

# **Ecological Assessment: Land at Cloddiau, Kerry SY16 4DY**

**National Grid Reference 315260, 290770**

Site Visits: 25 May – 5 July 2021  
Report Submitted: 16 September 2021

Ref: IPPS/2554/20.1



**Report Status: Pre-design and pre-planning**

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Dr R. M. Jones.

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## **1. SUMMARY**

On 25 May, 11 June and 5 July 2021 an Ecological Assessment was carried out of a proposed development site known as 'Land at Cloddiau', Kerry SY16 4DY.

The Ecological Assessment comprised a Desk Study, an Extended UK Habitat Survey and a Great Crested Newt Assessment.

Historical biodiversity records were purchased from the Biodiversity Information Service for Powys & Brecon Beacons National Park.

Dr. R. M. Jones, experienced field biologist, surveyor, Natural Resources Wales licensed bat worker (Licence number 2015-11179-CLS-CLS) and Natural Resources Wales licensed newt worker (Licence number 2016-19615-CLS-CLS) carried out the assessment/survey.

The Ecological Assessment was requested by Ian Pryce Property Services, on behalf of Mr. D. Jerman, to inform the proposed development and in anticipation of making a planning application for the installation of three holiday pods (or similar) on Land at Cloddiau.

### **1.1 Proposed Development**

The development proposal is to install three holiday pods (or similar) within part of an improved grassland field within the Cloddiau farm.

The proposed development will utilise an existing access track and does not require the removal of any tree or hedge (or parts of them).

### **1.2 Desk Study**

There are records of Great crested newt being present within two ponds adjacent to The Site. The records were collected as part of a survey to inform a previous development at Cloddiau; the construction of a poultry unit.

There are no designated wildlife sites within 1km of Land at Cloddiau.

There are records of bat, bird, Dormouse, Hedgehog, Otter and plants within 1km of the proposed development site.

With the adoption of appropriate mitigation and enhancement measures; it is not considered that development of Land at Cloddiau will adversely affect the conservation status of protected species recorded within the locality.

### **1.3 Habitat**

The proposed development site is part of an improved grassland field that is used for grazing of livestock and for the production of silage.

The proposed development site is of very low ecological value.

However:

- Badger, that may reside elsewhere in the locale, may use the proposed development site, and the field in which it is situated, for commuting and/or foraging.
- the proposed development site may be used by bats for commuting and/or foraging.
- Hedgehog may traverse and forage on the proposed development site.
- reptile, such as Grass snake and Lizard may, occasionally be present on the proposed development site.
- boundary vegetation provides bird nesting habitat.

#### **1.4 Great crested newt**

There are three recently created ponds within 500m of Land at Cloddiau. The ponds are within 10m, or-so, of the proposed development site.

The ponds do not provide Great crested newt breeding habitat and no evidence of Great crested newt was found within the ponds.

However, there is a (remote) possibility that Great crested newt may, occasionally, be present on the proposed development site and, in the absence of mitigation measures, they may be killed or injured by development work.

Mitigation measures for Great crested newt (in the form of Risk Avoidance Measures) are proposed to negate any negative impact of the proposed development on Great crested newt.

Should the proposed development be permitted: with the adoption of the Great crested newt mitigation measures, it is not considered likely that the favourable conservation status of Great crested newt would be adversely affected.

Given the size, habitat and current use of Land at Cloddiau; no further Great crested newt survey work is considered necessary to inform the proposed development.

Furthermore; it is not considered necessary for a European Protected Species Licence for Great crested newt to be issued by Natural Resources Wales to allow the proposed development to lawfully proceed.

#### **1.5 Mitigation**

Mitigation is recommended for:

- Badger
- Bat (external lighting)
- Great crested newt
- Hedgehog
- Reptile
- Small Breeding Bird

#### **1.6 Biodiversity Enhancement**

The wildlife value of the nearby ponds may be improved by dredging and by the removal of some of the surrounding trees.

Other enhancement measures for wildlife in general are recommended.

## **2. INTRODUCTION**

Star Ecology was commissioned by Ian Pryce Property Services, on behalf of Mr. D. Jerman, to conduct an Ecological Assessment of a proposed development site known as 'Land at Cloddiau', Kerry SY16 4DY.

From this point forward the proposed development site 'Land at Cloddiau' is referred to as 'The Site'.

Dr. R. M. Jones, experienced field biologist, surveyor, Natural Resources Wales licensed bat worker (Licence number 2015-11179-CLS-CLS) and Natural Resources Wales licensed newt worker (Licence number 2016-19615-CLS-CLS) carried out the assessment/survey.

The Ecological Assessment was requested in anticipation of making a planning application for the installation of three holiday pods (or similar) on The Site.

The Ecological Assessment comprised a Desk Study, an Extended UK Habitat Survey and a Great Crested Newt Assessment.

### **2.1 Report Status**

This report has been produced to inform proposed development plans and a proposed planning application.

The report includes recommendations for mitigation and biodiversity enhancement. Following the finalisation of development plans; the report may be upgraded/revised to confirm mitigation measures and/or to confirm (if possible) the likely post-development biodiversity net gain.

### **2.2 Site Description**

The Site is formed by the north-end of an intensively managed agricultural grassland field used for the grazing of livestock and for the production of silage.

The Site is approximately 4300m<sup>2</sup> (0.43 hectares) in size and is immediately neighboured by:

- an intensively managed improved grassland field at the north;
- a mixed tree species broadleaved copse, part of the Cloddiau farm access track and a modern egg-laying poultry unit at the east;
- the remaining part of the field in which it is situated, at the south; and,
- a single-vehicle-width (c-class) highway and agricultural fields at the west.

A minor (unnamed) watercourse flows north-to-south within the broadleaved woodland at the immediate east of The Site. It is understood, from Mr. D. Jerman, that in year 1998, or thereabouts, two ponds were formed along the length of the watercourse. To the south of the ponds, parts of the watercourse have been culverted.

The Site is situated in a rural landscape, and the surrounding landscape consists of agricultural fields and yard and building complexes and small woodlands/copses. The built-up area of the village of Kerry is situated approximately 750m southwest of The Site.

The River Mule flows roughly west-to-east approximately 400m south of The Site.

The course of the river and its riparian trees, hedgerows and highways in the vicinity of The Site provide habitat connectivity within the landscape surrounding The Site. Map 1. Location of The Site.

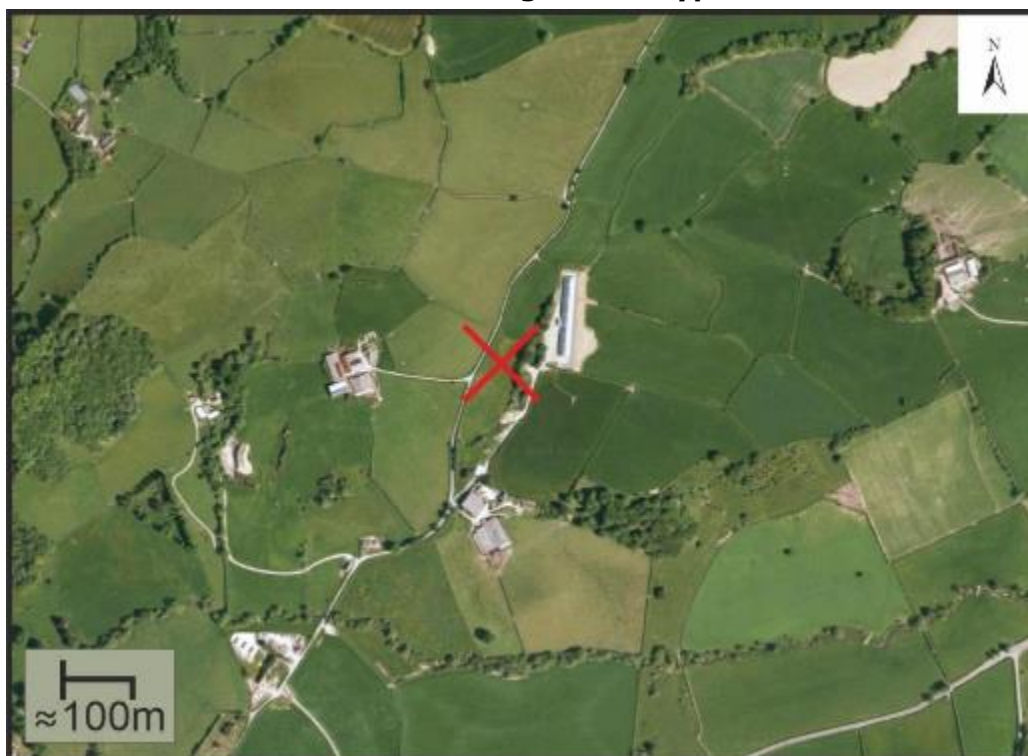
Map 2. Location of The Site and surrounding habitat types.

