

EXTENDED PHASE 1 HABITAT SURVEY OF
LAND OFF STATION AVENUE, CHIRK,
WREXHAM

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1.0 INTRODUCTION

- 1.1 Rachel Hacking Ecology Limited was commissioned in 2018 by Edwards Homes Limited to undertake an Extended Phase 1 Habitat Survey at a site off Station Avenue, Chirk, Wrexham. The site will be the subject of a planning application for 24no. dwellings, with associated gardens and access. An Extended Phase 1 Habitat Survey is required to provide an overview of the habitats present within the site and to assess any potential protected species issues on the site.
- 1.2 The site is situated within the village of Chirk, south of Wrexham (O.S. grid reference: SJ2883637838 – see Figure 1 below). The site currently comprises a triangular area of rank grassland, partly bordered by hedgerows. The site is surrounded by scattered residential dwellings, amenity land and a factory.
- 1.3 The aims of the survey were to:
- Describe and map the habitats present on the site
 - Assess the potential for protected species to be present on the site or just outside the immediate site boundary
 - Identify where further survey may be necessary.

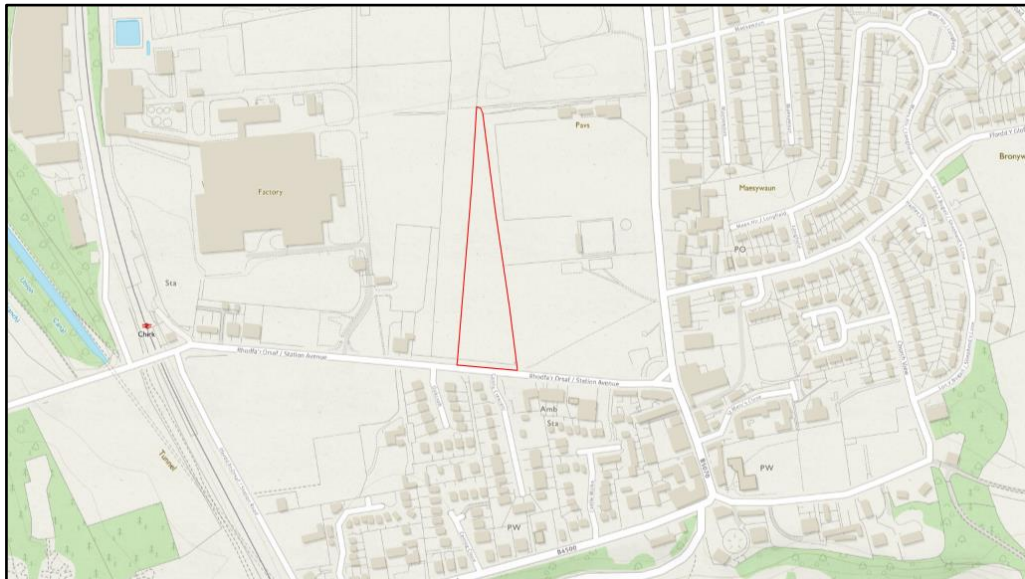


Figure 1 showing the site within the red line boundary

2.0 METHODOLOGY

- 2.1 A Phase 1 Habitat survey was undertaken to JNCC standards (JNCC, 2010). The site was walked, and each habitat was assigned a Phase 1 habitat category. Species lists were taken at locations of botanical interest. All botanical nomenclature follows Stace, 2010. A Phase 1 map was produced showing habitat boundaries.
- 2.2 During the Phase 1 survey, the habitats were assessed for their potential to support protected species. This included, for example, looking for signs of Badger activity (e.g. setts, paths, latrines and hairs on fences), assessing any waterbodies on site or near the site for their potential to support Great Crested Newt and assessing the potential for any buildings or mature trees to be used by bats.
- 2.3 The site was also surveyed for invasive, non-native plant species such as Japanese Knotweed and Himalayan Balsam.
- 2.4 Ben Crossthwaite and Joe Walters (Ecologists) undertook the survey on 22nd November 2018. The weather was dry and cool. Both surveyors are fully experienced at habitat and protected species surveys. November is not an optimal survey period for botanical assessments. Though due to the habitats present a full survey of the site was possible. There were no constraints to the survey and the site could be fully accessed.

3.0 RESULTS

HABITATS

- 3.1 The Phase 1 Habitat Map can be found at the back of the report. The habitats on site are described below.

