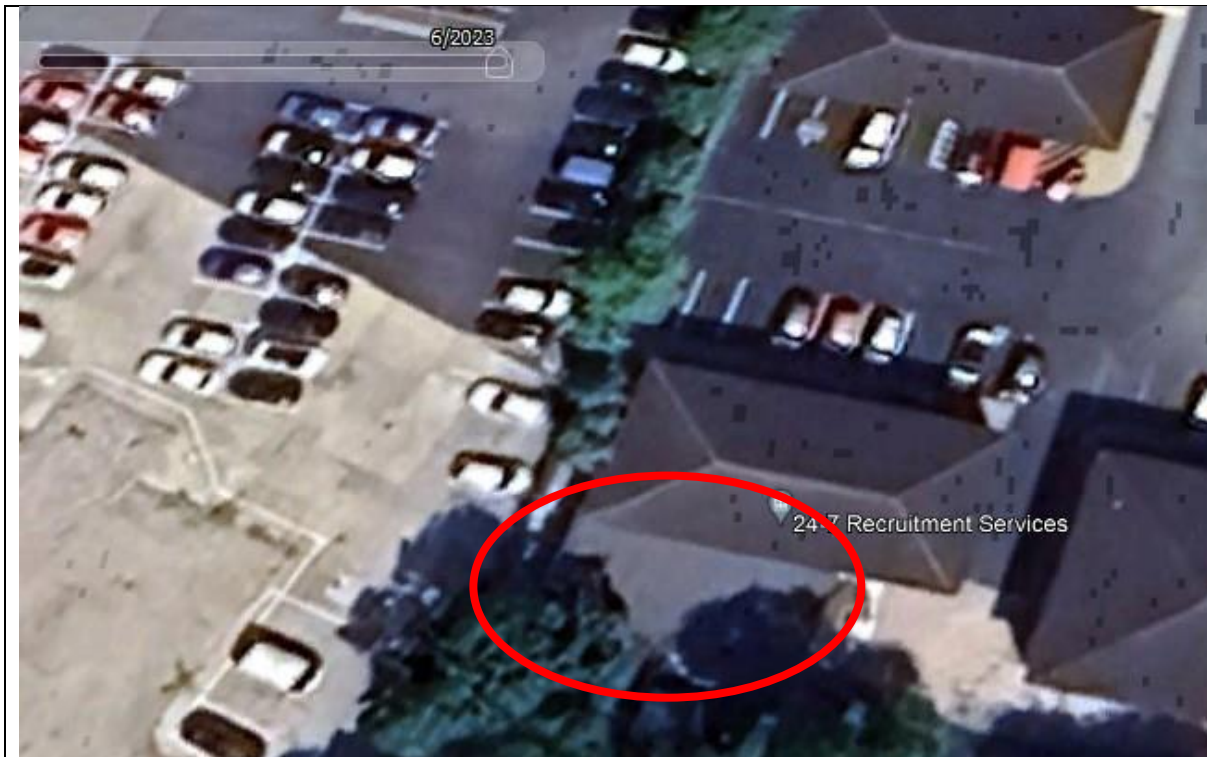


Photo 5 – application area in 2023. The grey flat roof of the extension is ringed in red



Photo 6 – application area in 2021. The same area is ringed in red. It appears to be bare ground (gravel) in the shadow of the adjacent trees

Historical Photos (cont.)



Photo 7 – application area in 2013. The same area is ringed in red. It appears to be bare ground (gravel) with some shadow from the adjacent trees



Photo 8 – application area in 2006. The same area is ringed in red. It appears to be bare ground before it was gravelled

3 EVALUATION

3.1 Method for evaluation of features

Habitat and species evaluation essentially follows the Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for Ecological Impact Assessment (CIEEM, 2018).

In order to assess impacts arising from a particular development, it is necessary to establish the biodiversity conservation value of each feature/receptor likely to have been affected by the extension, both within and adjacent to the application area.

