



# THE OLD YARD, RUDRY

Preliminary Ecological Appraisal (PEA)

October 2023

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<b>Client</b>	Mr Andrew Watts and Mrs Rebecca Watts
<b>Project</b>	The Old Yard, Rudry
<b>Revision Number</b>	1.0

	<b>Name</b>	<b>Position</b>	<b>Date</b>
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## Non-Technical Summary

<b>Site Location</b>	The Old Yard, Rudry Central Grid Reference: ST 18974 87352
<b>Proposed Development</b>	Construction of a single dwelling
<b>Purpose of Survey(s)</b>	To identify possible ecological constraints
<b>Survey Date(s)</b>	15 <sup>th</sup> September 2023
<b>Surveyor</b>	Rebecca Howells (BSc)
<b>Overview of Results</b>	<ul style="list-style-type: none"> <li>• There were no statutory designated sites within 1 km of site.</li> <li>• There were four non-statutory designated within 1 km of site.</li> <li>• Habitats within the survey boundary include parkland scattered trees, dense scrub, poor semi-improved grassland, bracken, tall ruderal, running water, building and hard standing.</li> <li>• There were no TPO's within 100 m of site.</li> <li>• There were 26 records of ancient woodland within 1 km of site.</li> <li>• Restored ancient woodland is located immediately east of site.</li> <li>• Mynydd Rudry Common SINC is located immediately south and east of site.</li> <li>• The site resides within a B-line. B-lines are a series of insect pathways running through the countryside and towns across the UK that are being restored through creating and restoration wildflower-rich habitats to help link existing wildlife areas together.</li> <li>• The Nant y Garth stream flows through the site.</li> <li>• Schedule 9 invasives species Himalayan balsam and hollyberry cotoneaster were recorded on site.</li> <li>• The narrow sections of scrub along the southern and some of the eastern boundary offers potential for foraging dormouse.</li> <li>• The scrub and tall ruderal habitats on site provide potential for foraging and sheltering great crested newts and common amphibians.</li> <li>• The site provides commuting and foraging opportunities for bats.</li> <li>• The Nant y Garth (stream) may provide resting and/or commuting opportunities otter.</li> <li>• The site may provide foraging and commuting opportunities for badger.</li> <li>• The site may provide foraging and basking opportunities for reptiles.</li> <li>• The building, trees, scrub and grassland habitats on site have potential to support nesting birds.</li> <li>• The habitats on site may provide opportunities for foraging, commuting and nesting hedgehog.</li> <li>• The habitats on site may provide opportunities for commuting and/ or foraging stoat and weasel.</li> </ul>

## Recommendations

- Pollution prevention measures should be put in place to prevent polluting and/ or damage to the Nant y Garth watercourse, Mynydd Rudry Common SINC, restored ancient woodland and its associated habitats and species.
- The narrow strip of bramble scrub along the south and east of the site's boundary should be retained to prevent disturbing dormouse. If this is not possible then an EPS development licence will be required before works can commence.
- A Method Statement (MS) will be required for great crested newts for the dismantling of the building and vegetation clearance which should include: timing works between March and October when newts are active, experienced ecologist to deliver toolbox talk to contractors before works begin, supervising ecologist throughout the dismantling of building and vegetation clearance, two-stage vegetation clearance, newt fence installation to prevent animals entering construction site and creation of habitat piles. If this is not possible an EPS development licence will be required before works can commence.
- The building should be emptied of equipment/ tools/ machinery before dismantling and undertaken outside of breeding bird season (September – February).
- Vegetation should be cleared using two-staged strimming outside of breeding bird season (September – February).
- Any excavations should be securely fenced off and covered over at the end of the working period, at weekends or when not in use and construction materials, tools and machinery should be stored appropriately when not in use.
- Habitat connectivity along the Nant y Garth and the habitats south of the site should be maintained.
- Night-time work should be avoided. If this is not possible then any lighting should be directional and positioned away from the Nant y Garth watercourse, Mynydd Rudry Common SINC, and restored ancient woodland to prevent disturbance to bats, dormouse, otter, badger etc.
- A sensitive lighting design should be incorporated into the final design to prevent light spilling onto the Nant y Garth watercourse, Mynydd Rudry Common SINC, and restored ancient woodland.
- The appointed contractor should provide an appropriate invasive species method statement that should be followed for the duration of the works to prevent the spread of Himalayan Balsam and hollyberry cotoneaster.
- In the unlikely event that protected species are discovered during the dismantling of the building and vegetation clearance, then works will have to stop and a European Protected Species (EPS) licence will need to be applied for and granted by NRW before works can continue.

