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Land Adjacent to Rhosddu Industrial Estate, Wrexham LL114YL
Disused Railway Line
(Grid Reference: SJ 32805 52498)

Extended Phase 1 Habitat Survey

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1.0 Introduction & Reason for Surveys

1.1 As part of a proposed Planning Application at the land adjacent to Rhosddu Industrial Estate Wrexham grid reference SJ 32805 52498 an Extended Phase 1 Habitat survey was undertaken. It is understood that the proposals for the site involve a 1.9 hectare residential development of the land that is shown in the location plan. It is also understood that plans for the section of disused railway line within the site boundaries include the creation of informal recreational footpaths which will involve a degree of vegetation clearance. (Figure 1) Ecological surveys, particularly where a specially protected species is or may be present, are generally required as part of the Local Authority's Planning Policies. Subsequently the Tyrer Partnership was commissioned to complete an extended Phase One Habitat Survey. On behalf of their client, McCormick Architecture commissioned the survey and report

1.2 The basic objective of the survey was to ascertain the nature of the land, and where possible obtain information on any sensitive wildlife habitats or species that may be present and if present to ascertain if they are likely to be affected by future development of the site. To achieve this objective the survey aimed to identify/assess any of the following:

- The presence of species with non-statutory protection
- The presence/potential presence of species protected under the Wildlife and Countryside Act 1981, as amended or the conservation of Habitats and Species Regulations 2010 (as amended)
- Identify any species or habitats that require special consideration during the development.

If the habitat was found to be suitable for the aforementioned species or signs of use were found then more detailed surveys would be recommended. If bats or Great crested newts were subsequently found during those detailed surveys and may be affected by future development proposals then a European Protected Species Licence would be required to proceed with the development.

Figure 1: Indicative site plan of development showing site and the disused railway line

2.0 UK Biodiversity Plans

2.1 The United Kingdom Biodiversity Action Plan lists priority species/habitats, which might potentially be present at a given site, based upon the site visit there is the potential for 7 UK priority species to be present** within or close to the immediate vicinity to the development boundary, these are shown in Table 1. The species list is not based upon actual observations but on an assessment of the nature of the habitat and surrounding habitat including buildings combined with existing population distribution data for the named species.

**Present - based on the location of the site it is geographically feasible in relation to population distributions and the habitat features/attributes on the site to be suitable for or at least partially fulfil the basic requirements of the named species as part of a wider ecological network.

3.0 Local Biodiversity Action Plan

3.1 LBAP's are simply a way of encouraging people to work together and deliver a programme of continuing action for biodiversity at a local level. They set out practical steps that aim to:

- help protect biodiversity
- enhance and improve biodiversity where possible, and
- promote biodiversity at a local level

Whilst there is no legal protection for sites of Local Biological Interest per se the presence of a protected species within them would attract the usual protection afforded to it/them. Wrexham Biodiversity Action Plan lists key local species/habitats in the area considered to be of significance based on specific criteria.

Some species and habitats included in LBAPs are of national concern, while others are of local significance. Several, but not all of the species and habitats listed are afforded statutory protection

Based on information gathered during the survey visit Species Action Plans (SAP) relevant to the site includes Great Crested Newt, Badger and Song Thrush. A Habitat Action Plan (HAP) for ponds and Hedgerows is also specifically relevant to the site/s.

4.0 Site Related Protected Species and legislation

4.1 Up to 11 bat species have been recorded in North Wales most of which use built structures, notably occupied residential properties, for roosting. The most frequently encountered species is the Pipistrelle bat (*Pipistrellus)* and its abundant status in North Wales is reflected throughout the UK.

4.1 All British bats and their **roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed in Schedule 2 of the Conservation of Habitats & Species Regulations 2010 (as amended). When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the 2010 Regulations and therefore has a statutory duty to have due regard to the provisions of the Regulations in the exercise of its functions.

4.2 *Planning Policy Wales* (PPW) (2002) sets out the land use planning policies of the Welsh Government (WG). It is supplemented by a series of Technical Advice Notes (TANs). Procedural advice is given in National Assembly for Wales / Welsh Office circulars. PPW, Ministerial Interim Planning Policy Statements (MIPPS), the TANs and circulars together comprise national planning policy to which local planning authorities in Wales must have regard in the preparation of development plans.

