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F.A.O. Mr John Bratherton

RE: Ecology Survey of Land at The Plassey Leisure Park, Eyton, Wrexham

Background Information & Proposals

RPS Planning and Development Ltd was instructed by Bratherton Park Design Consultants to carry out an ecology walkover survey of land at The Plassey Leisure Park, Eyton, Wrexham (central grid reference SJ 35010 45197), hereafter referred to as the "site". The survey was carried out to inform the requirement by Wrexham County Borough Council for an ecology report to validate a planning application. This appraisal is based on a review of the development proposal drawings: 'General Arrangement Rev B 04/10/16' provided by the client and a survey of the site. This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist, based on their personal interpretation of legislation and planning policy.

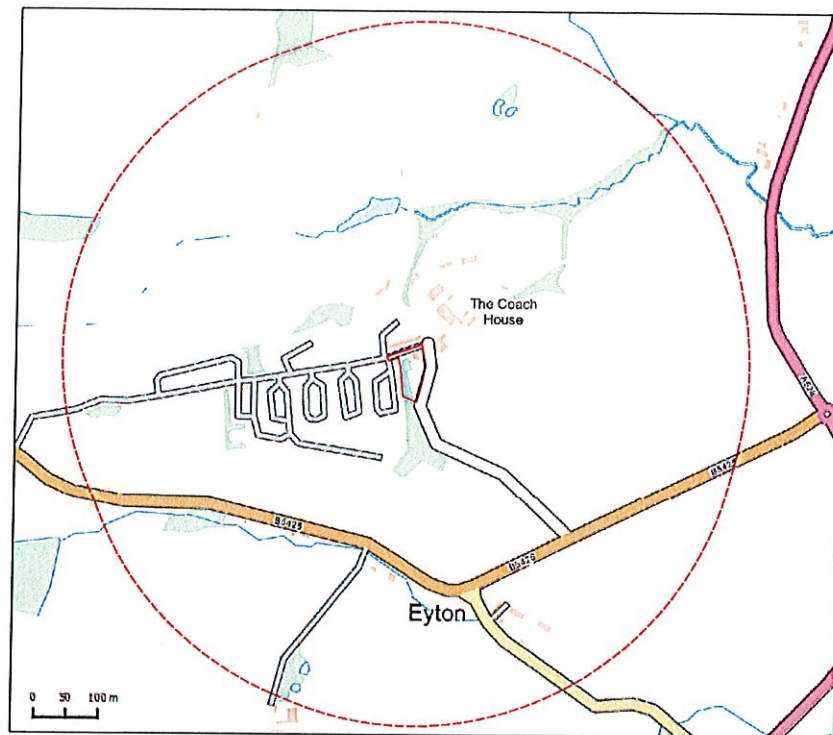
The proposed works are limited to the creation of a hardstanding access road through the site and the creation of a hardstanding concrete bin area with an additional tree planting scheme.

The term Zone of Influence is used to describe the geographic extent of potential impacts of a proposed development. The Zone is determined by the nature of the development in relation to individual species, depending on their habitat requirements, mobility and distances indicated in any best practice guidelines. For this site, the Zone of Influence is land on and immediately adjacent to the site and, specifically in respect of great crested newt *Triturus cristatus*, land within 500m of the site boundary as illustrated on the location plan (Figure 1).

The site comprises approximately 0.25ha of land situated 4km south west of Wrexham in the village of Eyton. The site comprises a hardstanding car park, a swimming pool, a pre-fabricated changing room facility, a small area of woodland and a small area of amenity grassland. The adjacent land use is a caravan park and associated leisure facilities to the west and north, with the Plassey Golf Club beyond this. The wider area comprises predominantly pasture grassland with occasional arable fields and woodland copses. The location in a local context is illustrated in Figures 1 and 2 below.



