



THE
ENVIRONMENT
PARTNERSHIP



ASH ROAD SOUTH WREXHAM ECOLOGICAL ASSESSMENT

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Document Title	Ecological Assessment
Prepared for	Portal Construction NW Ltd
Prepared by	TEP - Warrington
Document Ref	6899.001

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Date	February 2018
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Executive Summary

1. Planning consent for the Ash Road South site was previously granted by Wrexham Borough Council in August 2007, under consent number P/2007/0433. While partial development was carried out, a significant portion of the site remained undeveloped due to the downturn in the economy. This report has been prepared in support of the updated planning application for the portion of the site which currently remains undeveloped.
2. No international, national or locally designated wildlife sites will be impacted as a result of the proposed development.
3. The habitats within the site are common to the local area and are generally the same as was previously recorded within the 2015 Phase 1 habitat survey of the site.
4. The existing intact TAF fencing which is installed around the perimeter of the site provides a significant barrier to amphibian and reptile dispersal from the wider area. The site is considered to be amphibian and reptile free. A commitment will be made through the planning process to continue to monitor and manage the TAF fence line for the duration of the construction period.
5. The site provides some limited nesting bird habitat for species that use scrub and low lying vegetation. Any works that affect these features during the nesting season have the potential to disturb nesting birds. All birds in the UK are protected while undertaking nesting activities under the Wildlife and Countryside Act 1981 (as amended).
6. Replacement planting is recommended to compensate for the loss foraging habitat on site (for invertebrates and other species). A mix of wildlife friendly species should be incorporated into the planting scheme. These should be native species, ideally of local stock, and include a variety of nectar and berry bearing species to enhance foraging opportunities. Species could include hawthorn, blackthorn *Prunus spinosa*, dogwood *Cornus sanguinea* Holly *Ilex aquifolium* English oak *Quercus robur* and hazel *Corylus avellana*.

1.0 Introduction

Site History

- 1.1 Planning consent for the Ash Road South site was previously granted by Wrexham Borough Council in August 2007, under consent number P/2007/0433, this consent has now expired. While partial development was carried out, a significant portion of the site remained undeveloped due to the downturn in the economy.
- 1.2 Following receipt of planning consent in 2007, a GCN licence was granted by WAG on 15th April 2008 (licence number GCN/1194/WAG/IND). Upright temporary amphibian fencing (TAF) was installed around the site perimeter and a trapping scheme carried out. No GCN were recorded on site, during the licensed exclusion process.
- 1.3 The TAF remained in place over the following years. However due to length of time the TAF has been installed and then left unmanaged, there were some areas of damage which potentially left the site accessible once again to amphibians. In 2016 TEP were subsequently commissioned to consult with Natural Resource Wales (NRW), to enable measures to be undertaken to fix the fence line to ensure an appropriate amphibian barrier was once again in place. Due to the lack of planning consent these works were done under an amphibian Reasonable Avoidance Measures Method Statement (RAMMS) under agreement with NRW, rather than a formal licence application (Appendix A). Works associated with the RAMMS were carried out in Spring 2016 and included the following measures:
 - Repairs to the TAF perimeter fencing;
 - Vegetation trim to 150mm;
 - Hand searching of rubble piles & areas of suitable habitat; and
 - 5 days of artificial refugia checks.
- 1.4 Portal Construction NE Ltd are now looking to submit an updated planning application for the site, which includes a commercial unit, associated car/lorry parking and an access off Bridge Road North. This ecological assessment supports this new planning application, providing an update to previous ecological reports (the latest of which being TEP Ref 5351.002).

Site Description

- 1.5 The site is approximately 0.8ha in aerial extent and is situated within the Wrexham Industrial Estate, to the east of Wrexham. It is situated at the southern end of Ash Road South at the junction with Bridge Road North, which borders the site to the south. A row of three business units with associated car parking areas borders the site to the west and a large commercial unit exists to the east. To the north of the site the previous area of woodland/scrub has been cleared, presumably ahead of proposed site development. The approximate central grid reference of the site is SJ 382 497. The site location in the wider landscape is shown at Figure 1.