4.3 Detailed advice on the preparation of unitary development plans (UDPs) is contained in *Unitary Development Plans Wales*, 2001. Detailed advice on the preparation of Local Development Plans (LDPs) under the Planning and Compulsory Purchase Act 2004 is given in *Local Development Plans Wales*, 2005.

4.4 Technical Advice Note (TAN 5 2009) provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. This guidance note should be read in conjunction with *Planning Policy Wales* (2002), in particular with Chapter 5 *Conserving and Improving the Natural Heritage and Coast* which sets out the Assembly Government's objectives for the natural heritage and the land use planning policies which support these.

4.5 Use of man made and natural structures by bats

a) Summer breeding roost.
b) Hibernation.
c) Transitional or temporary roost.

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

** The term roost is generically referred to as a place that bat/s use for the any of the above reasons, however it should be noted that under the Conservation of Habitats & Species Regulations 2010 (Regulation 41) the term roost is not used but refers to "*a breeding site or resting place of such an animal"* and is afforded legal protection. The roost, breeding site or resting place of bats, which ever terminology is used is legally protected whether or not bats are in occupation.

4.6 Great Crested newts (*Tritus cristatus*) have declined within the UK over recent years, due to the destruction and pollution of their breeding sites and the loss of their terrestrial habitat. They spend a high percentage of their adult life in a terrestrial habitat and often hibernate under log piles or amongst general rubble. Great crested newts are present in a high percentage of the landscape in North Wales and are listed on the Wrexham BAP along with the pond habitat, although many ponds have been lost in the area.

GCN have been recorded at and within a 10 kilometre square radius of the site; GCN are protected under the Wildlife and Countryside Act 1981(as amended) and the Conservation of Habitats & Species Regulations 2010 (as amended). It is illegal to catch, possess or handle GCN without a licence and it is also illegal to cause them harm or death, or to disturb their habitat in any way.

4.7 Badgers (*Meles meles)* are recorded where suitable shelter and foraging habitat exists. They cannot be deliberately killed or trapped except under licence. The Protection of Badgers Act 1992 consolidates past badger legislation and, in addition to protecting the animal itself, makes it an offence to damage, destroy or obstruct badger setts. Badgers are regularly recorded within North Wales, notably in farmland and woodland habitat.

4.8 The Water Vole (*Arvicola terrestris*) is a Priority Species in the UK BAP because of their declining population which is largely as a result of habitat loss and degradation as well as predation by Mink. Water Voles are present in many counties of North Wales and are afforded legal protection in Schedule 5 of the Wildlife and Countryside Act 1981. Section 9 (Part 4) now protects its places of shelter. Water Voles are the largest British Vole and their preferred habitat is slow moving water courses rough/guideline dimensions being 3m wide and 1m deep. The water courses can be Rivers, Streams, Farmland ditches, Canals, Water Meadows and even Ponds where the bank side vegetation is lush and the water level does not fluctuate to extreme peaks and troughs.

4.9 The potential presence of reptiles at the site, particularly rare UK species, is considered to be unlikely due to the general nature of the site which does not offer terrestrial habitat to meet the requirements of reptile species.

Guidance for Local Authorities: Extract from Office of the Deputy Prime Minster: Circular 06/2005

"*It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision."*

5.0 Survey Methodology

5.1 The daytime survey was conducted on the 27th February 2015 by Ms K.Swift, MSc who is an experienced ecologist and accredited agent on the Natural Resources Wales bat licence that is held by Mr S Irwin. 51880 OTH:CSAB:2014

5.2 A 'walkover' of the site was conducted which included an assessment in relation to those species listed in section 4.0, and the land assessed in relation to flora. The information gathered would then be used to establish if more detailed surveys are required.

5.3 The trees upon and immediate to the site were inspected using close focussing binoculars for features that may be utilised by bat species such as stress cracks, Woodpecker holes and raised bark. The overall landscape was assessed for its value for bat species for foraging and commuting within the surrounding landscape. There are no buildings or structures present on the land to support bat roosts, hence no requirement for surveys of built structures arose.

