Site at Halton, near Chirk ([redacted])

Ecological Assessment

A short-form report

Camlad Ecology Ltd.

For

[redacted] / Trevor Mennell Planning

July 2024

Halton Site [redacted])

Short-form ecology report

1.0 Introduction

1.1 This report has been prepared for [redacted], to inform planning processes, through his agents, Trevor Mennell Planning. It follows a desk study and site surveys on 2nd February, 17th April and 23rd July 2024 by E J Lomas of Camlad Ecology Ltd. Copyright remains with Camlad Ecology Ltd.

1.2 The purpose of this report is to provide basic information on possible impacts to protected habitats and species.

1.3 The site is about 0.53ha in area, as a near rectangle with its long edges following a minor road to the south and wide roadside planting above the A5 to the north. There is an existing inset entrance from the minor road at the east end, to a 3m wide stoned roadway that leads into the site. Land within the site was evidently species poor modified grassland, but has been largely under stone since 2018 or earlier. At the eastern end there is a separate enclosure with two bungalow or chalet type dwellings, apparently unoccupied. The site is level, although the surrounding landscape and roads have gradients from east to west (This landform probably relates to previous use as a road construction yard, see 2.8, following). The northern, western and eastern sides of the wider site (including the bungalows) are bounded by dense native tree and shrub planting, probably dating from the mid 1990's, after the current road layout was constructed.

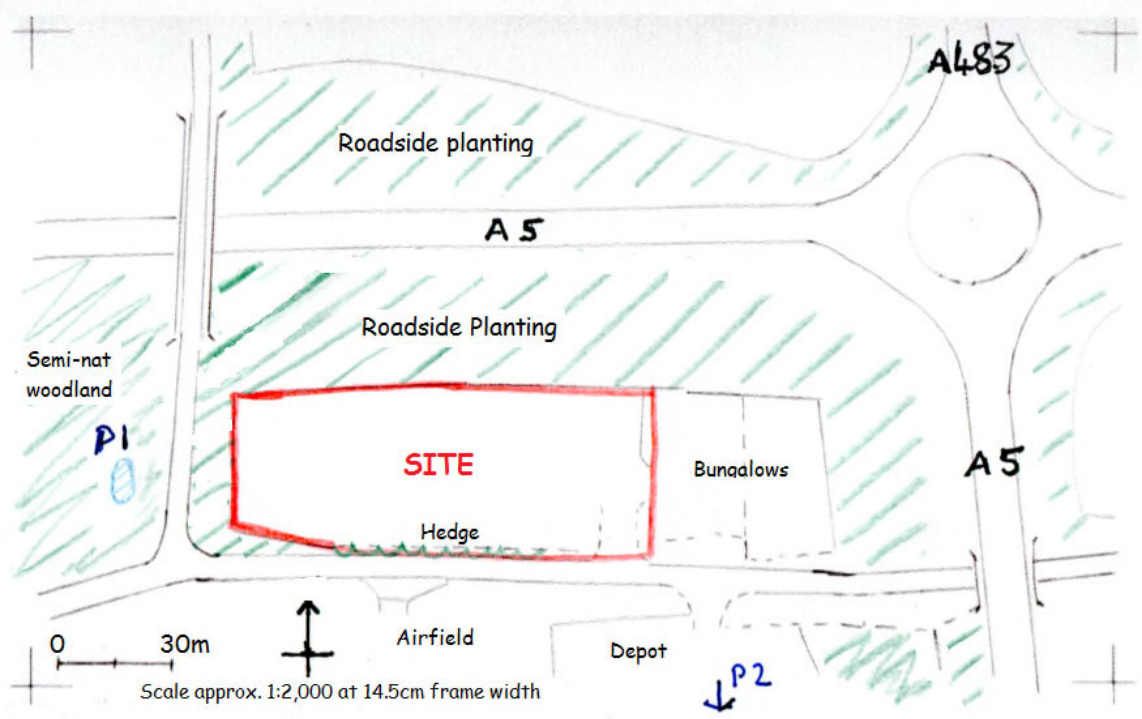
1.4 The site is in Wales, in the Wrexham Council area, but the Welsh-English border is about 2km west and 3km south, following the River Ceiriog and then the River Dee. This affects some data shown on the MAGIC website.