**Post-development  
enhancement  
opportunities**

- Bat and bird boxes (three of each) should be installed as part of the final building design or on suitable trees within the immediately surrounding habitat to provide additional bat roosting/ bird nesting opportunities;
- Any landscape planting proposed for the scheme should include native and wildlife attractive plant species that produce a variety of flower, fruit, nut and berries to provide food sources throughout the year;
- Habitat piles should be created by using materials produced from site clearance and located in retained suitable habitat and should include dead wood, logs and brash piles. This will provide suitable habitat for foraging and housing reptile, amphibian, hedgehog and a range of invertebrate species;
- Welsh meadow seed mix; and/ or
- Incorporate and harvest rainwater to create natural water features for birds; and/ or create a wildlife pond.

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## **DRAWINGS**

Non-designated Sites BE001 - 001

Phase 1 Habitat Plan BE001 – 002

GD Lodge Architects – Indicative Block Plan as Proposed – Option 2 – SK\_03

**APPENDIX A – Legislation and Policy**

**APPENDIX B - Photographs**

**APPENDIX C – Local Biodiversity Records Centre Data**



# 1. INTRODUCTION

## 1.1 Background

Rebecca Howells (BSc) was appointed by Mr and Mrs Watts to produce a Preliminary Ecological Appraisal (PEA), including a desk study and extended Phase 1 habitat of an area of land (known locally as the Old Yard') in Rudry for a proposed construction of a single dwelling (hereafter referred to as 'the site' and 'proposed development').

The PEA report identifies any ecological constraints associated with the proposed development.

## 1.2 Site Location

The proposed development site is located at the southeasterly edge of Rudry village, Caerphilly (central grid reference ST 18974 87352). Rudry is a rural village located approximately 3 km west from Caerphilly town centre. The site is immediately adjacent to an arable field to the north, country lane and Rudry village to the east and woodland to the south and west. A culvert enters the site from the south and through the culvert that runs under the country lane where it flows through the proposed development site.

The proposed development location is shown in Figure 1.



© Google Earth Image

Figure 1. overview of proposed development site within the red line boundary.



### 1.3 Scope of Works

The scope of this assessment includes the following:

- A desk study within 1 km of the proposed development for protected species and designated sites;
- An extended Phase 1 habitat survey of the proposed development to identify key habitats, assess their potential to support protected and or notable species and record any presence of non-native invasive species;
- Habitat mapping; and
- An outline of recommendations for further surveys, mitigation and enhancement.

### 1.4 Proposals

The proposed development site was historically used as a lorry yard and the shed building on site was used to house vehicles. The site in recent years had been used to keep horses and the shed building was then converted for use as a combined horse stable and workshop (hereafter referred to as 'the building').

The proposals are to construct a four-bedroom house that will replace the footprint of the existing building located at the northwest boundary of the development footprint (refer to GD Lodge Architects – Indicative Block Plan as Proposed – Option 2 – SK\_03).

The proposals will include the dismantlement of a building and localised vegetation clearance. The development is not anticipated to remove any trees and the vegetation clearance is estimated to clear a maximum of 1000m<sup>2</sup> from the total 3,200m<sup>2</sup> of habitat present on site.

### 1.5 Legislation and Planning Policy

A full description of wildlife planning policy and legislation is provided in Appendix A, those most relevant to the proposed development are described below. Species such as, bats, great crested newt (*Triturus cristatus*), Hazel dormouse (*Muscardinus avellanarius*), badger, (*Meles meles*), breeding birds, reptiles, amphibians, species may be residing within the proposed development area and/or adjacent habitat and therefore, may be impacted by proposed works. These habitats and species are given varying levels of protection from damage, killing, injury, destruction of shelter/nests and disturbance under the following legislation:

- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
- Wildlife and Countryside Act 1981 (as amended);
- Environment (Wales) Act 2016; and

Habitats on site include a water course, which flows through Mynydd Rudry Common SINC and restored ancient woodland habitat immediately downstream that fall under protection from damage or under the following legislation/policy:

- Environment (Wales) Act 2016; and
- Planning Policy Wales 11 (2021).