5.4 An assessment regarding the potential of the site to support breeding birds was based on an inspection for the presence of suitable nesting habitat and other physical evidence such as historic nests and or material as well as observations of birds present at the time of the survey. The potential of the site for over wintering birds was also assessed during the general inspection.

6.0 Constraints

6.1 The survey was conducted outside of the main active season of bats and breeding birds although badger activity can be expected.

6.2 Although conducted outside of the optimum period for flora identification it was possible to identify plant species present and an overall assessment of the land made for its potential to support vegetation of ecological significance.

6.3 Despite the above it is considered that there were no significant survey constraints that would prevent the gathering of information on which to base conclusions and recommendations.

7.0 Site Description

7.1 The parcel of land is located just off the busy New Llay Road (A483) within Old Rhosrobin amid rural urban fringe at just under 3 kilometres from Wrexham town centre. The land that is included in the planning application is currently an irregular shaped area of pasture with Rhosddu Industrial estate immediately to the south boundary. The land is currently used for sheep grazing and is accessed from New Llay Road; boundaries are defined by hedgerow and fencing to the north, east, and south. To the immediate west boundary of the development site the land is predominantly similar; i.e. pasture with hedgerows with the addition of mature trees, ditches and ponds within 200m of the development boundary. The dismantled railway line is immediate to the north site boundary sharing the boundary hedgerow.

Location of the proposed development site and disused railway within the surrounding landscape

7.2 Within the immediate and extending habitat a high level of ecological connectivity is evident within the rural – semi urban mosaic. The extensive hedgerow forming the site boundaries could provide foraging opportunities for several bat species and nesting opportunities for birds whilst the extensive open pasture and mature trees immediate to the site boundary are of high value for wildlife and contribute to the overall ecological connectivity.

7.3 Extending habitat contains areas of high quality wildlife habitat that are potentially of value for the species for which this survey was undertaken; Fishpond Wood is less than 700 metres north, which leads to further broadleaved woodland in the form of Round, Black, and Wilderness Wood as well as the River Alyn; all are within 1 kilometre of the site in a northerly direction. To the south of the site pasture a low profusion of broadleaved trees is present beyond the industrial estate. 1.5 km to the west Moss Valley consisting of a water body enclosed by broadleaved trees was noted but to the east the landscape is more developed, although Acton Park lies 1.5 kilometres in this direction but is relatively isolated from the survey site.

7.4 The level of semi-natural connectivity identified across the immediate and surrounding landscape can be considered as being productive for several of the species for which the survey was undertaken, i.e. bats, Great Crested Newts and breeding birds. Where such habitat is present close to buildings or trees then the percentage use of those buildings or trees, by bats and birds increases given that roost/nesting opportunities are available and vice versa.

8.0 Results

Bats

Within the proposed site boundaries man made structures or mature trees that could be utilised by bats as a roost are absent this is the same for the dismantled railway line. The hedgerows and open pasture within the site boundaries will, however, be of value for commuting and foraging bats. Particularly when considered as part of the wider landscape, i.e. forming part of an extended ecological network which is considered as being favourable for foraging and commuting bats, in particular for Pipistrelle bats due to the close proximity of residential dwellings; such structures are frequently used by this species. In addition, the pasture could be of foraging value for the Noctule bat. (*Nyctalus noctula*).

Amphibians

The overall terrestrial nature of the site would provide, should those species be present, suitable foraging and areas of refuge for the Common Frog (*Rana temporaria)* and Toad (*Buffo buffo*: UK BAP species) The presence of several aquatic resources immediate to the site means that it is highly likely for these species to be present and the potential exists for breeding within close proximity.

Great Crested Newts

Twelve ponds are present within close proximity to the site, six of which are within relatively close proximity and without significant any barriers between the survey boundaries and the ponds. The ponds are at distances ranging from approximately between 100 – 500 metres; two are located on land, which is under the same ownership as the survey area and were assessed for GCN using the Habitat Suitability Index calculation (HSI) (See Figure 2)

Remaining ponds are on private land and as result they were not assessed for their potential to support Great crested newts. Potential refuge is present between the ponds and the site where at the base of hedgerow grass features that could provide commuting routes for this species and it is known that GCN are in the locality. A HSI for Great crested newts is a measure of habitat suitability but it is not a substitute for newt surveys. In general, ponds with high HSI scores are more likely to support Great crested newts than those with low scores. Pond 1 was concluded to have a HSI rating of poor suitability and Pond 2 was rated as good suitability. (Figure 3)

Figure 2: Satellite image courtesy of Google earth showing identified ponds within the vicinity of the site.

