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EXTENDED PHASE 1 HABITAT SURVEY
Proposed Aldi
Denbigh Road, Ruthin.

20th September 2017



Report by: Chris Hall, ACIEEM & Kate Williamson, CIEEM

Client: Aldi Stores Ltd, Chester High Road, Neston, Cheshire, CH64 3TS

Planning Authority: Denbighshire County Council

Grid Reference: SJ 11383 58938 (Approximate site centre)

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EXTENDED PHASE 1 HABITAT SURVEY REPORT

20th September 2017

1. Summary

An extended Phase 1 Habitat survey was carried out on 30th August 2017 by Cambrian Ecology Ltd on land on the outskirts of Ruthin. It is proposed to submit a planning application to Denbighshire County Council for the construction of an Aldi store on the site on Plot 1 and the development of Plot 7, with outline planning consent being sought for the future development of Plots 2 – 4 inclusive.

The Phase 1 Habitat survey revealed that, with the exception of an individual tree, the only habitat on the site is heavily improved grassland, and that this is the only habitat that will be lost as a result of the proposals with a land take of approximately 5 acres. All botanical species present in this habitat are common and widespread and of no conservation or Biodiversity concern.

Also present are a ditch and a strip of broad leaved woodland just outside the eastern site boundary, and hedges with some hedgerow trees just outside the northern, southern and part of the western site boundaries. While these habitats will not be directly affected by the proposals, it is recommended that root protection zones are taken into account with regards to any works in the vicinity of mature trees.

The assessment of the habitats on the site perimeter concluded that there is the potential for birds to nest in the boundary habitats along with the potential for bats to utilise these linear features as navigational aids. One mature oak; (*Quercus petraea*) on the southern boundary adjacent to the proposed Aldi development was also assessed as having the potential to support roosting bats. Some precautionary measures with regards to lighting have therefore been made to minimise any potential impact on bat flight paths or roosts.

Some Biodiversity enhancements have been recommended, including the use of bat bricks within the fabric of the industrial/commercial units, and the use of beneficial species in landscaping schemes. This complies with Section 6 of the Environment Wales Act (2016) which requires Planning Authorities to seek Biodiversity gain as a routine part of planning consents being issued.

2. Introduction

Cambrian Ecology Ltd was commissioned by Aldi Stores Ltd to carry out an Extended Phase 1 Habitat Survey of a field adjacent to Denbigh Road on the outskirts of Ruthin. It is proposed to construct an Aldi store on a plot of approximately 2.9 acres in the south-western section of the field and a further Plot 7 in the eastern corner.

The relevant planning authority is Denbighshire County Council.

The approximate centre of the site is located at Grid Reference SJ 11383 58938

Figure 1: Aerial photograph of the survey area



3. Methodology

3.1 Habitats

The Phase 1 Habitat survey was carried out on 30th August 2017 by ecologist Chris Hall. The survey took the form of an extended Phase I survey and identified baseline ecological conditions, as well as any important or notable habitats. All habitats within the proposed development site were classified and mapped as accurately as possible, using target notes to identify features of particular ecological interest. Species lists were drawn up for each habitat type identified and the habitat condition was assessed. In the context of this report, *important or notable habitats* are considered to be those which are of a sustainable size and which meet any of the following criteria:

- Habitats which have a high intrinsic ecological value, i.e. they support a diverse range of vascular plant and/or faunal species;
- Mature or semi-natural habitats in built-up areas;
- Any UK BAP priority habitats;
- Local Denbighshire BAP habitats considered having a significant extent and/or ecological interest.
- Potentially Invasive Non-Native Species, (INNS)

All habitats considered to have the potential to support rare, protected or otherwise notable species of flora and fauna were noted, as were any direct signs of these species. Where possible, habitats were cross-referenced to any relevant UK priority habitats or Denbighshire County Council's Biodiversity Action Plan habitats.

3.2 Protected Species

The site was assessed on its potential to support any protected or important species by ecologist Kate Williamson on 30th August 2017. During this survey, a search was made for field signs of protected or notable species and assessments made of the potential of habitats to support these species. In the context of this report important or notable species are considered to be those that meet any of the following criteria:

- Species protected by British or international law
- UK BAP priority species or local Denbighshire BAP species
- Nationally rare or scarce species
- Species of Conservation Concern (e.g. JNCC Red List, RSPB/BTO Red or Amber lists)

3.3 Desk Study

The desktop study aims to collate existing information about priority species, habitats and designated sites within 1km of the survey area. This information has relevance to the likelihood of priority species being present within the survey area, as well as giving context to any species and habitat records from the actual site.