1.5 The intended development is as a permanent traveller / gypsy site for a small number of static caravans, one mobile caravan base and a communal day room, with a waste-water treatment plant serving all units. The total affected area will be under 0.67ha; the trees, hedges, and entrance will remain unchanged. The northern and western boundary is as a strong post, rail and wire mesh fence against roadside planting, while the southern boundary against a minor road is a well grown but gappy native hedge along about 60% of the boundary.

Site plan follows overleaf. Photos follow the text.

2.0 Potential habitat impacts

2.1 There is no likely impact on protected or valued habitat, provided due care is taken over pollution of groundwater and surface water channels. The nearest statutory protected habitat is the River Dee (Wales) SSSI & SAC, 1.2km north at its nearest, and the River Dee (England) SSSI 1.7km south east at its nearest. Waste water treatment from the intended development has been planned to reduce phosphate and nitrate discharge to a minimum. Geological, habitat and topographic factors make impacts on the river system highly unlikely (see 2.5, 2.6 following). This is considered further in the Green Infrastructure Statement and in water treatment documents.



2.2 Very large blocks of mostly broadleaved woodland lie around the River Dee valley, starting north of the A5 close to the site; this is likely to include areas with Ancient Woodland (ASNW) characteristics. The modern road layout results in considerable severance from the site. There is no likely impact on this woodland.

2.3 The site is level, on made ground probably dating from the late 1980's. Immediately west of the site the land slopes steeply east to west, interrupted by a modern fully surfaced minor road, a cul-de-sac that serves a single farm and a small number of houses. Below this there is a 1ha block of woodland on disturbed ground, with mostly native broadleaved trees around 30-40 years old. Beyond this there is a 5ha field of improved grassland, sloping gradually to Halton Brook, which is about 425m from the site. Halton Brook runs on for 1.5km (corridor length) to the River Dee. Surface water flow to the brook is highly unlikely, due to the made ground, underlying geology, and interception by the woodland. There was no sign of issues (seeps, springs or wet ground) along the change of slope where the woodland meets the field.

2.4 There are two ponds near the site. P1 is a very small seasonal pond (about 30m^2 maximum extent) in the woodland south of the lane. It is in an artificial hollow, receives water captured by road drains downslope of the site, and drains to groundwater; there is no sign of wet ground downslope of the pond. It is heavily shaded and has poor water quality. P2 is in the very artificial form of a square with extended corners and a circular central island, about 750m^2 excluding the island, in mostly young woodland. It is about 100m south of the site. There are some old waterfowl shelters and some signs of angling activity. The margins of this pond are clear and managed in Google Earth images from 2006 to 2010. Neither pond is evident on a large scale 1961 map.

2.5 Soils under the site were examined in spade pits, dug with the aid of a pickaxe. The only remaining surface soils are along the northern and western edges; these were found to be a dark friable loam to about 90mm deep with shaley sandstone below this. Excavated trenches that were visible in April showed clinker

and shale down to at least 800mm. Soils in the wood to the west were medium brown friable loams with moderate clay content, with much yellow brown shaley stone from about 300mm; this corresponds to descriptions of Cornbrook Sandstone, Carboniferous Period but pre-dating the productive coal measures. British Geological Society mapping shows that the ridge on which Halton and the A5 – A483 junction lie is of this formation.

2.6 The Cornbrook Sandstone dips steeply from west to east, under the productive coal measures. There is a downwards west-east fault just north of the site. The River Dee corridor runs over the coal measures, while the sandstone strata pass below the coal measures or are cut off by faulting. Any groundwater movement from the site should be away from the River Dee. The formation in this area is listed as a Secondary A aquifer (Magic website), suitable for local supply only. The only references to possible public supply use relate to the Mardy Water Resource Zone, drawing on a borehole about 8km south west of the site. This is one of Severn Trent Water's smallest WRZ areas; this WRZ should be secure until at least 2070 under any climate change scenario (Draft Water Resources Management Plan, Severn Trent Water, 2024). There are no licensed private borehole supplies in the locality and unlicensed abstraction (generally from rivers) is very low (Draft Water Resources Management Plan, Hafren Dyfrdwy, 2024). General precautions should be sufficient to avoid any impacts on groundwater and surface water resources.

2.7 The hedges and trees around the site should not be impacted by the development. They are the result of roadside landscape planting on steep banks, following the re-alignment of the A5 and A483 in the early 1990's. The trees and shrubs should date to about 1995. The planting is very dense, so there is little ground flora. The site is separated from this planting by a strong post, rail and wire mesh fence, with mainly hawthorn planting, unmanaged but in hedgerow form, behind this.