Non-native invasive species including Himalayan balsam (*Impatiens glandulifera*) and hollyberry cotoneaster (*Cotoneaster bullatus*) are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Section 14 of this Act makes it an offence to “plant or otherwise cause” these species to grow in the wild.

## **2. METHODOLOGY**

### **2.1 Desk Study**

A desktop study was undertaken in September 2023 to identify any existing ecological information relating to the proposed development site and surrounding landscape. The following resources were utilised:

- The Multi-Agency Geographical Information for the Countryside (*DEFRA, 2023*) website was used to search for statutory designated sites of nature conservation value within 1 km of the proposed development. The search buffer was extended to 10 km for Special Areas of Conservation (SACs) designated for bats.
- Natural Resources Wales' Ancient Woodland Inventory 2021 (*NRW, 2021*) was used to search for areas of ancient woodland within 100 m of the proposed development and ponds and watercourses within 250 m.
- Caerphilly County Borough Council interactive map (*CCBC, 2023*) was used to search for Tree Preservation Orders (TPO's) and Conservation Areas with 100 m.
- South East Wales Biodiversity Records Centre (SEWBRc) was consulted for records of protected and notable species or species of conservation concern (from data collected in the last 10 years only) and Local Nature Conservation Sites within 1 km (2 km for bats) of the proposed development (*Aderyn, 2023*).

### **2.2 Extended Phase 1 Habitat Survey**

An extended Phase 1 habitat survey was undertaken on the 15<sup>th</sup> of September 2023 by experienced ecologist Rebecca Howells following CIEEM's best practice guidelines (*CIEEM, 2017*). The survey was undertaken during daylight hours and weather conditions were warm and cloudy.

The survey comprised of a walkover survey to map Phase 1 habitats present within the proposed development site following the standard survey methodology (*JNCC, 2010*). Plant species abundance were noted (botanical names follow *Stace (2010)*), however, there was no attempt to compile an exhaustive species list.

The habitats were assessed for their potential to support protected/notable plant and/or animal species and observations of incidental signs of protected/ notable species were noted.

### **2.3 External Preliminary Roost Assessment for Bats**

A Preliminary Roost Assessment (PRA) was undertaken by Rebecca Howells during day light hours of the building whilst following good practice guidelines provided by the Bat Conservation Trust (*Collins, J (ed.) 2023*).

An external inspection was carried out to identify Potential Roost Features (PRF's) or actual bat access points and evidence of bats. The site and the surrounding habitat were also assessed for its potential to be used by foraging and commuting bats.

The stable was inspected for potential bat roosting features such as cracks and gaps between the wall panels, wooden rafters and corrugated aluminium roof. The surveyor searched for and recorded all evidence of bat activity which may include (and not limited to) droppings, urine stains, feeding remains, carcasses, scratch marks, grease stain and odour. Binoculars, high-powered torch and Eco Meter Touch 2 bat detector were used where appropriate.

The suitability of each feature(s), to support roosting bats has been assessed as either negligible, low, moderate or high, in accordance with best practice guidance (*Collins, J (ed.) 2023*) (refer to Table 1). Further surveys have been recommended in accordance with best practice guidance and the surveyor's professional judgement where evidence of a bat roost or PRFs have been identified that could be impacted by the proposed development where precautionary mitigation alone cannot ensure that bats would not be potentially disturbed or harmed.

Table 1. Guidelines for assessing suitability of structures (buildings and trees etc) to support bat roosts.

Suitability	Description of Roosting Habitats
Negligible	A structure that does not support any features that could be used by roosting bats.
Low	A structure that has one or more potential roosting features that could support individual roosting bats opportunistically. These features however lack the space, shelter or appropriate conditions, to support larger numbers of bats (such as a maternity roost).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter and suitable conditions for roosting, but are unlikely to support a roost of high conservation significance.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potential for longer periods of time due to their size, shelter, protection and conditions.