Please note: the aerial photograph of habitat types is a 'screenshot' from Google Maps.

**Map 1. Location of The Site (indicated by a red cross).**



**Map 2. Location of The Site (indicated by a red cross) and surrounding habitat types.**





### **2.3 Proposed Development**

It is understood that there is a proposal to install three holiday pods (or similar) on The Site.

Whilst The Site is approximately 4300m<sup>2</sup> (0.43 hectares) in size; it is likely that the actual developed area will be much smaller - being the areas of the proposed holiday pods (or similar) and associated infrastructure, such as access paths and similar.

The proposed development will utilise part of the Cloddiau farm access track and an existing field access track/gateway.

Should the proposed development require the installation of utility services, it is probable that any trench excavations (and similar) can be routed within existing field areas and access tracks.

The proposed development will not require the removal of any tree or hedge or (parts of them).

### **3. DESK STUDY**

#### **3.1 Previous development at Cloddiau**

There are two ponds situated to the east of The Site, within a small broadleaved tree species copse. The ponds and copse are situated between The Site and a purpose-built poultry unit and its associated infrastructure.

In year 2008 a Great crested newt survey was carried out and a mitigation strategy produced to inform the construction of the poultry unit.

On 25 June 2008 a 'low' population of Great crested newt was recorded present within the two ponds. One juvenile (approximately one year old) Great crested newt was found within one pond, and one adult Great crested newt was found in the other pond. A total of eight Great crested newt eggs was also recorded.

Prior to the construction of the poultry unit a permanent unidirectional Great crested newt (exclusion) fence was installed between the (future location of the) poultry unit and the ponds and copse.

Full details of the Great crested newt survey and mitigation strategy are contained within a report produced by Cardiff University, dated 1 December 2008.

On 22 May 2021, 11 June 2021 and 5 July 2021, the previously installed Great crested newt unidirectional (exclusion) fence was intact and *in situ*.

#### **3.2 Designated wildlife sites**

Designated wildlife sites within 1km of The Site were identified using the Multi-Agency Geographic Information Centre (MAGIC) (<http://magic.gov.uk>) and information provided by BIS

There are no designated wildlife sites within 1km of The Site.

#### **3.3 Record search**

Data searches were commissioned from Biodiversity Information Service for Powys & Brecon Beacons National Park (BIS) for records of priority/protected species within a 1km radius of The Site.

##### **3.3.1 Bat**

###### Legislation

All bat species (*Rhinolophidae* and *Vespertilionidae*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or

(iii) to affect significantly the local distribution or abundance of the species to which they belong;

- damage or destroy a breeding site or resting place of a bat;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead bat, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection.

A bat resting place may be a structure a bat uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not bats are in occupation, as they may be re-used by bats.

Eight species of bat are listed as 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales may be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against bats.

#### Records

BIS has nine records of bat within 1km of The Site. These records are detailed in Table 1. The earliest record was collected in year 1984; the most recent in year 2020.

Two records have a 1m precision, one record has a 10m precision, three records have a 100m precision and three records have a 1km precision.

The closest record of bat to The Site is for an unidentified bat, collected in year 1985, approximately 830m northwest.

**Table 1. Records of bat within 1km.**

<b>Bat species or Group</b>	<b>Scientific name</b>	<b>Number of records</b>	<b>Earliest year recorded</b>	<b>Most recent year recorded</b>	<b>Closest approximate position to the Building</b>	<b>Year of collection of the closest record</b>
Unidentified bat	Chiroptera	2	1985	1985	830m northwest	1985
Daubenton's	Myotis daubentonii	1	1985	1985	1.75km south	1985
Lesser Horseshoe	Rhinolophus hipposideros	3	2018	2020	1.38km south	2020
Unidentified Long-eared species	Plecotus	1	1985	1985	1.75km south	1985
Common pipistrelle	Pipistrellus pipistrellus	1	1985	1985	1.17km southeast	1985
Unidentified Myotis species	Myotis	1	1984	1984	1.23km west	1984

### 3.3.2 Bird

BIS has 81 records of 27 species of bird within 1km of The Site. The earliest record was collected in year 1977; the most recent in year 2020.

Records have been collected from 18 different (NGR) locations. Thirteen of the locations have a 100m precision and five have a 1km precision.

Of the records of bird recorded within 1km of The Site, two are fully protected under the Wildlife and Countryside Act 1981.

These species are:

- Barn Owl (*Tyto alba*)
- Brambling (*Fringilla montifringilla*)

### 3.3.3 Dormouse

#### Legislation

The Common or Hazel Dormouse (*Muscardinus avellanarius*) is protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 .

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a Dormouse;
- deliberately disturb Dormice. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Dormouse;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Dormouse, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Dormouse while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a Dormouse uses for shelter or protection.

A Dormouse resting place may be a structure a Dormouse uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not Dormice are in occupation, as they may be re-used by Dormice.

Dormouse are listed as 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales may be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Dormice.

#### Records

BIS has two records of Dormouse within 1km of The Site.

Both records were collected in year 2018 and have a 1m precision.

The closest record is approximately 1.41km south of The Site.

### 3.3.4 Hedgehog

#### Legislation and policy

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention.
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981.
- are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.
- listed as 'vulnerable to extinction' on International Union for the Conservation of Nature's Red List for British Mammals.

#### Records

BIS has three records of Hedgehog within 1km of The Site.

The earliest record was recorded in year 2012; the most recent in year 2020.

Records have been collected from two different (NGR) locations; one with a 100m precision and one with a 1km precision.

The closest record of Hedgehog to The Site is approximately 900m southwest.

### 3.3.5 Otter

#### Legislation

Otter (*Lutra lutra*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill an Otter;
- deliberately disturb Otter. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of an Otter;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Otter, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Otter while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which an Otter uses for shelter or protection.

Otter are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales will be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Otter.

#### Records

BIS has nine records of Otter within 1km of The Site, each collected from a different (NGR) location.

The earliest record was collected in year 1991; the most recent in year 2015.

Six records have a 100m precision and three records have a 1km precision.

The closest record of Otter to The Site is approximately 800m southwest.

### **3.3.6 Plants**

BIS has 46 records of 28 species of plants within 1km of The Site. The earliest record was collected in year 1977; the most recent in year 2020. Records have been collected from nine different (NGR) locations; one with a 10m precision, two with a 100m precision and six with a 1km precision.

### **3.4 Conclusions**

In year 2008, Great crested newt were recorded within the two ponds at the immediate east of The Site.

There are no designated wildlife sites within 1km of The Site.