Ponds assessed using HSI

Ponds ranging from between 150 – 500 metres

Site boundaries

Pond ref	Pond 1	Pond 2
SI1 - Location	1	1
SI2 - Pond area	0.1	1
SI3 - Pond drying	0.5	0.9
SI4 - Water quality	0.01	0.33
SI4 - Shade	1	1
SI6 - Fowl	1	1
SI7 - Fish	1	1
SI8 - Ponds	1	1
SI9 - Terr'l habitat	0.67	0.67
SI10 - Macrophytes	0.3	0.3
HSI	0.40	0.75

Figure 3: Ponds assessed using HSI scoring system (P1- 2)

Reptiles

Due to its general terrestrial nature, combined with its land management type, and the current condition of the hedges, the site is not considered entirely suitable for reptiles.

Water Voles

The sections of ditches located within the site along the southern boundary are mainly dry and are not considered suitable to support Water voles; the ditches did not meet several of the basic requirements for this species, and no field signs were located to indicate the presence of Water Voles during the assessment.

Terrestrial Mammals

The general nature of the site is considered suitable for badger and hedgehogs, specifically for foraging and commuting purposes. Moreover, boundary forming hedgerow would offer refuge for hedgehog sheltering and breeding purposes.

Rabbits are abundant within the development boundaries with extensive warrens visible. Although evidence of badger setts within the site was not found, several runs were located within the boundaries and evidence was found along the fence line in the form of access excavation and a latrine, which suggests it is likely a badger set is present in the immediate vicinity and they are commuting through/into the site. The additional phase one habitat survey of the dismantled railway found evidence of a badger sett and of extensive foraging and commuting throughout the site.

Birds

Historic evidence of nesting birds was identified within a section of hedgerow on the north boundary in the form of numerous intact and degraded nests. Furthermore, hedge and trees distributed along the south boundary also feature numerous other historic nests totalling 13.

Species identified as active on the site during the survey include Blackbird (*Turdus merula*), Wren (*Troglodytes troglodytes*), European robin (*Erithacus rubecula*), Chaffinch (*Fringilla coelebs*) and Dunnock (*Prunella modularis*); all of which demonstrated behavioural association with hedgerow and trees within the survey boundary, and these habitats would provide adequate nesting platform for species observed on the day and other garden/woodland bird species. During the survey of the dismantled railway the same species were noted with the addition of House Sparrow and Starling all of which were in the hedgerow immediate to the north boundary of the dismantled railway which is hedgerow.

PHASE 1 HABITAT SURVEY:

Habitats Present:

Main Site

A2.2 Scattered scrub
B4 Improved grassland
J2.1.2 Hedge (species poor, intact)
J.221 Hedge (species poor, defunct)
J.132 Hedge and Trees (species poor)
G1 Standing water

Dismantled railway

A2.2 Scattered scrub
A2.1 Dense scrub
J2.1.2 Hedge (species poor, intact)
J.221 Hedge (species poor, defunct)
J.132 Hedge and Trees (species poor)

Each species recorded was given an abundance value according to the standard DAFOR scale, where:

D = *Dominant
A = *Abundant
F = *Frequent
O = Occasional
R = Rare

*These values can be prefixed by the letter L (locally), to provide more subtle biogeographical data.

<u>Main Site</u>

Grass	**Abundance**
Perennial Rye Grass	A
Common bent	A
Sheep's fescue	A
Soft Rush	F
Rough meadow Grass	O

Wild Flower	**Abundance**
Dandelion	F
White clover	F
Ribwort plantain	F
Bramble	O
Common nettle	O
Daffodil	O
Herb Robert	O
Rosebay Willowherb	O
Broadleaved Dock	O
Spear Thistle	R
White Nettle	O

Dismantled Railway

Grass	**Abundance**
Perennial Rye Grass	A
Common bent	A

Wild Flower	**Abundance**
Dandelion	F
White clover	F
Ribwort plantain	F
Bramble	O
Common nettle	O
Daffodil	O
Herb Robert	O
Rosebay Willowherb	O
Broadleaved Dock	O
Spear Thistle	R
White Nettle	O
Discarded Garden Plants S.p	O

The survey has revealed that the site/s does/do not support any rare or listed plant species, nor was there any invasive species located on the site.