## 2.4 Habitat Suitability Index (HSI) Assessment

Rebecca Howells NRW GCN licence holder (number available upon request) conducted a Habitat Suitability Index assessment of a waterbody located approximately 50 m south of the site (central grid reference ST 19008 87276) on the 22<sup>nd</sup> of October 2023. The assessment was conducted in accordance with Oldham et al. (2000).

The HSI was used as a means of evaluating the quality and quantity of habitat to establish an indication of the level of suitability to support great crested newts.

The HSI assesses ten attributes that are known to influence whether great crested newts are likely to be present and include:

- Geographic location;
- Pond size (m<sup>2</sup>);
- Pond permanence (how often a pond dries);
- Water quality (based on invertebrate diversity within the pond);
- Level of shading the pond receives;
- Waterfowl presence/absence;
- Fish presence or absence;
- Number of ponds within 1 km;
- Terrestrial habitat suitability; and
- Macrophyte cover.

A value for each of these indices are calculated between 0.1 (unsuitable) and 1.0 (optimal).

A general description of the water body was also recorded in the field along with information for each of the ten attributes, excluding the pond count within 1 km (which was determined before the assessment using MAGIC maps (DEFRA, 2023)). The information for each of the attributes was converted into a score and the overall HSI score for each water body was calculated using the following formula (taken from ARG habitat suitability index advice note (ARG, 2010)):

$$HSI = (SI1 \times SI2 \times SI3 \times SI4 \times SI5 \times SI6 \times SI7 \times SI8 \times SI9 \times SI10)^{1/10}$$

The HSI score estimates the ponds suitability for great crested newt, with higher scores indicating a greater suitability, as shown in Table 2.

Table 2. HSI scores to define pond suitability to support Great crested newts (ARG UK, 2010).

HSI Score	Pond Suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

## 2.5 Limitations

The survey data and recommendations provided in this report are valid for two years from the date of issue.

This report provides a preliminary view of the likelihood of protected species being present within the proposed development. This was based on the suitability of the habitat, data records received by Local Biological Records Centre (LERC) and any evidence identified within the survey area. The findings in this report should not be considered as providing a definitive survey of any protected species and is only representative of the time the PEA was carried out. Additional surveys may be recommended if the preliminary assessment considered it likely that protected species may be present.

## 3. RESULTS

### 3.1 Statutory Designated Sites

There were no statutory designated sites (i.e., Sites of Special Scientific Interest (SSSIs) or Special Areas of Conservation (SACs)) within 2 km (10 km for bats) of the development site.

### 3.2 Non-Statutory Designated Sites

There were four non-statutory designated Sites within 1 km of the proposed development site and are listed in Table 3 (refer to drawing BE001 - 001).

Table 3. Non-statutory Designated Sites within 1 km of the proposed development site.

Site Name	Reasons for Designation	Location in relation to the proposed development
Mynydd Rudry Common SINC	Qualifying features include acid grassland containing at least 7 indicator species. Ponds with diverse wetland vegetation. Presence of hazel dormouse. Presence of great crested newt. Presence of nightjar ( <i>Caprimulgus europaeus</i> ). Presence of uncommon moss ( <i>Leptodontium flexifolium</i> ).	25 m
Rudry Woodlands SINC	Qualifying features include semi-natural woodland with an assemblage of indicator species. Replanted woodland retaining a range of semi-natural woodland indicator species. Presence of hazel dormouse.	256 m
Caerphilly/ Machen Disused Railway, East of Trethomas SINC	Qualifying features include continuous sections of disused railway line supporting semi-natural vegetation. Broadleaved woodland (with wet woodland and ancient woodland) with semi-natural indicators species-rich marshy grassland with at least 12 indicator species. Presence of great crested newt.	783 m
Nant Gwaunybara Mire, East of Caerphilly SINC	Qualifying features include ancient woodland / wet woodland with an assemblage of semi-natural indicator species. Marshy grassland/ mire with at least 12 indicator species. Presence of hazel dormice (reasonably assumed, as they are present in adjacent Coed Parc-y-Van).	843 m

### 3.3 Habitats

The following Phase 1 habitats were identified within the proposed development site and are listed in the order found in the Phase 1 handbook (*JNCC, 2010*).