It is not considered that BIS holds records for wildlife directly on The Site. However; records indicate that there may be protected species, particularly bats and Hedgehog on and/or within the vicinity of The Site.

Development of The Site will need to be carried out in a manner that will not negatively impact the status of protected fauna and flora within the vicinity of The Site.

## **4. EXTENDED UK HABITAT SURVEY**

An Extended UK Habitat Survey (Butcher et al., 2020) of The Site, and the field in which it is situated, was carried out on 25 May 2021, 11 June 2021 and 5 July 2021.

The Extended UK Habitat Survey was carried out by Dr. R. M. Jones, experienced field biologist and surveyor.

### **4.1 Survey Objectives**

- a) To determine if The Site contains flora of significant ecological value.
- b) To determine if The Site contains fauna of significant value and/or Protected Species.

### **4.2 Method**

To fulfil the brief of undertaking an ecological assessment of The Site an Extended UK Habitat Survey was conducted (Butcher et al., 2020).

This is a recently devised technique for classifying and mapping habitats.

The aim is to provide a record of habitats that are likely to be ecologically important.

Where appropriate, the extent of each habitat type was mapped, and details of relative plant species abundance within homogenous areas were recorded.

If appropriate, species abundance was measured on the DAFOR scale (Dominant, Abundant, Frequent, Occasional and Rare).

In order to allow efficient reporting of the boundaries on or immediately adjacent to The Site; where appropriate boundaries (such as hedges, fences and walls) were recorded and described individually.

In order to allow efficient reporting of trees on or immediately adjacent to The Site; where appropriate individual trees were recorded and described individually.

Please note:

A separate and thorough Tree Survey and/or Arboricultural Assessment (such as a tree survey to BS5837:2012 "Trees in relation to design, demolition and construction. Recommendations") or similar was not carried out by Star Ecology.

During the Extended UK Habitat Survey the presence, or potential presence, of protected species, such as Badger and reptiles, was recorded on The Site.

Surveyor accessible land within approximately 50m of The Site was also surveyed. Incidental records of birds present on The Site were made throughout the survey.

Where appropriate, Target Note descriptions were recorded for features of nature conservation importance and/or extra-ordinary features of The Site. These include areas of valued vegetation and places that might support notable animal species.

### **4.3 Limitations**

It is not considered that there are any significant limitations to the survey.



## 4.4 Results

### 4.4.1 Climate Conditions

The surveys were carried out in dry and bright conditions with little or no breeze.

### 4.4.2 Habitat types

Appendix 1 contains an Extended UK Habitat Survey Map.  
Appendix 2 contains a photographic record of the survey.

The Site is the north part of an intensively managed improved grassland agricultural field (g4, modified grassland). The field is used for the grazing of livestock and for the production of silage.

The north boundary of The Site (and the field in which it is situated) is formed by an intact species rich hedge (h2a) and livestock-proof fences (u1e). The hedge is approximately 1.5m high, appears to be annually trimmed and is formed of

- Blackthorn (*Prunus spinosa*)
- Dogrose (*Rosa canina* agg.)
- Elder (*Sambucus nigra*)
- Hawthorn (*Crataegus monogyna*)

A row of planted broadleaved trees is present on the south side of the hedge (h2a). Tree species present include:

- Cherry (*Prunus avium*)
- Field Maple (*Acer campestre*)
- Hazel (*Corylus avellana*)
- Oak (*Quercus* sp.)
- Silver Birch (*Betula pendula*)
- White Willow (*Salix alba*)

A small, man-made, pond is situated at the west-end of the north boundary. It is understood, from Mr. D. Jerman that the trees were planted and the pond created as part of a wildlife enhancement scheme associated with the construction of the poultry unit to the east of The Site.

The east boundary of The Site is formed by a livestock-proof fence (u1e).

There is no physical barrier along the south boundary of The Site.

The west boundary of The Site is formed by an intact species rich hedge (h2a) with an intact livestock-proof fence (u1e). The hedge is approximately 1.5m high, appears to be annually trimmed and is formed of:

- Hawthorn
- Sycamore (*Acer pseudoplatanus*)
- Hazel
- Elder (*Sambucus nigra*)
- Blackthorn
- Dogrose

All fences present are formed of timber-posts, pig-netting wire and barbed-wire.

### 4.4.3 Fauna

#### 4.4.3.1 Badger

##### Legislation

Badgers (*Meles meles*) and their setts are protected by the Protection of Badgers Act 1992.

Under this legislation it is illegal to:

- wilfully kill, injure or take, or attempt to kill, injure or take, a Badger;
- cruelly ill-treating a Badger, digging for Badgers, using Badger tongs, using a firearm other than the type specified under the exceptions within the Act;
- interfere with a Badger sett by damaging, destroying, obstructing, causing a dog to enter a sett, disturbing an occupied sett - either by intent or by negligence;
- sell or offer for sale a live Badger, having possession or control of a live Badger;
- mark, attach a ring, tag, or other marking device to a Badger.

A Natural Resources Wales Badger Disturbance Licence may be required for development works affecting Badgers.

##### Relevant factors

There is no record of Badger within 1km of The Site.

No evidence of Badger was found on The Site or within approximately 50m of it.

However, considering the habitat of The Site, its location and surrounding landscape; Badger may, occasionally, use The Site for commuting and foraging purposes.

#### 4.4.3.2 Bat

##### Legislation

All bat species (*Rhinolophidae* and *Vespertilionidae*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of a bat;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead bat, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a bat uses for shelter or protection.

A bat resting place may be a structure a bat uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not bats are in occupation, as they may be re-used by bats.

Eight species of bat are listed as 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales may be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against bats.

#### Relevant factors

There are records of bat within 1km of The Site (Desk Study – Section 3). There is no bat roost habitat on The Site. However, The Site is likely to be used by bats for commuting and/or foraging purposes.

### **4.4.3.3 Dormouse**

#### Legislation

The Common or Hazel Dormouse (*Muscardinus avellanarius*) is protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 .

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a Dormouse;
- deliberately disturb Dormice. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Dormouse;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Dormouse, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Dormouse while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a Dormouse uses for shelter or protection.

A Dormouse resting place may be a structure a Dormouse uses for breeding, resting, shelter or protection. Resting place sites are protected whether or not Dormice are in occupation, as they may be re-used by Dormice.

Dormouse are listed as 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales may be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Dormice.

#### Relevant factors

There are records of Dormouse within 1km of The Site (Desk Study – Section 3). The Site and its boundaries do not provide habitat suitable for use by Dormouse. No evidence of Dormouse was found on The Site or along its boundaries. Considering the location and habitat of The Site and the surrounding habitat; it is not considered likely that Dormouse would reside on The Site or within its immediate environs. Dormouse do not impose a constraint on the proposed development.

#### 4.4.3.4 Hedgehog

##### Legislation and policy

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention.
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981.
- are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.
- listed as 'vulnerable to extinction' on International Union for the Conservation of Nature's Red List for British Mammals.

##### Relevant factors

There are records of Hedgehog within 1km of The Site (Desk Study – Section 3).

The Site does not provide Hedgehog breeding/nesting habitat. However, habitat in the vicinity of The Site may support Hedgehog and Hedgehog may use The Site for commuting and/or foraging purposes.

#### 4.4.3.5 Otter

##### Legalisation

Otter (*Lutra lutra*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 (as amended).

Under the Conservation of Habitats and Species Regulations 2017 (as amended) legislation it is illegal to:

- deliberately capture, injure or kill an Otter;
- deliberately disturb Otter. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- damage or destroy a breeding site or resting place of an Otter;
- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Otter, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Otter while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which an Otter uses for shelter or protection.

Otter are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

A European Protected Species (EPS) Development Licence from Natural Resources Wales will be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Otter.