Habitat Descriptions:

All species nomenclature follows Stace, C. (1996) – definitive English names

(Refer to Map 1, Appendix 1 for the location of all described habitats)

Main Site

- **Scattered scrub**

  Scattered scrub features on the site and is found immediate to areas of hedgerow.

- **Improved grassland**

  Species poor pasture dominates the area within and immediate to the proposed development boundary; indicative species such as Perennial Rye Grass *(Lolium perenne),* Soft rush (*Juncus effusus*), Creeping buttercup (*Ranunculus repens*), Daisy (*Bellis perennis*) and Ribwort plantain (*Plantago lanceolata*) feature in high proportions.

- **Hedgerow and Trees**

  The hedgerow is defunct in several places and consists of mainly Hawthorn (*Crataegus monogyna*) with infrequent Sycamore saplings *(Acer pseudoplatanus)* interspersed throughout. Mature English Oak *(Quercus robur)* is also present along and immediate to the site boundaries

Dismantled Railway

- **Scattered scrub**

  Scattered scrub features on the site and is found throughout in particular immediate to boundary hedgerow areas of hedgerow.

- **Dense Scrub**
  A large area of dense scrub is present immediate to New Llay Road and the former bridge which predominantly comprises of Bramble S.p.

- **Improved grassland**

  A small strip of improved grasslands runs centrally through the site, indicative species such as Perennial Rye Grass *(*Creeping buttercup (*Ranunculus repens*) and Daisy (*Bellis perennis*) feature in high proportions.

- **Hedgerow and Trees**

  The hedgerow is defunct in several places and consists of mainly Hawthorn (*Crataegus monogyna*) with infrequent Sycamore saplings *(Acer pseudoplatanus)* interspersed throughout. Mature English Oak *(Quercus robur)* is also present along and immediate to the site boundaries. A small Bird Cherry tree (*Prunus padus*) is also present as well as some small semi mature Silver Birch trees (*Betula Pendula*).

Main Site

Target note 1: Badger Activity

Immediate to the North of the site there is a disused railway line; immediate to this on the site boundary there is evidence that would suggest frequent badger passing under the livestock fencing in the form of hairs and prints. This activity extends along the site boundary in the form of snuffle holes and further prints.

Target note 2: Rubble/Debris Piles

Immediate to the south boundary there are several piles of discarded wood and rubble, both of which could potentially offer refuge for amphibians or Hedgehogs.

Target Note 3: Standing Water

Field depression subject to seasonal flooding but not permanent

Disused Railway Line

Target Note 1: Badger Activity

On the incline of the dismantled railway evidence of digging badger in the form of bare ground and claw marks was present. In addition to this a potential sett is present which at the time of the survey did not appear to be in frequent use as the entrance was partially covered with leaves.

Target Note 2: Badger Activity

A large area where extensive digging is apparent resulting in large patches bare ground and numerous full and partial holes are present. None of the activity in this site bore signs of being recent use at the time of the survey.

Target Note 3: Scrub/ Tree line/Rubble/Debris Piles

To the north boundary of the disused railway line the area was impenetrable whereby abundant thick rubble and debris on which scrub has colonised that includes large piles of rubble, corrugated sheeting, discarded fence panels and general garden waste. This combination will offer refuge for amphibians or Hedgehogs; in particular the rubble piles and discarded felt could potentially offer a valuable refuge for amphibians.

Target note 4: Badger foraging and fresh digging

Very recent digging activity and foraging activity in the form of snuffle holes and runs were highly evident in this area suggesting badger activity close to the time of the survey.

9.0 Conclusions

9.1 From the survey results it can be concluded that opportunities for bats to roost within either of the site boundaries are definitively absent. The identified habitats contained within the site boundaries are considered productive for bats; in combination, mature hedgerow and trees form linear features which could be used for foraging and/or commuting purposes for species such as the Pipistrelle bat (both common and soprano), and open infield areas will support the Noctule bat (*Nyctalus noctula*) for the same purposes. Records for the previous species indicate their presence within a 1km radius of the site. Moreover, the sites direct connectivity to an extending ecological network will increase its overall productivity for bats. Therefore, development on site could potentially impact on bats, by way of reduced habitat and local connectivity if boundary features are removed.