- Parkland Scattered Trees;
- Dense Scrub;
- Poor Semi-improved Grassland;



- Bracken;
- Tall Ruderal;
- Running Water;
- Buildings – Stable; and
- Other - Hard Standing.

These habitats (described in Sections 3.3.1 – 3.3.8) and their distribution, corresponding habitat codes and Target Notes (TN) are provided in the Habitat Phase 1 Drawing (BE001-002). Corresponding photographs are provided in Appendix C (Plate 1-8).

### **3.3.1. Parkland Scattered Trees**

Approximately seven cedar trees (*Cedrus libani*) (Plate 1) were recorded along the southwest boundary of the site, close to the main entrance. This provides a screen between the proposed development site and Garth Place road.

### **3.3.2. Dense Scrub**

The majority of dense scrub (Plate 2) was mapped as thin strips along the edge of the site boundary and all areas were dominated by bramble (*Rubus fruticosus agg.*). The scrub along the southern and eastern boarder was immediately located next Mynydd Rudry Common SINC. The remaining areas of scrub consisted of isolated strips along the site's northern boundary. A larger isolated patch of scrub was recorded adjacent to the building. Himalayan balsam was also noted among the scrub within the southern section of the site.

### **3.3.3. Semi-improved Grassland**

A strip of semi-improved grassland (Plate 3) was recorded between the sites main entrance and continued along the northwest boundary where it opened up into a larger area at the northeastern section of the site. Species included abundant Yorkshire-fog (*Holcus lanatus*), cock's-foot (*Dactylis glomerata*), and perennial rye-grass (*Lolium perenne*), commonly occurring yarrow (*Achillea millefolium*), red clover (*Trifolium pratense*), creeping buttercup (*Ranunculus repens*), meadow buttercup (*Ranunculus acris*), ribwort plantain (*Plantago lanceolata*) and silverweed (*Potentilla anserina*), frequent tormentil (*Potentilla erecta*) and occasional creeping thistle (*Cirsium arvense*). Small patches of tall ruderal species including common fleabane (*Pulicaria dysenterica*) and broad-leaved dock (*Rumex obtusifolius*) were also noted.

### **3.3.4. Bracken**

An isolated strip of dense bracken (*Pteridium aquilinum*) (Plate 4) was recorded along the southern section of the site. Additional species include occasional bramble. Himalayan balsam was also noted amongst the bracken within the southern section of the site.

### **3.3.5. Tall Ruderal**

Tall ruderal (Plate 5) species were abundant throughout the south and the central areas of the site. Species include abundant creeping thistle, rosebay willowherb (*Chamerion angustifolium*), common

fleabane, frequent broad-leaved dock and occasional immature grey willow (*Salix cinerea subsp. cinerea*) and hawthorn (*Crataegus monogyna*). Himalayan balsam was also noted.

### **3.3.6. Running Water**

The Nant y Garth stream (Plate 6) was recorded entering the site via a culvert located beneath Garth Place road. This stream flowed through the site in a northeasterly direction where it continued into the neighbouring woodland and joined the Rhymney River approximately 1.5 km downstream. At the time of survey, the Nant y Garth contained minimal flow and was densely covered by Himalayan balsam.

### **3.3.7. Building**

A building (Plate 7) was recorded on the northern boundary. It was constructed from wooden planks and corrugated metal sheets. There were no side panels on the west side of the structure and only half of the east side was panelled. Two partially partitioned rooms were located within the front and central area of the structure. At the time of the survey this structure contained a tractor and tools/ equipment.

### **3.3.8. Other - Hard Standing**

A small area of hard standing (Plate 4) was mapped between the site entrance and building. Semi-improved grassland had encroached into this area.

## **3.4 Preliminary Roost Assessment**

The PRA did not identify any signs that may indicate that the building (Plate 9-16) was being used by roosting bats.

The ceiling and rafters were exposed (Plate 10) and did not support features suitable for roosting bats.