##### Consideration

There are records of Otter within 1km of The Site (Desk Study – Section 3).

The Site does not provide habitat suitable for Otter to reside within and no evidence of Otter was found on The Site or within its immediate environs.

Otter do not impose a constraint on the proposed development.

#### 4.4.3. Polecat

##### Legislation and policy

(European) Polecat (*Mustela putorius*) are:

- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981.
- protected from trapping or capture under Schedule 6 of the Conservation of Habitats and Species Regulations 2017.
- are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

##### Relevant factors

There is no record of Polecat within 1km of The Site.

The Site does not provide habitat suitable for Polecat to reside within and no evidence of Polecat was found on The Site or within its immediate environs.

Polecat do not impose a constraint on the proposed development.

#### 4.4.3.7 Reptile

##### Legislation

Four reptile species, Adder (*Vipera berus*), Grass snake (*Natrix natrix*), Slow-worm (*Anguis fragilis*) and Common Lizard (*Lacerta vivipara*), have protection under the Wildlife and Countryside Act 1981.

Their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 gives 'partial protection' (i.e. only parts of section 9 apply). In addition to restrictions with respect to trade (prohibition of sale and advertising for sale, etc.) they are also protected from intentional killing or injury.

All reptile species are listed as 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

##### Relevant factors

There is no record of reptile within 1km of The Site.

It is likely that the developed area of The Site will be too small to be of significant value to reptile. However, the occasional presence of common reptile, such as Grass snake and Lizard, on The Site cannot be wholly discounted.

#### 4.4.3.8 Small Breeding Birds

##### Legislation

Nesting birds are protected by the Wildlife and Countryside Act 1981.

Under the Wildlife and Countryside Act 1981, all birds are protected while breeding.

It is an offence, with certain exceptions to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird.

##### Consideration

Vegetation bounding The Site provides Small Breeding Bird habitat.

#### **4.4.3.9 Water vole**

##### Legislation

Water vole (*Arvicola amphibius*) are protected under the Wildlife and Countryside Act 1981.

Under this legislation, it is illegal to:

intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection;

intentionally or recklessly disturb Water voles whilst occupying a structure or place used for that purpose;

intentionally kill, injure or take Water voles;

possess or control live or dead Water voles or derivatives;

sell water voles or offer or expose for sale or transport for sale;

publish or cause to be published any advertisement which conveys the buying or selling of Water voles.

A Natural Resources Wales Licence may be required for development works affecting Water vole.

Water vole are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.

##### Consideration

There is no record of Water vole within 1km of The Site.

The Site does not provide Water vole habitat and there is no potential Water vole habitat within its environs.

Water vole do not impose a constraint on the proposed development.

#### **4.4.3.10 Other fauna**

No evidence of other notable fauna was found.

#### **4.5 Conclusion**

The Site is part of an intensively managed agricultural grassland field and is of low ecological value.

However:

- boundary hedges and trees and the copse at the east provide valuable habitat linkage within the local landscape.
- Badger may, occasionally, traverse and/or forage on The Site.
- The Site and its boundaries may be used by bats for commuting and/or foraging purposes.
- Hedgehog may traverse and/or forage on The Site.
- Grass snake and/or Lizard may, occasionally, be present on The Site.
- vegetation bounding The Site provides Small Breeding Bird nesting habitat.

## **5. GREAT CRESTED NEWT ASSESSMENT**

### **5.1 Introduction**

On 21 May 2021, 25 May 2021 and 18 June 2021, a Great Crested Newt Assessment was carried out to ascertain the likelihood of the proposed development of The Site affecting Great crested newts.

Dr. R. M. Jones, experienced field biologist, surveyor and Natural Resources Wales licensed Great crested newt worker (Licence number S088980/1) carried out the Great Crested Newt Assessment.

There are three known ponds within 500m of The Site:

- Pond 1: situated at approximate NGR 315315, 290790; approximately 5m east of The Site.
- Pond 2: situated at approximate NGR 315290, 290725; approximately 5m east of The Site.
- Pond 3: situated at approximate NGR 315260, 290820; at the immediate north of The Site.

Each pond is man-made. It is understood, from Mr. D. Jerman, that Pond 1 and Pond 2 were created for wildlife and recreational/leisure purposes, and that Pond 3 was created as part of a wildlife enhancement scheme as part of the approved planning permission for the construction of the nearby poultry unit.

A 'low' population of Great crested newt was recorded present within Pond 1 and Pond 2 in year 2008.

### **5.2 Assessment Objectives**

- a) If necessary and possible, to assess the suitability of Ponds 1 – 3 to support Great crested newt.
- b) To assess the likelihood of Great crested newt – should they be present – being adversely affected by the proposed development.
- c) To recommend further Great crested newt survey work as appropriate.

### **5.3 Legislation**

Great crested newt (*Triturus cristatus*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 .

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a Great crested newt;
- deliberately disturb Great crested newt. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Great crested newt;

- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Great crested newt, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Great crested newt while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a Great crested newt uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural Resources Wales will be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Great crested newt.

## **5.4 Method**

### **5.4.1 Assessment of Great Crested Newt Breeding Potential**

The likelihood of Great crested newt using Ponds 1 – 3 for breeding purposes was assessed using the Habitat Suitability Index (HSI).

The HSI for Great crested newt is a measure of habitat suitability but is not a substitute for newt presence/absence surveys.

In general, ponds with high HSI scores are more likely to support Great crested newt than those with low scores.

The National Amphibian and Reptile Recording Scheme HSI calculation method was used to calculate the HSI score.

### **5.4.2 Physical evidence of Great crested newt**

On 21 May 2021, 25 May 2021 and 18 June 2021:

- submerged vegetation within Ponds 1 – 3 was searched for the presence of Great crested newt eggs.
- the Ponds 1 – 3 were subject to a Night-time Lamping Survey.

The Night-time Lamping Survey was carried out as follows:

- the perimeters of the ponds were walked at night.
- the bottoms of the ponds were searched with a powerful torch and sightings of Great crested newts were recorded.
- an assessment was made of the amount of vegetation cover of the ponds.
- an assessment was made of the water turbidity of the ponds.

A Fenix RC40 3800 lumen torch and a DeWalt DCL043 1000 lumen torch were used.

Regarding vegetation cover:

A score of 0 means that there is no vegetation obscuring visibility, whereas a score of 5 means that the surface water of the pond is completely obscured.

Regarding water turbidity:

A score of 0 means that the water is completely clear, whereas a score of 5 means the water is very turbid.



### 5.4.3 Rapid Risk Assessment Tool

Research undertaken by Natural England (previously English Nature) (English Nature, 2006) indicates the distances from breeding ponds within which Great crested newt are most likely to be encountered.

In relation to the appropriate use of Great crested newt mitigation measures, Natural England (English Nature, 2006) determines:

“The most comprehensive mitigation, in relation to avoiding disturbance, killing or injury is appropriate within 50m of a breeding pond. It will also almost always be necessary to actively capture newts 50-100m away. However, at distances greater than 100m, there should be careful consideration as to whether attempts to capture newts are necessary or the most effective option to avoid incidental mortality. At distances greater than 200-250m, capture operations will hardly ever be appropriate.”

Natural England’s valuation of habitats according to distance from Great crested newt breeding ponds has been adopted within the Natural England European Protected Species Licence application form for Great crested newt and within their ‘rapid risk assessment’ tool (contained in Form ‘WML-A14-2.xls’).

Assuming:

- that Great crested newt use the subject pond for breeding purposes; and,
- the development of The Site was carried out in the absence of Great crested newt specific mitigation measures

if necessary, the Natural England ‘rapid risk assessment’ tool was used to qualify the likelihood of a criminal offence against Great crested newt being committed.