9.2 There are no current implications in relation to Schedule 1 specially protected bird species. However, the presence of other more common and garden bird species has been established, and identified historic nests demonstrates that the site/s is/are used for breeding birds.

9.3 There is incentive for refuge seeking hedgehog on the site and potential hibernacula on both the sites in addition to this there is potential for this species for commuting and foraging.

9.4 Records of GCN are present at and within close proximity to the site. Pond 1 was concluded to have a HSI rating of below average suitability and Pond 2 was rated as average suitability. In addition to this, there are numerous features on the site, for example hedgerow and rubble piles, which could provide commuting routes and potential refuge including the identified areas on the dismantled railway line.

The ponds located within private land were not assessed for their suitability to support GCN by way of a Habitat Suitability Index (HSI) calculation.

9.5 The land within the boundaries of both sites would provide shelter, terrestrial habitat, and potential hibernacula to support common amphibians.

9.6 The site does not support plant species of ecological importance; however as outlined in this and previous sections, all site comprising habitats will be of a multi-beneficial nature for some of the species this survey took into consideration, e.g. bats and birds.

10.0 Recommendations & Implications

10.1 Due to the boundary hedgerow being identified as of value and thus likely to be utilised by nesting and foraging birds as well as its identified potential as a foraging and/or commuting feature for several bat species; it is recommended that these hedgerows are retained. It is, however, noted that part of the eastern hedgerow will be removed to facilitate the access road, but is not considered to be a significant loss or impediment to the movement of wildlife, notably bats, as the most likely species to be present in the immediate semi-urban habitat is Pipistrelle, which is not a species that is highly dependant upon linear features, nor is the Noctule bat which often forages over open pasture.

10.2 It is recommended that any lighting associated with the development should be installed in such a way that it does not illuminate hedgerows identified on the site boundaries or the disused railway line. Although accepted that lighting is essential for safety and security; the measures recommended are to prevent any light from the development illuminating the surrounding habitat features that could be used by bats.

Should light spillage occur from the site and illuminate the features described it is likely to have an adverse impact upon bats. (See extract below from Bat Conservation Lighting Guidelines)

In addition to causing disturbance to bats at the roost, artificial lighting can also affect the feeding behaviour of bats. There are two aspects to this. One is the attraction that light from certain types of lamps has to a range of insects; the other is the presence of lit conditions.

"Lighting can be particularly harmful if used along river corridors, near woodland edges and near hedgerows used by bats". Below are several methodologies which could be applied to prevent the illumination of the stretch of woodland. In mainland Europe, in areas where there are foraging or 'commuting' bats, stretches of road are left unlit or lighting is designed in such a way as to avoid isolation of bat colonies. Several options are recommended which are suitable in a range of circumstances. Between the months of the bat active season i.e. April –October the earliest sunset time in April is 1947 hrs and the latest sunset time in October is 1639 hrs; the highest level of activity is two hours after sunset and one hour before dawn and most bat species emerge from 20 - 40 minutes after sunset. Therefore if lighting is operating at or after sunset then during that time there is potential for adverse impact. To avoid such impact occurring a lighting scheme would need to be produced that could demonstrate avoidance of light spillage in a lateral and vertical direction.

Alternatively, limitations on the use of lighting between the inclusive months of: 1st April – 31st October, would have to be implemented. The following guidance is taken from Bat Conservation Lighting Guidelines). See appendix II for more information regarding bats and artificial lighting

10.3 It is recommended that if any trees and shrub are to be removed, it should be undertaken outside of the breeding season of birds (March - August) unless it can be conclusively established, by an ecologist, that nesting birds are absent. All wild birds (with only minor exceptions) and their nests whilst being built or containing eggs or dependant young are protected under the Wildlife & Countryside Act 1981 (as amended).