Figure 1: Site location plan (red line denotes site location and dotted blue line illustrates the zone of influence)



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Figure 2: Aerial image of the site and local landscape



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Legislation

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:

- Planning Policy Wales (Edition 9, November 2016);
- Technical Advice Note 5 – “Nature Conservation” published by the Welsh Assembly Government;
- Local planning policies (Wrexham City Council);
- Local Planning Guidance Note 26: 'Landscape & Industrial Development';
- The Conservation of Habitats and Species Regulations 2010 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- The Protection of Badgers Act 1992;
- The Natural Environment and Rural Communities Act 2006;

Under the Planning Policy Wales (Edition 9, November 2016) sets out national planning policies for Wales. The guidance and legislation noted above, will be a material consideration when the Council decides planning applications. The Technical Advice Note 5 provides further guidance on the Welsh Governments land use planning policies in regard to Nature Conservation.

Methodology

A walkover survey was conducted on 12th October 2017 by RPS Ecologist Tim Elton BSc (Hons) GradCIEEM who is suitably experienced to carry out this type of survey. Habitats were described following standard Phase 1 habitat survey methodology (JNCC, 2010), which categorises habitat types through the identification of individual plant species, botanical community and habitat conditions. The habitats on site were also assessed for their suitability to support any legally protected or notable species that may present constraints to the proposed development. This includes invasive non-native plant species such as Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*.

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, and known distribution of the species in the local area. It should not be taken as providing a full and definitive survey of any protected/notable species group.

Survey Results

Habitat Survey Results

The site comprised mostly amenity grassland and hardstanding, with an area of mixed woodland as described under the individual sub-headings below. No protected, notable or invasive plant species were recorded. The habitats on site are described below and mapped on Appendix B: Phase 1 Habitat Plan.

Mixed Woodland Semi-Natural

Mixed woodland was present in the west of the site (Photo 1). Species present were predominantly Scots pine *Pinus sylvestris*, common ash *Fraxinus excelsior*, pedunculate oak *Quercus robur* and Austrian pine *Pinus nigra*. Other, less frequent species included field maple *Acer campestre*, cherry *Prunus sp.*, lime *Tilia sp.*, hazel *Corylus avellana* and Norway spruce *Picea abies*. The woodland canopy was open and the woodland lacked a dense scrub understory.

Photo 1: Mixed woodland



Scattered Scrub

An area of dogwood *Cornus sanguinea* formed part of a mosaic of habitats in the south of the site.

Tall Ruderal Vegetation

Species were dominated by nettle *Urtica dioica*, broad leaved dock *Rumex obtusifolius*, willowherb *Epilobium* sp. and cleavers *Galium aparine*. Sow thistle *Sonchus* sp., herb Robert *Geranium robertianum* and fern were also present less frequently.

Amenity Grassland

An area of heavily managed grassland formed the eastern section of the site. The grassland was shortly mown at the time of the survey, and dominated by perennial rye-grass *Lolium perenne* with occasional Yorkshire fog *Holcus lanatus* and meadow grass *Poa* sp., with herb species including common daisy *Bellis perennis*, creeping buttercup *Ranunculus repens*, dandelion *Taraxacum officinale* agg. and ground ivy *Glechoma hederacea*.

Photo 2: Area of amenity grassland



Ephemeral/ Short Perennial Vegetation

A small area of this habitat formed part of a larger mosaic of less-intensively managed habitats in the south of the site. Species were dominated by dandelion *Taraxacum agg.*, with abundant meadow cranesbill *Geranium pratense* and herb Robert.

Bare ground

In a shaded area between the mixed woodland and tall ruderal habitat, bare ground was present with occasional saplings of sycamore, cherry laurel *Prunus laurocerasus* and common ash.

Species-poor Intact Hedgerow

Three intact hedgerows were present at the site boundaries, all of which were intensively managed.

Hedgerow H1 (Appendix B: Phase 1 Habitat Plan, H1) comprised Lawson cypress *Chamaecyparis lawsoniana*, hawthorn *Crataegus monogyna* and climbing common ivy *Hedera helix*. The hedgerow was approximately 2.5m in height and 2m in width, with one end connection to the mixed woodland (Photo 3, right).

H2 formed the west boundary to the mixed woodland and was dominated by privet *Ligustrum vulgare* with hawthorn. This hedgerow was approximately 3m in height and 1-2m in width, managed on its western side and with more gaps/ defunct in nature than H1 and H3.

H3 was a heavily managed roadside hedgerow comprising cherry laurel only. This hedgerow was approximately 1.5m in height and 1m in width.