A data search for all priority species, habitats and designated sites was conducted with the Local Environmental Records Centre; Cofnod. The search parameters were 1km from the survey site area.

4. Survey Limitations

Field signs for protected and important species are often difficult to find or absent from a site. For this reason, the site and its habitats are assessed on their potential to support these species.

5. Results

5.1 Habitat

With the exception of an individual tree, the habitat on the site currently consists entirely of improved grassland. There are hedges, a strip of broadleaved woodland, mature trees and a ditch around the site perimeter. These features are however all outside the site boundary and should be unaffected by the proposals, provided that some precautionary measures are adhered to.

The location of these habitats is shown in Appendix 2.

A. *Improved Grassland*

The habitat on the site is dominated by heavily improved and grazed grassland. *Lolium perenne* and *Trifolium repens* are dominant, with other species only present as minor components, mainly around the field margins where livestock sheltering results in higher nutrient levels. These species include *Urtica dioica*, *Cirsium arvense*, and *Rumex obtusifolius*.

B. *Hedges*

These linear landscape features are all outside the site boundary and it is understood that they will be physically unaffected by the proposals.

Hedge 1 adjacent to the Denbigh road on the western site boundary is well maintained and ends at the proposed site entrance. This hedge is a monoculture of *Crataegus monogyna*.

Hedge 2 just outside the northern site boundary is taller and less heavily managed. Species present include, *Crataegus monogyna*, *Prunus spinosa*, *Corylus avellana*, *Alnus glutinosa*, *Sambucus nigra*, *Rosa canina*, *Viburnum opulus* and *Salix spp.* This hedge is heavily grazed at the base.

Hedge 3 just outside the southern boundary adjacent to the livestock market is tall and overgrown and includes *Crataegus monogyna*, *Prunus spinosa*, *Acer campestre* and *Salix spp.* The hedge immediately adjacent to the proposed development is shorter and relatively well maintained and includes *Crataegus monogyna*, *Prunus spinosa*, *Rosa canina*, *Sambucus nigra* and *Corylus avellana*.

C. *Mature Trees*

There are some mature hedgerow trees in the form of *Quercus petraea* in the section of hedge on the southern site boundary in addition to the individual *Populus spp* that is actually growing inside the site boundary in Plot 7.

D. *Broadleaved Woodland*

There is a strip of broadleaved woodland just outside the eastern site boundary which will be unaffected by the proposals. Species present include *Quercus petraea*, *Prunus avium*, *Alnus glutinosa* and *Salix spp.*

E. Ditch

The ditch just outside the eastern site boundary is very heavily shaded and devoid of vegetation.

5.2 Protected Species

Bats

No evidence of bats was recorded during the site visit on 30th August 2017, although habitat features adjacent to the site were noted as having the potential to support roosting and commuting bats.

Nesting birds

No direct evidence of nesting birds was recorded during the site visit and the only potential within the site boundary was in the single mature tree. However, adjacent hedgerow habitat and woodland habitat may support nesting birds during the breeding season.

5.3 Desk Study

The biological record search did not contain any records from within the site boundary and no relevant species within 100m. The closest record for badger was over 1km away and hedgehogs (*Erinaceus europaeus*) 473m away. There are four records of bat roosts within 500m of the site. These roosts are of soprano (*Pipistrellus pygmaeus*) and common pipistrelle (*P.pipistrellus*) bats.

6. Habitat Evaluation

A. Improved Grassland

The improved grassland habitat which will be lost is of little botanical value.

B. Hedges

With the exception of the hedge on the roadside boundary, the hedges around the site perimeter are relatively diverse botanically. Their importance is however primarily from a protected species perspective providing both cover and habitat connectivity. This is of particular importance in a relatively open, agriculturally dominated landscape.

C. Mature Trees

Mature trees such as the oaks on the southern and northern site boundaries are of considerable importance to Biodiversity and due to their nature, take a long time to replace if lost. They can also be of significant importance to protected species. e.g. roosting bats and nesting birds.