### 5.4.4 Limitations

It is acknowledged that the HSI scoring system cannot provide unequivocal evidence of Great crested newt absence.

Where Great crested newt are likely absent; should there be a change in habitat – the future absence of Great crested newt cannot be wholly assumed.

## 5.5 Results

### 5.5.1 Habitat suitability

A photographic record of Ponds 1 – 3 is contained in Appendix 3.

Details of the HSI calculation scores for Ponds 1 – 3 are contained in Table 2.

The HSI score of Pond 1 is 0.50.

The habitat of Pond 1 is between ‘poor’ and ‘below-average’ for Great crested newt to use for breeding purposes.

The HSI score of Pond 2 is 0.47.

Pond 2 provides ‘poor’ habitat for Great crested newt to use for breeding purposes.

The HSI score of Pond 3 is 0.28.

Pond 3 provides ‘poor’ habitat for Great crested newt to use for breeding purposes.

**Table 2. Pond HSI scores.**

HSI variable	Pond 1		Pond 2		Pond 3	
	Comment	Score	Comment	Score	Comment	Score
SI1 - Location	Zone B = marginal	0.50	Zone B = marginal	0.50	Zone B = marginal	0.50
SI2 - Pond area	Measured area $\approx$ 150m <sup>2</sup>	0.30	Measured area $\approx$ 100m <sup>2</sup>	0.20	Measured area $\approx$ 20m <sup>2</sup>	0.05
SI3 - Pond drying	Informed value: 'never dries'	0.90	Informed value: 'sometimes dries'	0.50	Informed value: 'dries annually'	0.10
SI4 - Water quality	Informed value: 'poor'	0.33	Informed value: 'poor'	0.33	Informed value: 'poor'	0.01
SI4 - Shade	Informed value $\approx$ 100%	0.20	Informed value $\approx$ 90%	0.40	Informed value $\approx$ 50%	1.00
SI6 - Fowl	Informed value: 'minor'	0.67	Informed value: 'minor'	0.67	Informed value: 'absent'	1.00
SI7 - Fish	Informed value: 'absent'	1.00	Informed value: 'absent'	1.00	Informed value: 'absent'	1.00
SI8 - Nearby ponds	Mapped & known ponds $\approx$ 3	0.60	Mapped & known ponds $\approx$ 3	0.60	Mapped & known ponds $\approx$ 3	0.60
SI9 - Terrestrial habitat	Informed value: 'moderate'	0.67	Informed value: 'moderate'	0.67	Informed value: 'moderate'	0.67
SI10 - Macrophytes	Informed value $\approx$ 10%	0.40	Informed value $\approx$ 30%	0.30	Informed value $\approx$ 0%	0.30
<b>HSI</b>		<b>0.50</b>		<b>0.47</b>		<b>0.28</b>

### **5.5.2 Physical evidence of Great crested newt**

No physical evidence of Great crested newt was found in Pond 1, Pond 2 or Pond 3.

### **5.5.3 Rapid Risk Assessment**

If it is hypothesised that Great crested newt use Pond 1, Pond 2 and/or Pond 3 for breeding purposes; the Natural England 'rapid risk assessment' tool shows the potential affect of developing the whole of The Site (i.e. 0.43 hectares) on Great crested newts is:

- 'Amber: Offence Likely'.
- Notional offence probability score 0.5.

## **5.6 Conclusion**

Great crested newt has been previously recorded within ponds adjacent to The Site. However, the records were collected in year 2008 and the ponds no longer provide habitat suitable for Great crested newt to use for breeding purposes.

Use of the Natural England 'rapid risk assessment tool' suggests that should Great crested newt be present in Pond 1, Pond 2 and/or Pond 3, in the absence of mitigation, the proposed development is 'likely' to cause the killing and/or injury of Great crested newt and may negatively affect the favourable conservation status of the local Great crested newt population.

However, the 'rapid risk assessment' tool is not able to take into account:

- the habitat of The Site and its boundaries;
- the scale and nature of the development; or,
- that Risk Avoidance Measures for Great crested newt may be used to reduce the likelihood of Great crested newts being negatively affected by development work.

Considering:

- the habitat of The Site;
- the size of The Site;
- the nature of the proposed development; and,
- the ease at which mitigation for Great crested newt may be adhered to throughout the development,

no further Great crested newt assessment or survey is considered necessary to inform the proposed development.

## **6. ECOLOGICAL ASSESSMENT CONCLUSIONS**

### **6.1 Desk Study (Section 3)**

Previous survey at Cloddiau, to inform a previous planning application, recorded the presence of Great crested newt within two ponds at the immediate east of The Site.

There are no designated wildlife sites within 1km of The Site.

The local biodiversity record centre holds records of bat, bird, Dormouse, Hedgehog, Otter and plants within 1km of The Site.

Considering the habitat of The Site and the nature and scale of the proposed development: with the adoption of appropriate mitigation measures; it is not envisaged that the proposed development would negatively affect the conservation status of protected fauna or flora recorded at and/or in the vicinity of The Site.

#### **Bat:**

There are records of bat within 1km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of the bat (species) identified within the Desk Study.

The Site and its boundaries may be used by bats for commuting and/or foraging purposes.

Mitigation for bat is contained in Section 7.1.

#### **Bird:**

There are records of birds within 1km of The Site.

Vegetation bounding The Site offers nesting opportunity for Small Breeding Birds. It is not anticipated that the proposed development will require the removal of any (part of) the vegetation. However, due to unforeseen reasons, should the proposed development require removal of potential bird nesting vegetation; mitigation for Small Breeding Birds is contained in Section 7.2.

#### **Dormouse:**

There are records of Dormouse within 1km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of Dormouse identified within the Desk Study.

#### **Hedgehog:**

There are records of Hedgehog within 1km of The Site.

The Site may be used by Hedgehog for commuting and/or foraging purposes.

Mitigation for Hedgehog is contained in Section 7.3.

#### **Otter:**

There are records of Otter within 1km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of Otter identified within the Desk Study.

#### **Plants:**

There are records of plants within 1km of The Site.

It is not envisaged that development of The Site would negatively affect the conservation status of the plants identified within the Desk Study.

## 6.2 Extended UK Habitat Survey (Section 4)

The Site is part of an intensively managed improved grassland field and is of low conservation value.

However:

- The Site may be used by bats for commuting and/or foraging. Should the proposed development require the installation of external lighting; it is recommended that a bat-sensitive external lighting scheme be designed. Mitigation for bats is contained in Section 7.1.
- Vegetation bounding The Site provides nesting resources for Small Breeding Birds. It is not anticipated that the proposed development will require the removal of any trees or hedge, or parts of them. However, should, for unforeseen circumstances, the proposed development require the removal of potential bird nesting habitat; mitigation for Small Breeding Birds should be adhered to. Mitigation for Small Breeding Birds is contained in Section 7.2.
- The Site may be used by Hedgehog for commuting and/or foraging purposes. Should the proposed development be carried out mitigation for Hedgehog should be adhered to. Mitigation for Hedgehog is contained in Section 7.3.
- Badger may, occasionally, use The Site for commuting and/or foraging. Should the proposed development be carried out mitigation for Badger should be adhered to, to minimise the likelihood of Badger being killed and/or injured during development work. Mitigation for Badger is contained in Section 7.4.
- Reptile, such as Grass snake and Lizard may, occasionally, be present on The Site. It is a legal offence to kill or injure reptiles. Considering the scale and habitat of The Site and the nature of the proposed development it is not considered necessary for (a) reptile survey(s) to be carried out to inform the proposed development. However, should the proposed development be carried out mitigation for reptiles should be adhered to assuage any possible negative impact of the development on reptiles. Mitigation for reptiles (and Great crested newt) is contained in Section 7.5.