Figure 1: Site location in wider context.

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- 1.6 The site comprises an area of undeveloped land which has been previously cleared of vegetation and has subsequently begun to naturally regenerate. It is bordered on all sides by temporary amphibian fencing (TAF).

2.0 Methods

Desktop Study

- 2.1 Information regarding historic species records and protected sites within a 1km radius of the site was requested/gathered from the sources listed in Table 2.1.

Table 2.1: Ecological information and consultations

SOURCE OF INFORMATION	NATURE OF INFORMATION
Magic Map: Multi-Agency Geographic Information for the Countryside	Online mapping system identifying statutory and rural designations, citations, natural area boundaries etc
Section 42 NERC Act 2006	Habitats and species of principal importance for the conservation of biodiversity.
Google Maps	Satellite imagery
Cofnod	Identification of records for protected species and sites within the local area.
Wrexham Council Unitary Development Plan (February 2005)	Relevant policies and local site designations/ wildlife corridors

Habitats and Flora

- 2.2 An extended Phase 1 habitat survey was originally completed by Kerry Stead in August 2015, the survey was subsequently updated by ecologist Emma Pickering in February 2018 to note any changes. The surveys were carried out in line with the Phase 1 habitat survey methods (JNCC, 2010) (1). The surveys give an overview of key habitats and wildlife corridors present on and adjacent to site and any likely species of conservation concern.

Limitations

- 2.3 The updated Phase 1 habitat survey was undertaken outside the core season of April-September. However as the initial survey was carried out in August and similar diversity of species were recorded with only minimal changes within the updated survey, it is not deemed to be a significant limitation to the assessment.

Fauna

- 2.4 During the ecological walkover survey, the habitats present were assessed for their potential to support species of conservation concern, particularly statutorily protected species or S41 priority species.

3.0 Results

Desktop Study

Designated Sites

- 3.1 The desktop study did not identify any internationally or nationally designated sites within 1km of the proposed development site.
- 3.2 Although the site is not located within 1km of a nationally designated site, it does fall within a SSSI Impact Zone. The Impact Risk Zones (IRZs) are a GIS tool used by Natural England to make an initial assessment of the potential impacts of development proposals on Sites of Special Scientific Interest (SSSIs). They define zones around each SSSI according to the particular sensitivities of the features for which it is notified and specify the types of development that have the potential to have adverse impacts.
- 3.3 The SSSI IRZs can be used by Local Planning Authorities to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural Resources Wales to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated.
- 3.4 MAGIC Map does not state specifically which SSSI IRZ the site falls within, although it is apparent from the mapping that this is the Afon Dyfrdwy (River Dee) SSSI located approximately 3.5km east of the site. Any future development is likely to be of a commercial nature only. This type of development is not identified as having the potential to impact on the SSSI.
- 3.5 There is one locally designated Wildlife Site located within a 1km radius of the site. This comprises three separate areas of land, all forming the Wrexham Industrial Estate Wildlife Site. These areas are located approximately 310m southeast, 450m northwest and 595m east.

Protected Species

- 3.6 Records of protected and/or notable species within 1km of the site were provided by Cofnod. Full results are found in Appendix B. A summary of records within the last 10 years is supplied as Table 3.1.

Table 3.1: Species records provided by Cofnod within 1km of the site.