The value or potential value of each feature identified is evaluated according to its importance in a geographical context, as follows:

- International (European);
- National (Wales);
- County / Unitary Authority (Wrexham County Borough);
- Site (the site or a larger area if impacts extend further for certain features);

or

- Of negligible value/importance.

The CIEEM guidelines suggest that value assigned to a feature should be a matter of professional judgement based on statutory requirements and policy objectives for biodiversity. These include the key sites, as well as habitats and species of principal importance for biodiversity conservation in the Wales.

Individual species that are protected under European or National legislation are evaluated as above.

3.2 Habitats within the application area boundary

None of the habitats currently present or likely to have been present since at least 2006 are considered to be any of those of principal importance for the conservation of biological diversity in Wales. Given this and the low biodiversity value (as described in Section 2 above), all habitats present or likely to have been present since at least 2006, are also considered to be of negligible biodiversity conservation value.

3.3 Species

Great crested newt

It is considered that the assessment undertaken adequately established that the application area is highly unlikely to currently support great crested newt or likely to have supported them since at least 2006.

Reptiles

It is considered that the assessment undertaken adequately established that the application area is highly unlikely to currently support reptiles or likely to have supported them since at least 2006

Wild Birds

It is considered that the assessment undertaken adequately established that the application area is highly unlikely to currently support notable wild bird species or likely to have supported them since at least 2006.

Bats

It is considered that the survey undertaken adequately established that within and immediately adjacent to the application area, no features suitable for use as bat roosts are present or likely to have been present since at least 2006

Badger

It is considered that the assessment undertaken adequately established that the application area and its immediate surrounds currently does not appear to support a badger sett. Nor is it likely to have supported one since at least 2006.

Other protected species and species of principal importance for biodiversity conservation

Given the lack of current suitable habitat and historically since at least 2006, it is considered unlikely that any other such species are or were either present within the application area or are or were solely reliant on it for their continued presence in the locality.

3.4 Statutory, non-statutory and other sites of biodiversity value in the locality

SSSIs are generally considered to be of value in a national (Welsh) context. LWS are generally considered to be of value in a County context.

4 POTENTIAL IMPACTS

4.1 General

This section considers the potential and predicted impacts which may have arisen from the extension in the absence of mitigation. These are divided firstly into direct impacts arising from the proposed development itself and then indirect impacts arising from other possible associated effects.

4.2 Method of impact assessment and prediction

The method essentially follows a simplified form of the guidance set out in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment, 2018.

An assessment (in the absence of mitigation) is made of whether important ecological features (features of greater than negligible value) will be subject to impacts, and characterisation of these impacts and their effects.

Typically, this can involve:

- Characterisation of unmitigated impact on the feature (often including extent (area), duration and reversibility, as well as the size and/or severity of the impact in quantitative terms);
- Significance without mitigation and confidence level (often including, if the impact is positive or negative, the likelihood that any impacts will occur as predicted).

4.3 Potential Direct Impacts on Habitats

Given the likely negligible value of the habitats present historically, no significant direct adverse impact is predicted to have occurred with a very high degree of certainty.

4.4 Potential Direct Impact on Species

Given the likely negligible value of the species present historically, no significant direct adverse impact is predicted to have occurred with a very high degree of certainty.

4.5 Potential Indirect Impacts

Given the likely negligible value of the habitats and species present historically, no significant indirect adverse impact is predicted to have occurred with a very high degree of certainty.

5 PROPOSED MITIGATION, COMPENSATION AND ENHANCEMENT

This section outlines measures to mitigate or compensate for any significant impacts identified in Section 4 above. Enhancement measures are also proposed.

5.1 Habitats

Since no significant direct adverse impact is predicted to have occurred, no mitigation or compensation is proposed.

5.2 Species

Since no significant direct adverse impact is predicted to have occurred, no mitigation or compensation is proposed.