Photo 3: Hedgerow H3



Broad-Leaved Scattered Tree

A line of broad-leaved trees was present on-site at the eastern site boundary. These comprised a line of hazel *Corylus avellana* with a single common pear *Pyrus communis* and common ash *Fraxinus excelsior* at the northern and southern ends of the tree line.

Fence

A post and wire fence was present within the site which separated the amenity grassland in the east of the site from the less managed habitat and mixed woodland in the west of the site.

Photo 4: Fence within the site (right)



Buildings

One building (Appendix B: Phase 1 Habitat Plan, building B1, Photos 5 and 6) was present at the north-eastern corner of the site. The building was of brick construction to first storey height and of a corrugated metal construction at second storey height, with a corrugated metal roof. A single storey extension was present at the south of the building which housed a swimming pool (photo 6), which was of brick wall, glass window and corrugated sheet roof construction.

Photo 5: Building B1 western elevation



Photo 6: Building B1 southern elevation



Hardstanding

The north of the site comprised a Tarmac hardstanding car park and a paved path along the southern edge of Building B1.

Preliminary Protected / Notable Species Assessment

Badger

No badger setts were recorded on site or within a 30m radius of the site, and the generally flat nature of the site was sub-optimal for sett excavation. The woodland and bare ground within the site may provide suitable foraging opportunities for badgers and therefore it could not be entirely ruled out that badger, and other mammals, may occasionally use the site for commuting or foraging.

Bats

Building B1 offered negligible bat roosting potential due to the use of metal in construction which would fluctuate greatly in temperature, and was of single sheet construction without cavities. No trees with bat roosting potential were recorded within the site.

The woodland and woodland edge habitat within the site offered potential foraging habitat for bats.

Birds

The woodland and hedgerow within the site offer potential bird nesting and foraging habitat.

Hazel Dormouse

Having an open canopy and lacking in a dense scrub ground layer, the mixed woodland on site provides sub-optimal habitat for dormice. Furthermore, the hedgerows within the site lack the species diversity required to support the foraging requirements of this species. Anecdotal records are noted in the wider area; however these sites have A and B roads which receive a heavy volume of traffic, which would represent a barrier to dispersal for hazel dormice.

Great Crested Newt (GCN)

No waterbodies were present within the site. The site offered sub-optimal GCN terrestrial habitat due to the lack of a dense scrub layer in the woodland and absence of log piles/ hibernacula and scrub elsewhere

within the site. The site is isolated from suitable newt migratory habitat by hardstanding and managed amenity grassland to the north, east and south.

The closest waterbody was located approximately 200m north of the site. A further six waterbodies associated with the Plassey Golf Club were located between 200m and 440m north of the site. Between these ponds and the site lies the Plassey holiday village & retail park, which comprises a mix of hardstanding and heavily managed amenity grassland which is subject to frequent disturbance. It is considered that this presents a barrier to dispersal for GCN for ponds to the north of the site. Two ponds were located approximately 440m south west of the site, south of the B5426. This road receives a high volume of traffic and was considered to present a barrier to dispersal for GCN. Anecdotal records inform the closest record of GCN is 800m to the north east, dated to 1992.

A pond is located within a small woodland copse to the west of the site, connected to the site via a hedgerow.

Due to the lack of suitable hibernation habitat within the woodland onsite (i.e. lacking in a dense understorey or fallen dead wood) combined with the low-level impacts/ scale of the works, it is considered highly unlikely that impacts to GCN should occur.

Reptiles

The site comprised mainly hardstanding and amenity grassland, which was considered to provide negligible reptile habitat due to the lack of shelter from predators. The woodland, scattered scrub, bare ground and tall ruderal vegetation habitats within the site offered sub-optimal reptile habitat, however these areas were shaded by the woodland to the west for much of the day, and generally lacked in the dense habitat structure required by reptile species for basking and predator avoidance.

White-clawed Crayfish, Water Vole and Otter

No features were present on site or adjacent to the site that could accommodate white-clawed crayfish, water vole, and otter.

Impacts

Habitat impacts will be limited to the removal of a section of hedgerow H3, the removal of H1, the removal of a young ash tree and a young lime and the loss of an area of amenity grassland.