## 6.3 Great crested newt (Section 6)

There are three ponds within close proximity (no more than 10m) to The Site. In year 2008, Great crested newt was recorded present within two of the ponds.

There are no other known mapped ponds within 500m.

The nearby ponds do not provide habitat suitable for Great crested newt to use for breeding purposes and no evidence of Great crested newt was found within the ponds.

No further Great crested newt survey work is considered necessary to inform the proposed development of The Site.

Furthermore; it is not considered necessary for a European Protected Species Licence for Great crested newt to be issued by Natural Resources Wales to allow the proposed development to lawfully proceed.

However, it is possible that the two of the ponds may (in the future) be used by Great crested newt for breeding purposes.

Therefore, it is (remotely) possible that Great crested newt may, occasionally, be present on The Site and/or within its immediate environs.

It is considered that any potential risk of the development of The Site affecting Great crested newts may be assuaged by the adoption of Risk Avoidance Measures (RAMs) for Great crested newt.

A set of RAMs for Great crested newt (and reptile), suitable for the proposed development, are detailed in Section 7.5.

Adoption of RAMs will negate any potential impact of the development on Great crested newts and other wildlife, including common amphibians and small mammals.

#### **6.4 Future ecological value of The Site**

The restoration of Pond 1 and Pond 2, by dredging and the clearing of some of the surrounding trees, should be considered.

Furthermore, the ecological value of The Site, and its immediate environs may be enhanced, post-development, by:

- the installation of purpose-made bird nesting features;
- the installation of purpose-made bat roosting features;
- sympathetic design for Hedgehog;
- the installation of purpose-made Hedgehog nesting features; and,
- the planting of hedges and/or the planting of trees.

Recommendations for biodiversity enhancement are contained in Section 9.

## **7. MITIGATION**

### **7.1 Bat**

#### External Lighting

In order to avoid any unnecessary disturbance to bats in the future, any external lighting to be installed should:

- use Light emitting diodes (LED) luminaries
- have a warm white spectrum <math><2700^{\circ}</math> Kelvin (degrees colour temperature)
- have peak wavelengths higher than 550nm
- be set on motion-sensors
- use short duration (e.g. one minute) timers
- not be in the vicinity of, or shine towards, bat roost openings
- not shine towards (the) roof structure(s)
- not be in the vicinity of, or shine towards, boundary vegetation

### **7.2 Small Breeding Bird**

#### **7.2.1 Legislation**

Nesting birds are protected by the Wildlife and Countryside Act 1981. Under the Wildlife and Countryside Act 1981, all birds are protected while breeding.

It is an offence, with certain exceptions to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built;
- intentionally take or destroy the egg of any wild bird.

#### **7.2.2 Mitigation**

Vegetation clearance may only be carried out when no nesting birds are present i.e. between 1<sup>st</sup> October and 1<sup>st</sup> March.

Should it be required that vegetation clearance takes place within the bird breeding season, a survey should be carried out by a suitably qualified ecologist to ascertain whether breeding birds are present or not; should no breeding birds be present, it may be possible for vegetation clearance work to commence.

## 7.3 Hedgehog

### 7.3.1 Legislation and Policy

(European) Hedgehog (*Erinaceus europaeus*) are:

- listed on Appendix III of the Bern Convention.
- protected from harm under Schedule 6 of the Wildlife and Countryside Act 1981.
- are listed as a 'priority species' under Schedule 7 of the Environment (Wales) Act 2016.
- listed as 'vulnerable to extinction' on International Union for the Conservation of Nature's Red List for British Mammals.

### 7.3.2 Mitigation – Excavations and ground-works

Excavated footings, post-holes, pipe trenches etc. will need to be filled on the same day as they are opened.

Should the time between excavation and filling of foundations or trenches need to be extended, due to unforeseen circumstances, it will be necessary to prevent any chance of Hedgehog, or other wildlife, becoming trapped in excavations.

This may be achieved by:

Covers:

Covering the excavations with ply-board sheeting or similar, ensuring a good seal between the bottom edge of the board and firm ground substrate.

Ramps:

Should it not be possible to cover all excavations, wooden boards (or similar) will be placed extending from the bottom of excavations to the surrounding surface. Should Hedgehog, or small mammals, become trapped in excavations, these 'ramps' may potentially allow Hedgehog, and small mammals, a method of escaping on their own accord.

Each morning; excavations should be inspected for the presence of Hedgehog. Should Hedgehog be present, they should be removed from the excavation and, if they are healthy, released within suitable habitat, away from the development site.

## 7.4 Great Crested Newt and Reptile

### 7.4.1 Legislation – Great crested newt

Great crested newt (*Triturus cristatus*) are protected under the Wildlife and Countryside Act 1981, the Countryside and Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2017 .

Under the Conservation of Habitats and Species Regulations 2017 legislation it is illegal to:

- deliberately capture, injure or kill a Great crested newt;
- deliberately disturb Great crested newt. This includes in particular, disturbance in a way any such which is likely to (i) impair their ability to survive, breed or reproduce, or to rear or nurture their young; (ii) impair their ability to hibernate or migrate; or (iii) to affect significantly the local distribution or abundance of the species to which they belong
- damage or destroy a breeding site or resting place of a Great crested newt;



- to be in possession or control, to keep, transport, to sell or exchange, or to offer for sale or exchange, any live or dead Great crested newt, or any part of, or anything derived from such a wild animal.

Under the Wildlife and Countryside Act 1981, it is illegal to:

- intentionally or recklessly disturb a Great crested newt while it is occupying a structure or place which it uses for shelter or protection.
- intentionally or recklessly obstruct access to any structure or place which a Great crested newt uses for shelter or protection.

A European Protected Species (EPS) Development Licence from Natural Resources Wales will be required for development works triggering Conservation of Habitats and Species Regulations 2017 offences against Great crested newt.

#### **7.4.2 Legislation – Reptile**

Four reptile species, Adder (*Vipera berus*), Grass snake (*Natrix helvetica*), Slow-worm (*Anguis fragilis*) and Viviparous (or Common) Lizard (*Lacerta vivipara*), have protection under the Wildlife and Countryside Act 1981.

Their inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 gives 'partial protection' (i.e. only parts of section 9 apply). In addition to restrictions with respect to trade (prohibition of sale and advertising for sale, etc.) they are also protected from intentional killing or injury.

Natural Environment and Rural Communities Act 2006 lists all reptile species as a species of principle importance.

Reptiles are listed as priority species under the UK Biodiversity Action Plan.

#### **7.4.3 Mitigation**

Adoption of the mitigation measures is *precautionary* but may avoid the killing or injury of Great crested newt and reptile that may traverse The Site or be attracted to it during the construction phase. (E.g. animals may seek refuge or shelter within spoil heaps or building materials).

##### **A. Site worker induction**

- A.1 All personnel working on The Site shall be made aware that there is a small risk of Great crested newt and/or reptile, occasionally, being present on The Site.
- A.2 All site personnel will be informed:  
Should Great crested newt and/or reptile, or a suspicion of their presence, be found, work must cease immediately and the Ecological Clerk of Work and/or Natural Resources Wales (Telephone 0300 065 3000) contacted.

##### **B. Timing**

- B.1 Generally, Great crested newt and reptile are active on land from approximately mid-February to mid-November.
- B.2 There is no timing constraint on the installation of foul water pipe work and/or septic tank(s), or similar, or the excavation of trenches (in general). These activities do not require the removal or disturbance of (potential) Great crested newt or reptile hibernation habitat.