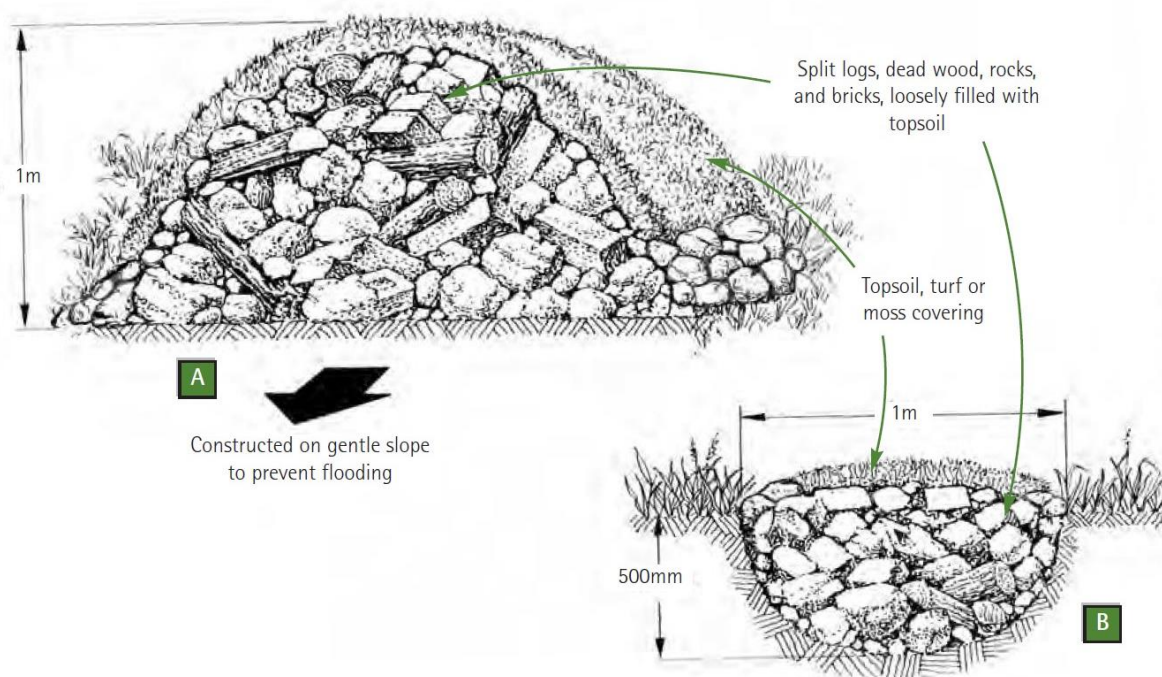
5.3 Enhancements

In keeping with the requirement for NBB, the following steps will be taken as species enhancement measures.

- The value of the application area for nesting birds should be enhanced by the installation of two sparrow terrace boxes on the existing building. An example can be found online at <https://www.birdfood.co.uk/woodstone-estella-house-sparrow-nest-box> (accessed September 2023).
- The value of the application area for bats should be enhanced by the installation of a 'woodstone' (or direct equivalent) bat box on the existing building. An example can be found online at <https://www.birdfood.co.uk/chillon-woodstone-bat-box> (accessed September 2023). Comprehensive information on suitable installation sites can be found at http://www.bats.org.uk/pages/bat_boxes.html (accessed September 2023).
- The value of the application area for amphibians and reptiles should be enhanced by the installation of a refuge at the south-east corner of the application area. Two designs are shown in Figure 1 below.

Note that house sparrow, several bat species (noctule, soprano pipistrelle, brown long-eared and lesser horseshoe) and several amphibian and reptile species (great crested newt, common toad, slow-worm, adder, common lizard, grass snake) are known from the locality (see associated existing records submitted with this report for details) and are also all Species of Principal Importance for biodiversity conservation in Wales, as derived from the Environment (Wales) Act 2016. Hence, these proposed enhancements are fully in keeping with the requirements of NBB.

Figure 1 – Two designs for amphibian/reptile refuges



6 REFERENCES & BIBLIOGRAPHY

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