It is considered that the heavily managed hedgerows H1 and H3 and amenity grassland are of low to negligible conservation value; however, the loss of hedgerow habitat and trees will result in a net loss of habitat if unmitigated.

Evaluation and Recommendations

Due to the areas of the site where impacts will occur comprising hardstanding, amenity grassland and two sections of heavily managed hedgerows, with limited value for any notable or protected species, it is considered that the proposed development poses limited impacts on any protected or notable species.

Habitats

The woodland habitat within the site will be retained and buffered during the development via the enforcement of Root Protection Areas (RPAs). Two trees will be removed from the eastern edge of the woodland, neither of these trees have roost potential for bats. A tree planting scheme will be implemented through the proposed development, which once established will provide a net gain in vegetated habitat.

Bats

The retained woodland and woodland edge habitat should not be lit at night to avoid potential impacts to foraging bats. The current development proposals do not detail a road lighting scheme.

Badger

It is considered that mammals (including badger) may use the site for foraging during the construction phase of the works. Therefore, during construction phase the presence of open excavations, pipes and site equipment has the potential to cause harm to animals in the local area. It is recommended that the following precautions are observed;

- Mammal ladders (such as a plank) or earth ramps to be placed in any open excavations at the end of each day;
- Any open pipework to be capped overnight to prevent larger mammals such as badger from accessing the pipe work and becoming stuck;
- Night work should be avoided where possible, and any flood lighting should face away from the site boundaries; and
- Any chemicals or machinery are to be stored in a secure compound.

Birds

It is recommended that works are carried out outside of the bird nesting season of March to September inclusively (to avoid destroying an active nest). However, it is understood the proposals are to remove the two hedgerows between March and June. Therefore, it is recommended that an ecologist undertakes a 'site survey for birds' prior to works commencing to establish, if nesting birds are present. Following on from the site check, further guidance and mitigation will be discussed. If nesting birds are present, works will cease until the young have fledged; or where possible suitable buffers will be incorporated to avoid an offence being committed.

Great Crested Newt (GCN)

Suitable terrestrial habitat for GCN is limited to the woodland in the west of the site, which lacks a dense scrub understorey/ fallen deadwood and therefore offers potential albeit low for terrestrial GCN. The adjoining hedgerows (H1 and H3) are heavily managed in nature, which reduces the likelihood of GCN using these features as resource. The nearest waterbody to these habitats (woodland and hedgerow) is within a woodland copse at a distance of 350m west. This waterbody is surrounded by suitable habitat and is such as distance from the site that the likelihood of GCN using the terrestrial habitat within the woodland is further reduced.

The woodland will be retained and protected during the development. The impacts will be limited to amenity grassland, scattered scrub, tall ruderal vegetation and small sections of managed hedgerows H1 and H3. It is therefore considered highly unlikely that the development would impact terrestrial GCN. The removal of H1 and H3 should be undertaken during the GCN breeding season of mid-March to mid-June, when GCN will be utilising aquatic habitats. In the unlikely event that GCN are encountered, works will cease and a Natural England mitigation licence for the site will be sought.

If you require any further information please don't hesitate to contact us.