Neutral Grassland

- 3.2 The majority of the site comprises neutral grassland (see Photograph 1). The grassland is dominated by rank species of grass and is unmanaged. Species include False Oat-grass *Arrhenatherum elatius*, Yorkshire Fog *Holcus lanatus*, Cock's-foot *Dactylis glomerata*, White Clover *Trifolium repens*, Ribwort Plantain *Plantago lanceolata*, Yarrow *Achillea millefolium* and Common Bent *Agrostis capillaris*. In places, species typical of a seed mix occur such as Yellow Rattle *Rhinanthus minor*, Field Scabious *Knautia arvensis* and Poppy *Papaver* var. Target Note 1 (Appendix 1) describes this habitat.



Photograph 1 showing the rank neutral grassland

Tall, Ruderal Herb

- 3.3 Narrow strips of tall, ruderal vegetation occur along the edges of the site (see Photograph 2). Species include Creeping Thistle *Cirsium arvense*, Hogweed *Heracleum sphondylium*, Common Nettle *Urtica dioica*, and Cow Parsley *Anthriscus sylvestris*.



Photograph 2 showing the ruderal vegetation

Continuous Scrub

- 3.4 Small patches of dense scrub exist on the western boundary (see Photograph 3). These comprise stands of Bramble *Rubus fruticosus* agg. and Hawthorn *Crataegus monogyna*.



Photograph 3 showing the scrub

Hedgerows

- 3.5 Species-poor hedgerows exist along the southern and eastern boundaries of the site (see Photographs 4 and 5). The hedgerows comprise mainly Hawthorn *Crataegus monogyna* with occasional Elder *Sambucus nigra*, Dog Rose *Rosa canina* agg., and Blackthorn *Prunus spinosa*. The eastern hedgerow is interspersed with mature trees.



Photograph 4 showing the hedgerow along Station Road



Photograph 5 showing eastern site boundary

Trees and Scattered Scrub

- 3.6 Mature trees exist on the southern edge of the site (see Photograph 6). These include mainly Lime *Tilia x europaea* and Sycamore *Acer pseudoplatanus*. Trees occur along the eastern edge of the site, these include Sycamore, Pedunculate Oak *Quercus robur* and Ash *Fraxinus excelsior*. Individual Hawthorn *Crataegus monogyna* shrubs are mapped as scattered scrub (see Photograph 7).



Photograph 6 showing the trees along the front of the site



Photograph 7 showing an individual Hawthorn shrub

PROTECTED SPECIES

Badger

- 3.7 Badgers *Meles meles* are protected under the Protection of Badgers Act 1992. This Act, for example, makes it illegal to disturb a Badger whilst it is in a sett, to kill, injure or take a badger and to obstruct the entrance to a Badger sett.
- 3.8 No evidence of Badger activity, such as latrines or snuffle holes could be located on the site. No Badger setts could be located within the site or on the immediate boundaries of the site.

Bats

- 3.9 All bat species are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended).
- 3.10 No built structures exist within the site. The trees on the boundaries of the site were inspected from the ground. Some of the trees may support cavities but no obvious signs of potential bat habitat within the trees could be found. No evidence of bat activity could be located.

Great Crested Newt

- 3.11 Great Crested Newt *Triturus cristatus* is a European Protected Species (EPS) under the Conservation of Habitats and Species Regulations 2017 and the species is fully protected under the Wildlife and Countryside Act 1981 (as amended).
- 3.12 No waterbodies exist on the site. No ponds exist within 500 metres of the site. The site supports suitable Great Crested Newt terrestrial habitat, within the hedgerows, ruderal vegetation and tall grassland.

Nesting Birds

- 3.13 All bird species are protected at their nest under the Wildlife and Countryside Act 1981 (as amended).
- 3.14 The hedgerows and mature trees provide suitable nesting habitat for birds.

INVASIVE SPECIES

- 3.15 No invasive, non-native species could be located on the site or immediately adjacent to the site.

PROTECTED SITES

- 3.16 No statutory or non-statutory protected sites exist on or directly adjacent to the site. The nearest statutory protected sites are 0.5km south of the site which are River Dee Site of Special Scientific Interest (SSSI) and

River Dee & Bala Lake Special Area of Conservation (SAC). Chirk Castle & Parkland SSSI lies 0.7km to the west of the site separated by the railway line and industrial buildings. Ifton Meadows Local Nature Reserve (LNR) lies 2.5km to the east of the site. These sites are designated mostly for their valuable riverine, meadow, and parkland habitats which are not represented on the proposed development site. The site is within a SSSI Risk Zone which limits residential development off 100 units or more.

- 3.17 No non-statutory protected sites could be found near the proposed development site.