The building contained two partly partitioned rooms (Plate 13) which were constructed from wooden planks. One room was constructed from a single skin of wooden planks (Plate 14 & 15) and the other contained two single skin walls and two walls with wooden planks either side of a stud wall (Plate 16 & 17). Some of the boards were missing and broken providing access. However, these features were close to the ground and considered unsuitable for roosting bats as it could be easily accessible to rats and other predators (i.e., domesticated cats).

An Echo Meter used during the external inspection did not record any bat activity.

The site did not contain any artificial light source and is located at the edge of Mynydd Rudry Common SINC and ancient woodland, therefore, the site is considered suitable for commuting and foraging bats.

## **3.5 Habitat Suitability Index (HSI) Assessment**

The pond was located approximately 50 m south of the site and on the opposite side of Garth Place road. At the time of the assessment the water level was shallow. The tree canopy immediately above and surrounding the pond prevented any direct sunlight.

A local resident informed the surveyor that the pond acts as an overflow trap during heavy rainfall and had been recently dredged (refer to Plate 18).

The HSI calculated the pond as having a score of 0.49. This score indicates the pond provided 'Poor' suitability to support great crested newts (refer to Table 4).

Table 4. Habitat Suitability Index results.

Indices	Description	Value
Geographic location	B	0.5
Pond area m <sup>2</sup>	180 m <sup>2</sup>	0.2
Pond performance	Sometimes dries	0.5
Water quality	Poor/ low invertebrate diversity	0.33
Shade	100 %	0.2
Waterfowl (presence/ absence)	Absent	1
Fish (presence/ absence)	Absent	1
Ponds within 1 km	9	1
Terrestrial Habitat	Good	1
Macrophyte cover	20 %	0.5
<b>HSI Score</b>	<b>0.49</b>	
<b>Pond Suitability</b>	<b>Poor</b>	

### 3.6 Tree Preservation Orders (TPO'S)

There were no TPO's within 100 m of the proposed development boundary.

### 3.7 Priority Habitats

There were 26 records of ancient woodland sites returned within 1 km search area as part of the desk study including 16 records of Ancient Semi-natural Woodland, five records of Restored Ancient Woodland and five Plantation on Ancient Woodland Sites. The closest was a restored ancient woodland site located immediately northeast of the proposed development boundary.

The desk study also returned a Natural Resources Wales (NRW) Priority Area Woodland (PAWS) located approximately 400 m east of the proposed development boundary. These areas are prioritised for targeted conservation work, based on factors including the habitats within them.

The Nant y Garth flowed in a northerly direction through the central area of the site where it meets the Rhymney River approximately 1.5 km downstream. Rivers and streams are a Priority Habitat in Wales under Section 7 of the Environment (Wales) Act 2016.