Species	Distance and direction of closest record	Status
Great Crested Newt	29 records within 1km of the site	Conservation of Habitats and Species Regulations 2017 S.42 NERC Act 2006*
Dingy Skipper	On site/adjacent	S.42 NERC Act 2006*
Grizzled Skipper	On site/adjacent	S.42 NERC Act 2006*
Small Heath	300m northwest	S.42 NERC Act 2006*

Species	Distance and direction of closest record	Status
Cinnabar	650m south	S.42 NERC Act 2006*
Latticed Heath	600m southeast	S.42 NERC Act 2006*
Shaded Broad-bar	650m southwest	S.42 NERC Act 2006*
Adder	700m south	S.42 NERC Act 2006*
Slow-worm	700m south	S.42 NERC Act 2006*
Badger	530m northwest	Protection of Badgers Act 1992.
Common pipistrelle	Various records within 1km with the closest 130m southeast	S.42 NERC Act 2006*
Hedgehog	500m west	S.42 NERC Act 2006*
Myotis sp	Various records within 1km with the closest 120m southeast	S.42 NERC Act 2006*
Noctule	Various records within 1km with the closest 120m southeast	S.42 NERC Act 2006*
Otter	150m south	Conservation of Habitats and Species Regulations 2017 S.42 NERC Act 2006*
Soprano pipistrelle	350m southeast	S.42 NERC Act 2006*

* Section 42 of the Natural Environment and Rural Communities Act 2006

- 3.7 There are numerous Schedule 1, S.42 and Welsh Birds of Conservation Concern (BoCC) recorded within a 1km radius of the site. Those within the last 10 years are summarised within Table 3.2.

Table 3.2: Birds species recorded within 1km radius.

Bird Species	Schedule 1	Section 42	Red List Welsh BoCC*	Amber List Welsh BoCC*
Barn Owl	Yes			
Black-headed Gull		Yes	Yes	
Bullfinch			Yes	
Cetti's Warbler	Yes			
Common Gull			Yes	
Cuckoo			Yes	
Dunnock		Yes		
Fieldfare	Yes			Yes

Bird Species	Schedule 1	Section 42	Red List Welsh BoCC*	Amber List Welsh BoCC*
Goldcrest			Yes	
Goshawk	Yes			
Grasshopper Warbler		Yes	Yes	
Green Woodpecker				Yes
Herring Gull		Yes	Yes	
House Sparrow		Yes		Yes
Kestrel		Yes	Yes	
Lapwing		Yes	Yes	
Lesser Black-backed Gull				Yes
Linnet		Yes	Yes	
Little ringed plover	Yes			
Long-tailed tit				Yes
Mallard				Yes
Peregrine	Yes			
Redwing	Yes			Yes
Reed Bunting		Yes		Yes
Skylark		Yes		Yes
Snipe				Yes
Song Thrush		Yes		Yes
Spotted Flycatcher		Yes	Yes	
Starling		Yes	Yes	
Swift				Yes
Whitethroat			Yes	
Willow Warbler			Yes	

* Birds of Conservation Concern

Phase 1 Habitat Survey

- 3.8 The site comprises an area of undeveloped land which has been previously cleared of vegetation and the vegetation continued to be managed.

- 3.9 The neutral grassland categories detailed within the Phase 1 Habitat Survey Handbook are concentrated on grassland associated with rural situations (pastures and meadows), as such it was agreed with JNCC in 2005 (P. Gateley, pers. comm.) that neutral grassland habitats that don't easily fit within these categories, usually within urban or industrial areas, can be referred to as modified neutral grassland:

'Modified neutral grassland is not derived from agricultural grassland and the terms semi-improved and improved do not apply. Some modified neutral grassland may be species-rich but many swards are dense, coarse and species-poor. Modified neutral grassland naturally regenerates on disturbed ground and is unmanaged. It most commonly occurs in urban areas and on post-industrial land'.

- 3.10 A list of the habitats present within the site is provided below. Target notes are supplied in Appendix 2 and the Phase 1 habitat plan is provided at Figure G6899.001.
- Modified neutral grassland;
 - Species-poor modified neutral grassland;
 - Tall ruderal herb; and
 - Scattered scrub.