### **C. Grass/vegetation clearance**

- C.1 Should the sward height of vegetation growing within The Site be above 50mm at the time that development work is to commence; action will be required to negate any likelihood of Great crested newt and reptile being present:
- Immediately prior to development works commencing: The Site will be walked-over and inspected for the presence of Great crested newt and reptile;
  - Should Great crested newt and/or reptile be found, it may be necessary for the development-work schedule to be reassessed and Natural Resources Wales be consulted;
  - If no Great crested newt and/or reptile is found, The Site will be cut/strimmed to a height of no less than 50mm. Cutting/strimming will start in the middle of The Site and work progressively towards the north and east boundaries. All cut vegetation will be removed from The Site by hand.
- C.2 Where appropriate, the grassland habitat on The Site should be kept to a minimum sward height (ideally less than 50mm) for the duration of the development.

### **D. Building material storage**

- D.1 Wherever possible; building materials will be stored within purpose-made (a) solid-floored compound(s).
- D.2 Building materials stored on The Site during the construction phase will be on pallets, or similar, and at as great a distance as possible from (retained) hedges and trees.  
This will:
- minimise the likelihood of Great crested newt and reptile using building materials as a place for rest or shelter.
  - ensure the protection of the root systems of trees and hedge shrubs.
- D.3 Where suitable, construction materials will be stored on pallets, or similar, to keep them off the ground and potentially prevent Great crested newt or reptile from resting underneath them.
- D.4 Pallets and other stored materials will not be kept on bare ground and in the same place for more than 3-4 weeks - to prevent them from creating potentially suitable resting places for Great crested newt or reptile.

### **E. Excavations**

- E.1 Excavated footings, post-holes, pipe trenches et cetera will be filled on the same day as they are opened.
- E.2 Should the time between excavation and filling of foundations or trenches need to be extended, due to unforeseen circumstances, it will be necessary to prevent any chance of Great crested newt or reptile becoming trapped in excavations.  
This may be achieved by:
- a) Covers:  
Covering the excavations with ply-board sheeting or similar, ensuring a good seal between the bottom edge of the board and firm ground substrate.
  - b) Ramps:  
Should it not be possible to cover all excavations, wooden boards (or similar) will be placed extending from the bottom of excavations to the surrounding surface.

Should amphibians or small mammals become trapped in excavations, these 'ramps' may potentially allow amphibians and small mammals a method of escaping on their own accord.

- c) Prior to works re-commencing: the Ecological Clerk of Works will inspect all covered or 'ramped' excavations for the presence of Great crested newt and reptile.
- d) Should Great crested newt or reptile be found, it may be necessary for the development-work schedule to be reassessed and Natural Resources Wales be consulted.
- e) Should no Great crested newt or reptile be found, under the direction of the Ecological Clerk of Works, work may re-commence.

#### **F. Arisings and/or waste materials**

- F.1 Ideally, excavated soil (and any other arisings) will be removed from The Site on the same day as their creation.
- F.2 (Soil) arisings that are to remain on The Site, perhaps for landscaping for example, will either need to be placed in (a) secure (solid-floored) compound(s) or placed immediately on The Site where they are required post-development. Should the latter be required, soils will need to be compacted and dressed to the required finished level on the same day (or as soon after as possible) as they were excavated.
- F.3 Waste materials, such as builders rubble, generated within the development process will be stored within purpose-made refuge containers (such as 'skips') and or (a) secure (solid-floored) compound(s).
- F.4 Where appropriate, the areas immediately surrounding the storage areas of (soil) arisings and/or waste materials will be kept clear of debris and/or vegetation, and (where appropriate) the grassland sward height will be kept to a minimum (<50mm).

**Should Great crested newt or reptile, or a suspicion of their presence, be found, work must cease immediately and the Ecological Clerk of Work and/or Natural Resources Wales (Telephone 0300 065 3000) contacted.**

## **8. BIODIVERSITY ENHANCEMENT**

### **8.1 Planning Policy**

#### **8.1.1 National Planning Policy Framework**

Paragraph 170 of the National Planning Policy Framework (2019) states:  
"Planning policies and decisions should contribute to and enhance the natural and local environment by:

- b) ... protecting and enhancing ... sites of biodiversity ... value ...
- d) ... minimising impacts on and providing net gains for biodiversity ..."

Paragraph 174 of the National Planning Policy Framework (2019) states:

"To protect and enhance biodiversity ... plans should:

- a) ... safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;  
and
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity"

Paragraph 175 of the National Planning Policy Framework (2019) states:

- d) "development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."

#### **8.1.2 Planning Policy Wales**

Section 6 of Planning Policy Wales (adopted December 2018) states:

- 6.4.22 "The presence of a species protected under European or UK legislation, or under Section 7 of the Environment (Wales) Act 2016 is a material consideration when a planning authority is considering a development proposal which, if carried out, would be likely to result in disturbance or harm to the species or its habitat and to ensure that the range and population of the species is sustained."
- 6.4.24 "Trees, woodlands, copses and hedgerows are of great importance for biodiversity. They are important connecting habitats for resilient ecological networks and make a valuable wider contribution to landscape character, sense of place, air quality, recreation and local climate moderation."
- 6.4.25 "Planning authorities should protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function."
- 6.4.27 "The protection and planting of trees and hedgerows should be delivered, where appropriate, through locally-specific strategies and policies, through imposing conditions when granting planning permission ..."

### **8.1.3 Environment (Wales) Act 2016**

Section 6 of the Environment (Wales) Act (2016) states:

"A public authority must seek to maintain and enhance biodiversity in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions".

### **8.2 Small Breeding Bird**

In order to encourage wildlife to reside on The Site, or within its immediate surrounds, in the future it is recommended that a minimum number of:

- two Swift nest boxes (e.g. Schwegler No. 16 Swift Box)
- three House Martin nest boxes (e.g. Schwegler House Martin Nest 9A)
- two Wren nest boxes (e.g. Schwegler Number 1ZA woodcrete nest);
- one generic bird species nest box (e.g. Schwegler 1B Bird Nest Box);
- one generic bird species open-fronted nest box (e.g. Schwegler 2H woodcrete open fronted nest box); and,
- one predator protected nest box (e.g. Schwegler 3SV with Predator Protection Bird Nest Box)

(or similar alternatives) be installed on The Site, or within its immediate vicinity, post-development.

Boxes should be installed at a minimum of 3m from the ground and in locations subject to low future disturbance.

### **8.3 Bat**

In order to encourage wildlife to reside on The Site, or within its immediate surrounds, in the future it is recommended that a minimum number of:

- one Schwegler 1FR Bat Tube or one Wienerberger EcoSurv Bat Box (or similar alternatives) are built into an exterior wall(s) of any proposed new buildings; or,
- one Schwegler 2FN Bat Box and one Schwegler 2F Bat Box (or similar alternatives) are installed on The Site, or within its immediate vicinity, post-development.

Boxes should be installed at a minimum of 4m from the ground and in locations subject to low future disturbance.

In addition or alternatively to purpose-made bat boxes, custom bat roosting provision (such as 'Bat Lofts', 'Eaves Boxes', 'Exterior Common Rafter Bat Crevices', 'Loft Boxes', 'Rafter Boxes', 'Raise Ridge Tiles' and/or 'Soffit Box Bat Roosts') may be installed and/or created within the structural fabric of proposed buildings.

### **8.4 Hedgehog**

Gates proposed to be installed within the development should have a minimum ground clearance of 100mm.

Every 4-6m, ground level holes, a minimum of 100mm high (vertical) and 100mm wide (horizontal), should be created within proposed boundary fencing to be installed.

A minimum of:

- one purpose-made Hedgehog hibernation nest box/refuge (e.g. Schwegler Hedgehog Dome); or,
- one purpose-made Hedgehog summer/breeding nest box/refuge (e.g. Hogitat Hedgehog Home)

should be installed within The Site, post-development.

## 8.5 Wildlife Hedge and/or Tree Planting

Wherever possible, hedgerows within or bounding The Site should be retained and all existing (mature) trees should be retained.