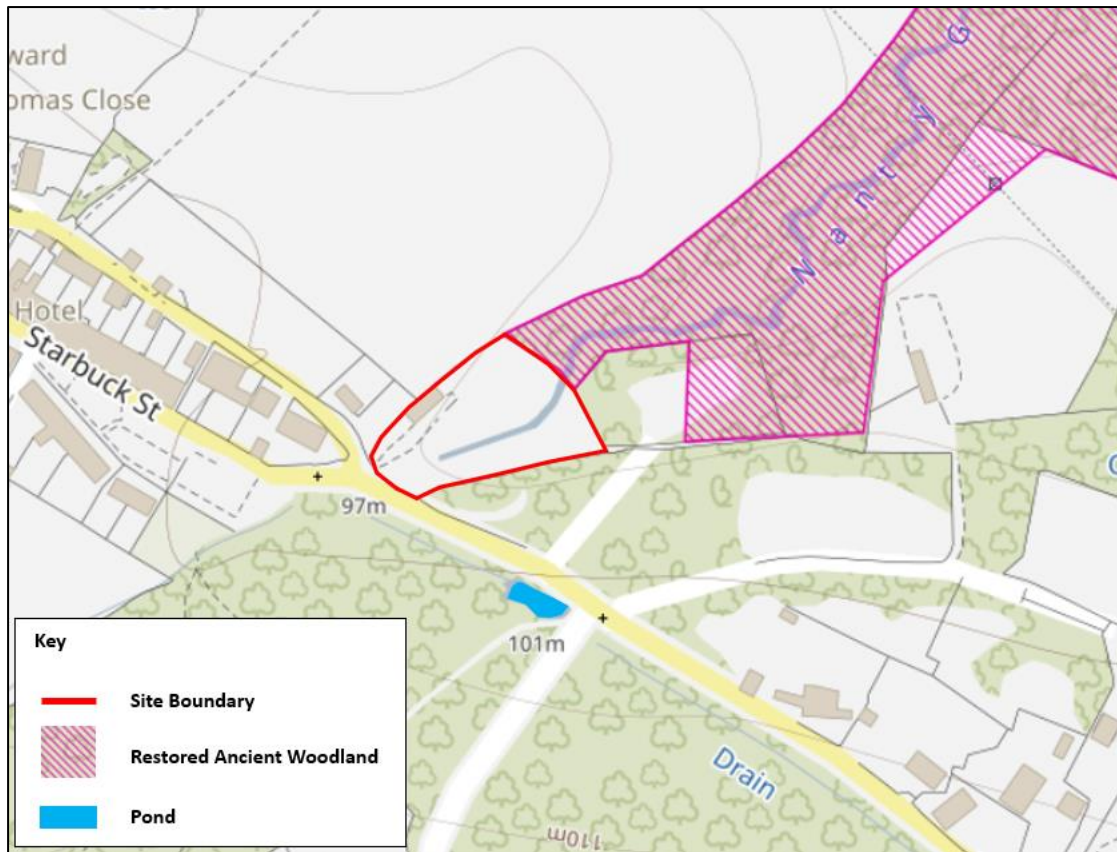


Figure 2. Proposed development with redline boundary with neighbouring ancient woodland and pond (NRW, 2021).

### 3.8 B-lines

The proposed development site resides within a B-line (refer to Figure 3). B-lines are a series of insect pathways running through the countryside and towns across the UK that are being restored through creating and restoration wildflower-rich habitats to help link existing wildlife areas together (Buglife, 2023).

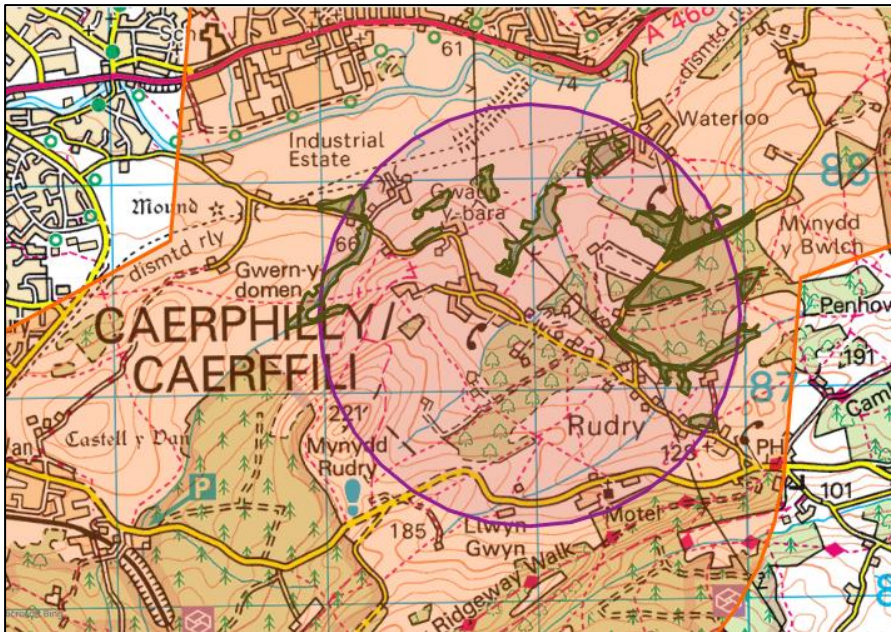


Figure 3. 1 km search area with purple boundary within a B-Line shown in orange (Aderyn, 2023)

### 3.9 Records of Protected and Notable Species

The desk study and PEA survey observations are presented as follows. A full list of (SEWBRc) species data records within 10 years and 1 km (2 km for bats) of the search area are provided in Appendix D.