Yours sincerely,



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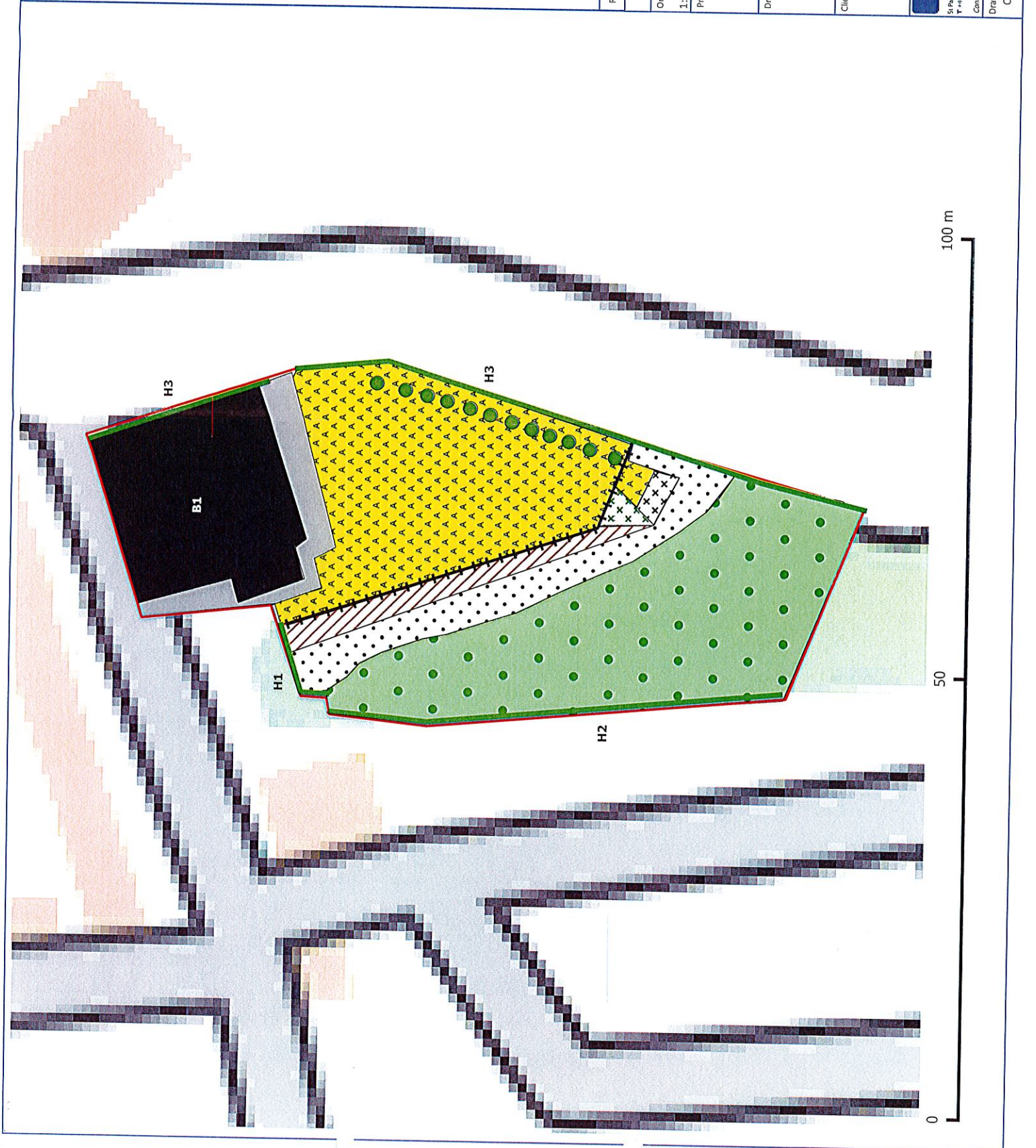
Appendix A: References

Chartered Institute of Ecology and Environmental Management, 2013. *Guidelines for Preliminary Ecological Appraisal*. 2nd ed. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2013. *Competencies for Species Survey in Britain and Ireland*. Winchester: CIEEM.

Chartered Institute of Ecology and Environmental Management, 2015. *Guidelines for Ecological Report Writing*. Winchester: CIEEM.

Joint Nature Conservancy Council , 2010. *Handbook for Phase 1 habitat survey*. Peterborough: JNCC.



Legend

- Site Boundary
- A1.3.1 - Mixed woodland - semi-natural
- A2.2 - Scrub - scattered
- C3.1 - Tall ruderal vegetation
- J1.2 - Amenity grassland
- J1.3 - Ephemeral/Short perennial Vegetation
- J3.6 - Buildings
- J4 - Bare ground
- J2.1.2 - Intact hedge - species-poor
- J2.4 - Fence
- Broad-Leaved Scattered Tree
- Hardstanding

Rev	Date	Description	Checked	Authorised

Issue / Revision	
Original Scale	Drawn
1:1500 @ A3	31.10.2017
Project title	
The Plassey Leisure Park, Wrexham	
Drawing title	
Appendix B: Phase 1 Habitat Plan	
Client	
Bratherton Park Design Consultants	
RPS	
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Drawing Number	Rev
OXF10781-01	0