Modified neutral grassland

- 3.11 A large proportion of the site comprises modified neutral grassland (TN2). There is abundant knapweed *Centaurea nigra*, silverweed *Potentilla anserina* and hoary ragwort *Senecio erucifolius*. Glaucous sedge *Carex flacca*, wild carrot *Daucus carota* and red clover *Trifolium pratense* are also frequently occurring. There are few grass species throughout the site with crested dog's-tail *Cynosurus cristatus*, tufted hair-grass *Deschampsia cespitosa*, Yorkshire fog *Holcus lanatus* and Timothy *Phleum pratense* all apparent.



Figure 2: Modified neutral grassland.

Species-poor modified neutral grassland

- 3.12 The eastern half of the site comprises patches of species-poor modified neutral grassland (TN3). Very few species were recorded in this area and this was dominated by spiny restharrow *Ononis spinosa*, glaucous sedge, wild carrot and hoary ragwort were again evident. Where habitats were previously identified as bareground in 2015, these have now naturally regenerated and become species-poor modified neutral grassland.

Tall ruderal herb

- 3.13 The vegetation along the western and southern boundaries, along with an earth mound in the northwestern part of the site, is dominated by tall ruderal herb (TN1). Abundant knapweed is located throughout these areas and frequently-occurring plants include silverweed, creeping thistle *Cirsium arvense*, oxeye daisy *Leucanthemum vulgare*, curled dock *Rumex crispus* and hoary ragwort.

Scattered scrub

- 3.14 Scattered scrub is evident across the site upon the modified neutral grassland and the tall ruderal vegetation. The scrub vegetation comprises grey willow *Salix cinerea*, hawthorn *Crataegus monogyna*, rose *Rosa* sp., broom *Cytisus scoparius* and oak *Quercus* sp.

Protected and Invasive species

- 3.15 No protected or invasive plant species were recorded during the 2015 or the updated Phase 1 habitat survey.

Connectivity with the wider landscape

- 3.16 There was previously good habitat connectivity to the north across the adjacent scrub and woodland, however this has since been cleared as part of an adjacent scheme. Connectivity to the east, south and west is limited by commercial development and the road network.

Fauna

Amphibians

- 3.17 Although there are no ponds within the site, aerial imagery and Ordnance Survey mapping shows five ponds within a 500m radius of the site. Previous surveys and existing records have established the presence of great crested newts (GCN) within 500m of the site, along with the common amphibian species smooth newt and common frog.
- 3.18 The site was previously the subject of a GCN licence granted by WAG on 15th April 2008. Upright temporary amphibian fencing (TAF) was installed around the site perimeter and a trapping scheme implemented. There were no GCN recorded on site during the trapping period. Additional artificial refugia checks were also undertaken in Spring 2016, as part of the RAMMS agreed with NRW ahead of the fence repairs works.

- 3.19 The site is now surrounded on all sides by an existing amphibian fence which is intact and in good condition. This fence line provides a significant barrier to any amphibian movement. The site is therefore considered to be isolated from all amphibians, including GCN, which may be present within the wider area.



Figure 3: TAF fence line.

Bats

- 3.20 There are no buildings or trees within the site or immediately adjacent and therefore no opportunities for roosting bats.
- 3.21 Although there are some records of bats within 1km of the site, there is only limited habitat available on site for foraging bats that are present within the local area. As the site is heavily managed there is no habitat suitable for commuting bats.

Reptiles

- 3.22 Although the site offers good reptile habitat and there are records of adder and slow-worm 700m to the south of the site, the amphibian fencing acts as barrier to reptile dispersal.

Water vole and otter

- 3.23 There is no aquatic habitat suitable for water vole or otter within the site or within the immediate vicinity.

Birds

- 3.24 There are a range of bird species found to be recorded within 1km of the site boundary. The low lying vegetation and areas of natural regeneration could provide some suitable habitat for nesting birds.

Badgers

- 3.25 There was no evidence of badgers present within the latest survey or within the previous ecological surveys carried out at the site. The site offers some limited foraging habitat for badgers present within the local area, however it does not provide any habitat suitable for sett construction.