D. Broadleaved Woodland

The woodland strip is relatively poor botanically, but as with the hedges, takes on additional importance in an open landscape providing both cover and habitat connectivity.

E Ditch

The ditch just outside the eastern site boundary is of no botanical importance, being devoid of vegetation.

7. Species Evaluation

Bats

The woodland edges and hedges around the site perimeter potentially provide sheltered foraging opportunities and habitat connectivity for a range of bats species, including those recorded roosting in relatively close proximity revealed by the data search.

No potential roosts were recorded either on the site or around the site perimeter, although a mature oak tree did have some suitable crevices. This fact gives some scope for Biodiversity gain as an integral part of the proposals.

Nesting Birds

There is the potential for nesting birds to be present in the hedges, scrub and the tree on the site at the appropriate time of the year.

8. Impact Assessment

8.1 Habitat

Improved Grassland

The improved grassland habitat on the site displays an impoverished species assemblage, largely as a result of the long term agricultural management history of the site.

Hedges,

At this stage it is presumed that the hedges are to be retained as part of the proposals. Hedge 1 along the roadside ends where the proposed site access is to be located removing any need to create an access through the hedge. No impact as a result of the loss of hedgerows is therefore anticipated.

Mature Trees & Broadleaved Woodland

Neither of the above habitats are to be removed as part of the proposals. There is however the potential for a negative impact on both habitats as a result of soil compaction and/or root damage. This could cause the death and/or destabilisation of trees resulting in them having to be felled for safety reasons.

The loss of trees also has the potential to have an impact on any protected species associated with them such as roosting bats and nesting birds.

Ditch

The ditch is also outside the site boundary and will be unaffected by the proposals. There is however always the potential for pollution incidents to occur, particularly during the construction phases on Plots 5, 6 & 7 which lie adjacent to the ditch.

8.2 Protected Species

Bats

Although there will be no direct disturbance to the mature oak at SJ 11370 58798 identified as having potential bat roosting crevices present, there are possible indirect impacts due to inappropriate lighting and/or damage to the root plate during the construction phase. This tree is situated directly behind the proposed new Aldi store. New lighting could also affect the use of the linear field boundary features by commuting bats and alter the connectivity of the landscape for foraging animals.

Nesting Birds

There is the potential for nesting birds to be present in the hedges, woodland and trees on the site boundary. Due to the retention of these habitats, the disturbance will be short term and temporary and no long term negative impact is anticipated from the proposed new Aldi store development or further development of the remainder of the site.

There is however the potential for habitat/management improvements recommended in this report to have a positive impact on birds by providing enhanced foraging opportunities for a wider range of species.

9. Mitigation Measures

9.1 Habitats

Improved grassland

No mitigation measures are required for the loss of the improved grassland on Plot 1.

Hedges

No hedges are to be lost as a result of the proposals. No mitigation measures are therefore required.

Trees & Broadleaved Woodland

To prevent soil compaction and/or root damage to trees around the site perimeter, it is recommended that root protection zones are enforced. A professional arboriculturist should be consulted with regards to the extent of these zones.

Ditch

Due to the location of the proposed Aldi store on Plot 1 which is some distance from the watercourse, no mitigation measures should be required.

It is important for future development on the site, that any works in close proximity to the ditch are carried out in accordance with Guidance for Pollution Prevention GPP5 Works and Maintenance in or near Water available at <http://www.netregs.org.uk/media/1303/gpp-5-works-and-maintenance-in-or-near-water.pdf>

9.2 Protected Species

Bats

Bat flight paths & potential roosts

Due to the fact that many bat species are highly sensitive to light pollution, any new lighting installed as part of this proposed development should be designed to avoid spill onto adjacent hedgerows and mature trees.

Nesting birds

No mitigation is required for nesting birds unless any hedgerows or trees are to be removed.

9.3 Biodiversity Gain

Section 6 of the Environment Wales Act (2016) requires Planning Authorities to seek Biodiversity gain as a routine part of planning consents being issued.

The following recommendations could be adopted within the proposals to deliver a level of Biodiversity gain in the long term.

New Buildings

The incorporation of bat bricks or tubes within the fabric of the new industrial/commercial building would provide roosting opportunities on the site which are currently absent. There are a range of products available, including the Schwegler 2FR bat tube and Schwegler brick box 27, which would all be suitable.

Providing wide eaves on the gable ends of the building would also provide nesting opportunities for house martins.