2.8 Historic maps show the site near to a railway siding related to a colliery, Black Park, as a field within its current boundaries and surrounded by other fields, between 1881 and 1970, with the new A5/A483 road layout being built from 1988 to 1992. The new (1990's) A5 route cuts through what would have been the spoil heaps of the colliery and the line of the rail siding; it appears likely that the site was built up with waste during the road construction. It is in an very suitable location for a temporary works compound.

3.0 Potential species impacts

3.1 [redacted]

3.2 Bats – NBN data show few bat records within 2km, with two species (common pipistrelle, noctule) from survey at a group of buildings about 350m south west and one lesser horseshoe record from a location about 1.2km south west. There are no buildings or underground voids on or adjacent to the site. Trees on and near the site are all under 700mm stem diameter and in generally good condition with few flaws. These are unlikely to be used by bats, but would not be disturbed by the development in any case. Hedges should not be affected by the development. There should not be any significant impact on bats.

3.3 Other mammals – impacts on other mammals are considered to be unlikely, given the small scale of the site and the nature of its habitats. The nearest aquatic habitat is 410m away.

3.4 Nesting birds - impacts on nesting birds are considered to be unlikely, given the small scale of the site and its habitats, and the retention of all hedges and trees.

3.5 Reptiles are unlikely to be present in this area, with largely arable farming or improved grassland and a lack of unchanged linear habitat such as railway lines. There is one NBN record, for slow worm almost 2km from the site.

3.6 Great crested newts – The nearest GCN record is from a site about 1.9km to the south; there are no other NBN records within 2km. However, there are two ponds within 250m, the nearest being about 25m west and the other 95m south, beyond a road. These ponds appear to be of low suitability as great crested newt breeding ponds; some key unfavourable factors appear to have been overlooked in earlier assessments, particularly the likely fish presence in Pond 2. This pond and its margins were clearly managed in 2006-12, from Google Earth images, and there was some old angling debris seen in our survey. Considering the nature of local ponds, their distance from the site, the intervening habitat, and the small scale of the intended works, impacts on great crested newts, even if present locally, are considered to be highly unlikely.

3.7 All other protected species - impacts on any other protected or valued species such as rare plants or invertebrates are considered to be unlikely, given the small scale of the site and the nature of its habitats, and the retention of all hedges and trees.

3.8 Mature trees – The trees on the margins of the site, in the roadside boundaries, are outside the intended works. The nearest trees to this area would require a root protection zone of around 1.2m radius, which can easily be accommodated; the root protection zones appear to be outside the site itself.

3.9 Invasive species – no invasive species were found during the survey, in or close to the site.

4.0 Recommendations

4.1 A high level of precaution over ground water and surface water contamination must be maintained during construction and use of the site, observing the precautions given in NRW (Netregs) Guidance for Pollution Prevention, GPP1

4.2 The existing hedges and trees including ivy must be left undisturbed during construction works. During the ongoing use of the site, the hedges should not be trimmed over their entire length each year. All shrubs, but especially holly and ivy, are of highest biodiversity value when allowed to flower and set fruit. Work to hedges and trees should only take place in early spring or mid autumn (mid February to mid March, or late September to end October).

4.3 During construction precautions must be taken to avoid trapping animals in trenches and pipes. Trenches should have ramps of soil or wood at each end to allow escape. Open pipe ends should be capped or blocked each day at the end of work.

4.4 During construction and all use, care must be taken to avoid bringing invasive species into the site, such as Japanese knotweed, Himalayan balsam, cotoneaster and rhododendron plants, or introduced pondweeds. These may be conveyed on vehicle wheels and chassis, from construction and landscaping work sites.

4.5 Green Infrastructure – Our study and survey of the site and its surroundings strongly indicate that the site, prior to any work that has occurred since 2015, consisted of low distinctiveness grassland in poor condition, almost enclosed by hedgerows and woodland strips that had good connectivity to wider habitat.

The hedgerow against the minor road on the southern edge of the site is not continuous and is thin in some places where there is a hedgeline. We suggest that connectivity is reinforced by additional planting of shrubs and appropriate trees. Habitat of higher distinctiveness could be established on site by the planting and management of fruit trees in a belt of more diverse grassland around part of the site margins. A Green Infrastructure Statement has been prepared.

E J Lomas

Camlad Ecology

30 June 2024

Site photos:



Grass sward on margins of site



General site area, Feb 2024



Pond P1, showing outfall from road drains



Pond P2