Invertebrates

- 3.26 A number of species of butterfly were identified as being present within the immediate vicinity of the site, including dingy skipper and grizzled skipper. Other species of butterfly and moths were identified within the 1km site buffer. The habitats on site are currently well managed, offering some limited suitable habitat for invertebrate species.

4.0 Conclusions

Designated Site

- 4.1 There are no internationally or nationally designated sites located within 1km of the site. Although the site falls within the SSSI Impact Risk Zone for the River Dee SSSI, commercial development is not identified as having an impact on the SSSI. Therefore no impacts on international or national designated sites will occur as a result of the proposed development.
- 4.2 The Wrexham Industrial Estate Wildlife Site is located approximately 310m away from the site. Due to the distance from the site and the nature of any future development (commercial development only within the industrial estate) the development will have no direct or indirect impacts on this site.

Habitats

- 4.3 There are no S42 habitats present on site. A relatively new hedgerow has been planted along Bridge Road North, which is located outside the amphibian fencing (outside the red line boundary) and will not be impacted by the proposed scheme.
- 4.4 There are no protected or invasive plant species identified within the site or within the immediate vicinity of the site. There are no implications to the development in relation to invasive or protected plant species.

Fauna

Amphibians

- 4.5 The existing intact TAF provides a barrier to amphibian movements from the wider area and therefore the site is considered to be free from amphibians. Proposals for the site will include some landscaping which will provide habitat for amphibians present in the wider area, once the development has been completed and the TAF has been removed.
- 4.6 The TAF will continue to be monitored to ensure no damage throughout the construction programme.

Bats

- 4.7 There is no habitat suitable for roosting bats present within the site. Although the site offers some bat foraging habitat this is very limited and no commuting habitat is present. There are no implications to the development with regard to bats.

Reptiles

- 4.8 The existing TAF fence not only prevents amphibian movements but also prevents the encroachment of any reptiles that may be in the vicinity of the site. The site is therefore considered free from reptiles and no further implications to the development of the site with regard to reptiles are anticipated.

Water vole and otter

- 4.9 There are no records of water vole or otter within a 1km radius of the site. There is no habitat on site to support either of these species and there are no implications for development with regard to water vole and otter.

Birds

- 4.10 The site provides some limited nesting bird habitat for species that use scrub and low lying vegetation. Any works that affect these features during the nesting season have the potential to disturb nesting birds. All birds in the UK are protected while undertaking nesting activities under the Wildlife and Countryside Act 1981 (as amended).

Badger

- 4.11 Although there are records of badgers within 1km of the site, the site only offers limited foraging habitat and no habitat suitable for sett construction. No evidence of badger activity were observed during the latest survey or found previously within the site. There are currently no implications to the proposed development with regard to badgers.

Invertebrates

- 4.12 A number of butterflies and moths were previously observed on site during the extended Phase 1 habitat survey and there are also records of S.42 invertebrate species throughout Wrexham Industrial Estate area. For any future development works the loss of foraging habitat on site for invertebrates should be taken into account.

5.0 Recommendations

- 5.1 Any vegetation clearance works should be undertaken outside the bird breeding season (March to August inclusive). All works undertaken during the breeding season will require a nesting bird check to be carried out by a suitably qualified ecologist immediately prior to any clearance works commencing. In the event that active nests are discovered, a buffer zone will need to be implemented around the nest, the size of which will be dependent upon the species nesting. The nest will need to be monitored regularly by an ecologist, who will confirm when the nest is no longer active and clearance works can proceed within the buffer zone.
- 5.2 Replacement planting is recommended to compensate for the loss foraging habitat on site (for invertebrates and other species). A mix of wildlife friendly species should be incorporated into the planting scheme. These should be native species, ideally of local stock, and include a variety of nectar and berry bearing species to enhance foraging opportunities. Species could include hawthorn, blackthorn *Prunus spinosa*, dogwood *Cornus sanguinea* Holly *Ilex aquifolium* English oak *Quercus robur* and hazel *Corylus avellana*.

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