10.4 In relation to Great Crested Newts, it would normally be recommended that presence/absence surveys are required at Ponds 1 & 2 and the additional identified ponds to the west and south west. However, following consultation with NRW species officer Mr M. Ellis on Monday 16th February 2015 it was concluded that given the information that is currently known about GCN at and beyond the application site and that a mitigation scheme will be produced then no further presence/absence GCN surveys would be required at the application site. (See: Land south of dismantled railway, Main Road, Old Rhosrobin, Wrexham, LL11 4RL Great crested newt Mitigation: Tyrer Partnership 16th March 2015)

10.5 There exists habitat within the site, which is considered to offer some potential for hedgehogs and the presence of commuting badgers has been identified. Therefore, during development provision of low angle sloping boards of approximately 300 mm wide should be placed within any excavations at the end of each working day to facilitate a means of escape for mammals such as hedgehogs or badgers.

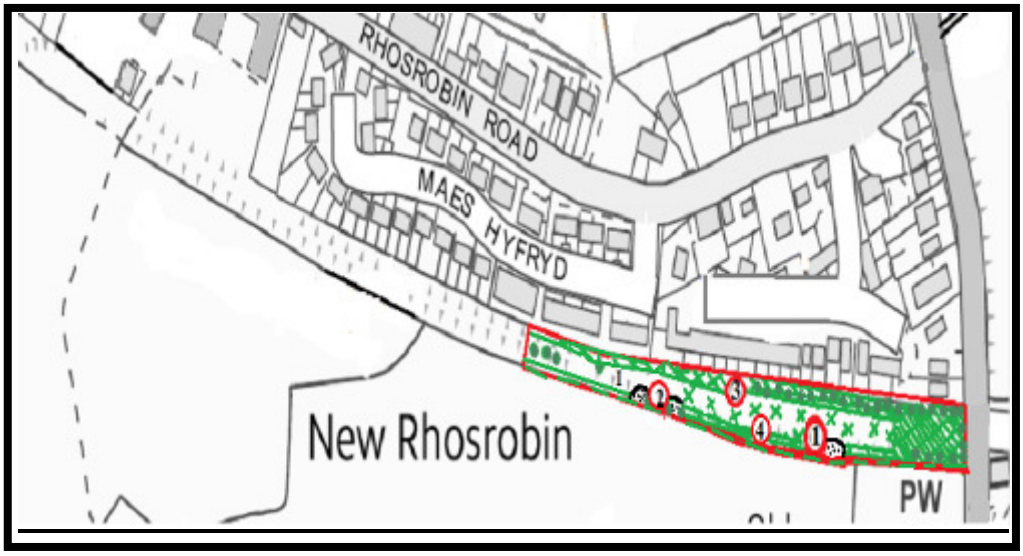
10.6 As the habitat has been identified as offering possible foraging potential and shelter for hedgehogs, it is recommended that if any dense vegetation is to be removed, it is done so in a careful manner to check for the presence of hedgehogs. Furthermore, it is recommended that if hedgehogs are discovered during their most vulnerable time, i.e. during hibernation/breeding then they are to be left in situ, and the habitat retained around them. If they are in danger of being harmed then they should be carefully relocated to a suitable sheltered area away from the work.

10.7 Due to the identified evidence of badger activity it is recommended that further surveys are carried out in relation to this species prior to any land disturbance within approximately 30 metres of the identified sett/s. This is necessary to ensure that up to date information is available on which to base further recommendations, particularly in relation to the creation of paths for recreational use.

10.8 If landscaping is proposed within the development, then native species suitable to the geology of the site and native species that will be of beneficial to wildlife should be selected. Further advice on this should be sought from a suitably qualified ecologist.

Appendix I – Phase 1 Habitat Maps

Main application site



Section of disused railway line within the application site

Habitat Key

- Survey boundary
- Scattered scrub
- Improved grassland
- Hedge (species poor, intact)
- Hedge (species poor, defunct)
- Hedge and Trees (species poor)
- Scattered trees
- Target note
- Standing water
- Bare Ground

APPENDIX II Site Photographs

Ditch close to undefined western site boundary

Badger prints under access fence on north boundary

Additional badger access

Scrub immediate to north boundary

Animal run through the site

Example of debris pile on south boundary

Intact hedgerow

Tall defunct hedgerow

Desire lines along disused rail line

Sett not currently in use

Area of extensive & fresh digging

Target note 3

Target note 3