4.0 ASSESSMENT

HABITATS

- 4.1 The Phase 1 Habitats present on the site are common throughout the UK. No nationally rare or locally rare plant species were located during the extended Phase 1 Habitat Survey.
- 4.2 The boundary habitats are the most ecologically valuable habitats. The hedgerows provide dispersal routes for wildlife. The ruderal vegetation provides a pollen and nectar source for invertebrates and enhances the value of the hedgerows. The rank neutral grassland offers little ecological value. Where left tall it offers some cover for wildlife and a limited source of nectar and pollen for invertebrates.

Development Context

- 4.3 The development proposals include the retention of the eastern boundary hedgerow and trees and the majority of the southern hedgerow and trees, except to allow for access. Two trees and a small section of hedgerow will be removed. This will be mitigated for by planting elsewhere on the site. The development involves the loss of the grassland habitat. However, a large area within the southern half of the site will be designated as public space. This could be partly planted as a wildflower meadow, with a more species-rich habitat created.

PROTECTED SPECIES

Badger

- 4.4 No Badger sett could be located on the site or immediately adjacent to the site. No incidental evidence of Badger was encountered such as foraging or latrines. Badger is not considered to be a constraint on development at this time.

Bats

- 4.5 No suitable bat roosting habitat exists on the site. No structures suitable for a bat roost occur on the site. The trees were inspected from the ground and found to support no obvious features suitable for bats, although dense epicormic growth and ivy made it difficult to see the trunk and limbs on some trees. The two trees to be felled to facilitate the access to the site do not support any features suitable for bats. No further bat survey work is considered to be necessary and bats are not considered to be a constraint on development. However, if further mature trees are to be affected or felled as part of the proposals, detailed bat survey work may be required prior to work commencing.
- 4.6 Bats use linear landscape features to forage and commute along, therefore it is likely that bats use the boundary hedgerows and trees as foraging habitat. These features will be mainly retained and enhanced

through further planting, and therefore there will be no deleterious loss of bat habitat. Any artificial lighting within the scheme should be aimed away from the hedgerows

Great Crested Newt

- 4.7 No ponds exist on the site. No ponds could be located within 500 metres. The site supports suitable Great Crested Newt terrestrial habitat within the hedgerows, ruderal vegetation and grassland. However, the lack of breeding ponds in the locality indicates that it is reasonably unlikely that Great Crested Newt occurs on the site. Therefore, no further newt survey work is required and Great Crested Newt is not considered to be a constraint on development at this time.

Nesting Birds

- 4.8 The site supports suitable nesting habitat for birds. If any work to the hedgerows or trees will proceed within the bird nesting season (generally March-August), then a nesting bird check will be required immediately prior to any work. Nesting birds can be somewhat mitigated for by allowing no works to be carried out to suitable nesting habitat within the bird nesting season.
- 4.9 No statutory or non-statutory protected sites exist on the site or immediately adjacent to the site. The nearest statutory protected site is over 0.5km from the site and separated by adequate buffer habitats. The nearest non-statutory protected site does not support similar habitats to that of the development site. At these distances, and with the low impact it is considered that the proposed development would have no deleterious effect on the protected sites

5.0 RECOMMENDATIONS

Further Survey

- 5.1 Protected species are a material consideration when a planning authority is considering a planning application. The presence of protected species, the effect of the proposed development and suitable mitigation, if required, must be established before planning permission can be granted. Following the findings from the Extended Phase 1 Habitat Survey, the following may be required:

- **Nesting Birds** - If any work to the hedgerows or trees needs to be carried out within the bird nesting season (generally March to August), then a nesting bird survey will be required by experienced personnel immediately prior to work commencing.

Habitat Enhancement

- 5.2 The design of the scheme allows room for habitat enhancement, such as a wildflower meadow, pond and enhanced boundary planting. Other general recommendations to bring biodiversity gain to the site are:

- Tree planting – If any tree planting is proposed, where practical native tree species should be planted.
- Soft landscaping should include the provision of native and non-native flowering perennial species, to provide a pollen and nectar source for invertebrates.
- Bird boxes and/or bat coxes could be erected on some of the new buildings, where possible.

6.0 REFERENCES

JNCC. *Phase 1 Habitat Survey – a technique for environmental audit*, JNCC, Updated 2010.

Preston, C.D., Pearman, D. & Dines, T. (2002). *New Atlas of the British and Irish Flora*. Oxford University Press.

Stace, C. A. (2010). *New Flora of the British Isles, 3rd Edition*. Cambridge University Press.

PHASE 1 HABITAT MAP