New hedgerows may be planted and/or existing hedgerows supplementary planted. Recommendations are provided in Section 8.5.1.

Open spaces to be created within the proposed development may be planted within fruit trees.

Recommendations are provided in Section 8.5.2.

### 8.5.1 Hedgerow/shrub planting

Open spaces may be planted with shrubs to provide shelter and foraging areas for wildlife.

Ideally, a minimum of four species of shrub should be planted.

Native species of local provenance are preferred.

Ideally, potted stock should be in non-peat compost.

Favourable native plant species that may be incorporated in hedgerow boundaries and/or shrubberies include:

<b>Common English Name</b>	<b>Scientific Name</b>
Blackthorn	<i>Prunus spinosa</i>
Common Beech	<i>Fagus sylvatica</i>
Dogwood	<i>Cornus sanguinea</i>
Field Maple	<i>Acer campestre</i>
Field Rose	<i>Rosa arvensis</i>
Guelder Rose	<i>Viburnum Opulus</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus Avellana</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Oak	<i>Quercus robur/ petraea</i>
Rowan	<i>Sorbus aucuparia</i>
Spindle	<i>Euonymus europaeus</i>
Wayfaring Tree	<i>Viburnum lantana</i>

### 8.5.2 Standard/Fruit Trees

New native tree planting within (public) open spaces and/or along (retained) boundaries may encourage wildlife to forage on The Site. Trees may be half-standard or standard size. Standard trees provide instant habitat for birds and insects. Species should be those that provide a good mast crop (i.e. seeds), and ideally a mixture of species should be planted.

Tree stakes should be low (maximum 0.60 metres above ground), at an angle to avoid roots, and removed in year three.

The fecundity of trees should be monitored and dead and/or damaged plants suitably replaced.

Ideally, a minimum of three tree species should be planted.

Favourable tree species include:

<b>Common English Name</b>	<b>Scientific Name</b>
Apple	<i>Malus sp.</i>
Bird Cherry	<i>Prunus padus</i>
Cherry	<i>Prunus var.</i>
Cobnut / Filbert	<i>Corylus var.</i>
Crab-apple	<i>Malus sylvestris</i>
Damson	<i>Prunus var.</i>
Mountain Ash	<i>Sorbus aucuparia</i>
Mulberry	<i>Morus nigra</i>
Pear	<i>Pyrus sp.</i>
Plum / Greengage	<i>Prunus var.</i>
Silver Birch	<i>Betula pendula</i>
Small-leaved Lime	<i>Tilia cordata</i>
Walnut	<i>Juglans regia</i>
Wild Cherry	<i>Prunus avium</i>

## 9. RELEVANT PUBLICATIONS

Amphibian and Reptile Groups of the United Kingdom (2010). ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index.

Bat Conservation Trust and Institution of Lighting Professionals (2018). Guidance Note 8 Bats and Artificial Lighting.

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). UK Habitat Classification – Habitat Definitions V1.1 at <http://ukhab.org>

Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd ed., Bat Conservation Trust.

Multi-Agency Geographic Information Centre (MAGIC) (<http://magic.gov.uk>).

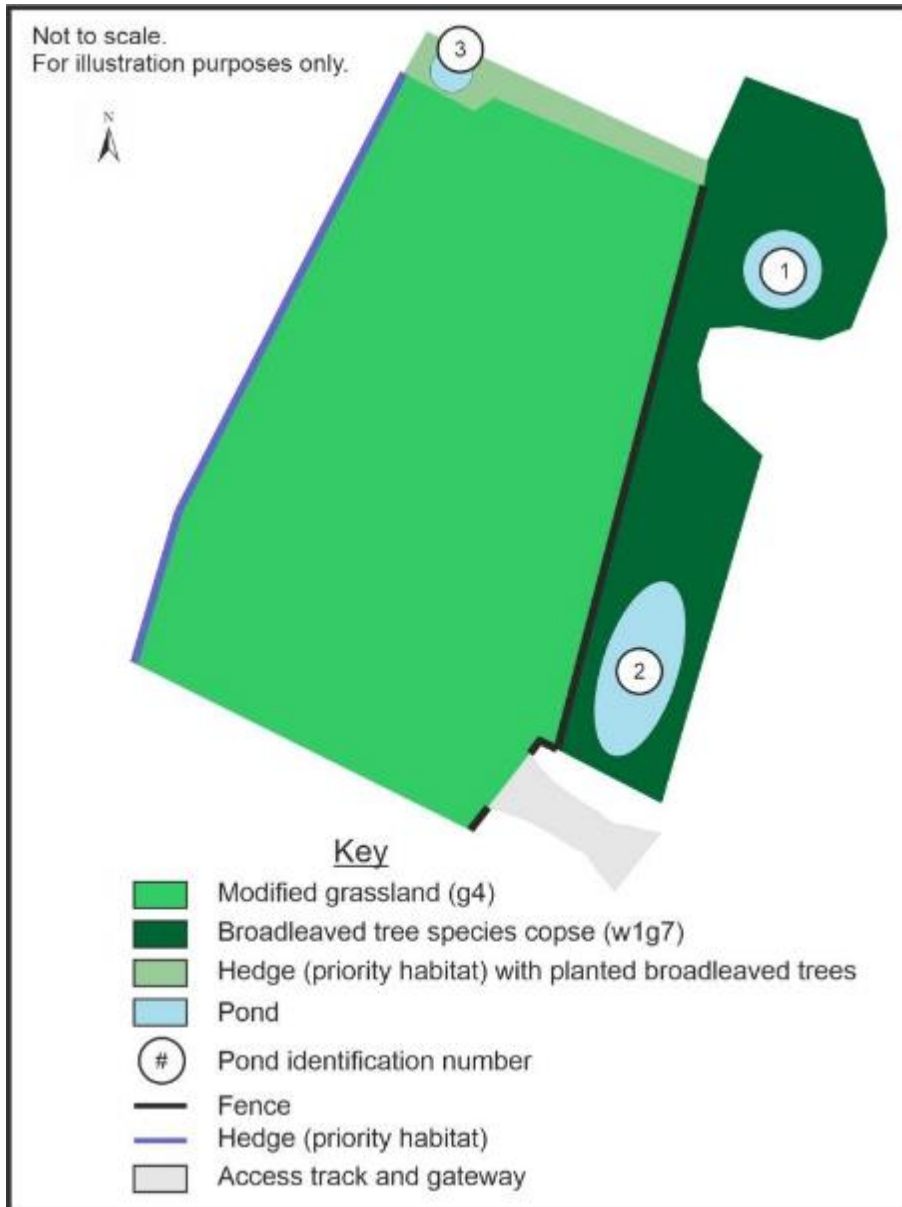
Natural England (2020). European Protected Species Method Statement document. Form WML-A14-2.xls.

Oldham, R.S., Keeble, J., Swan, M.J.S., and Jeffcote, M. (2000). *Evaluating the Suitability of Habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal, Vol. 10, pp. 143-155.

Slate, F. & Murton, K. (2008). Great crested newt Mitigation Report for Cloddiau Farm at Kerry, near Newtown. Cardiff University.



## APPENDIX 1 – Extended UK Habitat Map



## APPENDIX 2 – Site Photographs



**Photograph 1.**

View of the access track and gateway to the field in which The Site is situated, leading from part of the Cloddiau access track. Looking northwest from southeast.



**Photograph 2.**

View of The Site.  
Looking northeast from southwest.

### APPENDIX 3 – Pond Photographs



**Photograph 1.**  
View of Pond 1.  
Looking west from east.



**Photograph 2.**  
View of part of Pond 2.  
Looking north from south.



**Photograph 3.**  
View of Pond 3.  
Looking north from south.