It is also recommended that any landscaping employs tree and shrub species that are of benefit to Biodiversity by providing nectar sources for invertebrates and/or fruits for birds and small mammals.

10. Legal Implications

10.1 Bats

Bats are protected under UK law by the Wildlife and Countryside Act 1981 (as amended) and also under European law by the Habitat and Species Regulations 2010. Under these laws it is an offence to deliberately kill or injure a bat, to disturb a bat or to damage, destroy or block access to a roost. Bat roosts are protected under these laws whether the animals are present at the time of survey or not. Natural Resources Wales are empowered to issue licences to carry out work to bat roosts for reasons of overriding public interest.

12. Appendices

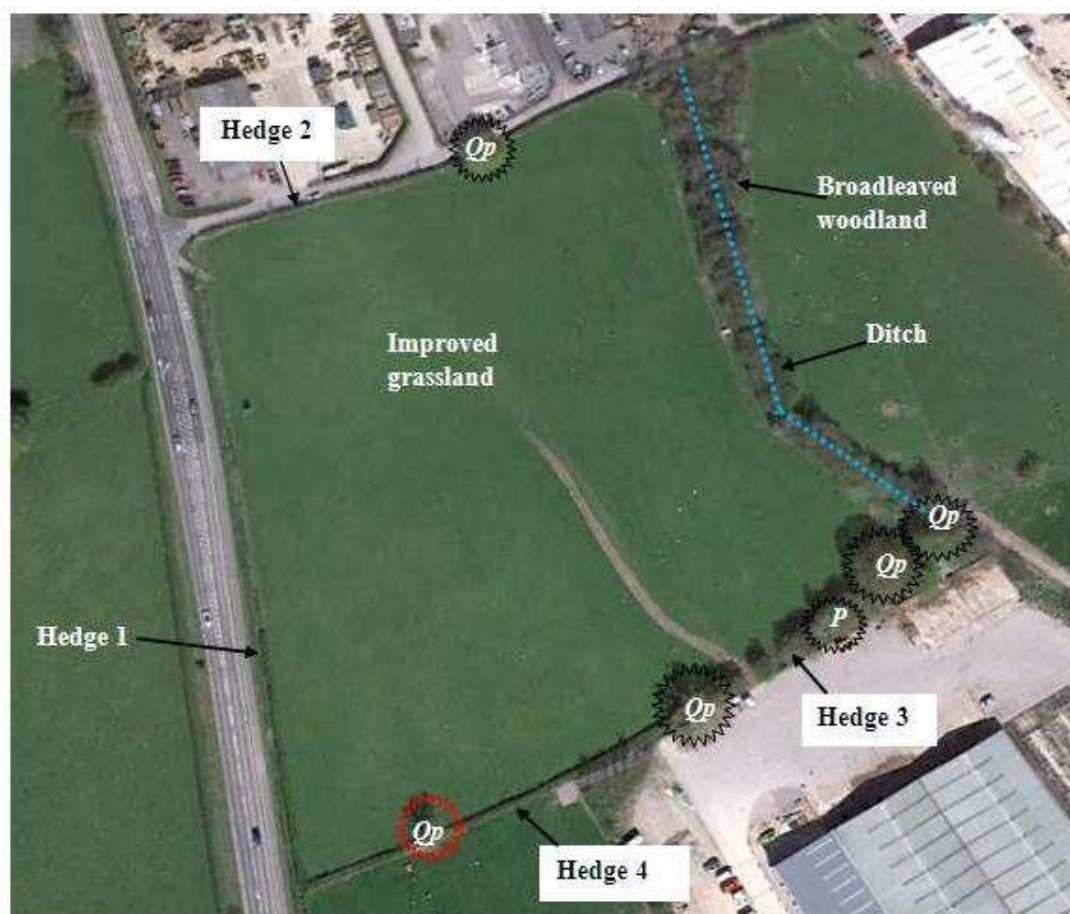
12.1 Site photographic record





Woodland along eastern boundary of the site, with ditch running within it

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12.2 Phase I habitat survey results



Key

-  Mature trees
-  Potential bat roost tree
- Qp* *Quercus petraea*
- P* *Populus spp*

12.3 Review Table

Name	Task	Date
Chris Hall	Author	03.09.2017
Kate Williamson	Review	17.11.2017