#### 3.9.1. Vascular Plants

**Desk study:** The desk study returned three records of bluebell (*Hyacinthoides non-scripta*). The closest record was located within woodland approximately 540 m south from the proposed development boundary.

**Field observations:** No protected or priority plant species were identified during the walkover.

#### 3.9.2. Birds

**Desk study:** The desk study returned 123 bird species records within the 1 km search area. Species include schedule 1 barn owl (*Tyto alba*), brambling (*Fringilla montifringilla*), fieldfare (*Turdus pilaris*), Firecrest (*Regulus ignicapilla*), goshawk (*Accipiter gentilis*), hobby (*Falco Subbuteo*), merlin (*Falco columbarius*), osprey (*Pandion haliaetus*), red kite (*Milvus milvus*), redwing (*Turdus iliacus*), song thrush (*Turdus philomelos*) and white-tailed eagle (*Haliaeetus albicilla*). The closest record was of fieldfare located approximately 145 m southwest from the proposed development site boundary (a full list of bird species are listed in Appendix D).

**Field observations:** The following bird species were observed within or immediately surrounding the site during the field survey; buzzard (*Buteo buteo*), coal tit (*Periparus ater*), jay (*Garrulus glandarius*), wood pigeon (*Columba palumbus*), nuthatch (*Sitta europaea*), robin (*Erithacus rubecula*) and magpie (*Pica pica*). The building, bracken, tall ruderal, scrub and grassland habitats were suitable for nesting birds.

### 3.9.3. Bats

**Desk study:** The desk study returned 13 records for bats within 2 km of the search area. Species include unknown species of bat (*Chiroptera*), brown long-eared bat (*Plecotus auratus*), common pipistrelle (*Pipistrellus pipistrellus*), lesser horseshoe bat (*Rhinolophus hipposideros*), long-eared bat species (*Plecotus* sp.), and pipistrelle bat species (*Pipistrellus* sp.). The closest record was of a pipistrelle species located approximately 160 m south from the proposed development site boundary.

**Field observations:** Refer to Preliminary Roost Assessment (Section 3.4) for field observations.

### 3.9.4. Hazel dormouse

**Desk study:** The desk study returned 12 records of hazel dormouse within 1 km of the search area. The closest record was of a gnawed hazelnut found in a roadside ditch located approximately 120 m southeast from the proposed development site boundary. The closest dormouse record was of an adult female located in a dormouse box approximately 250 m east of the site.

**Field observations:** The neighbouring woodland habitats were considered suitable to support hazel dormouse. Bramble scrub was present along the southern site boundary and immediately north of site (outside of the site boundary). A patch of bramble was recorded approximately 5 metres north of the building, but there was no connecting habitat to this patch of bramble or any other suitable food sources or habitats for dormouse within the site boundary.

### 3.9.5. Great Crested Newt

**Desk study:** The desk study returned three records of great crested newt within 1 km of the search area. The closest record was located within a residential garden approximately 145 m west from the proposed development site boundary. A pond was identified on ordinance maps during the desk study, which was located approximately 50 m south from the proposed development site (refer to Figure 2).

**Field observations:** The bracken, scrub, tall ruderal and grassland habitats within the site boundary had the potential to support commuting and foraging great crested newts during their terrestrial phase and the building may offer hibernating opportunities.

No ponds were identified within the proposed development boundary for breeding newts.

### 3.9.6. Other Amphibians

The desk study returned 17 records of amphibian species within 1 km of the search area. Species include common frog (*Rana temporaria*), common toad (*Bufo bufo*), palmate newt (*Lissotriton helveticus*). The closest record was of a palmate newt located close to the pond approximately 80 m south from the proposed development site boundary.

**Field observations:** No amphibian species were identified during the field survey. The scrub, bracken, tall ruderal and grassland habitats on site had the potential to support foraging, commuting and may offer hibernating common amphibian species.

No ponds were identified within the proposed development boundary for breeding amphibians.

### 3.9.7. Reptiles

**Desk study:** The desk study returned four reptile records within the 1 km search area. Species include slow-worm (*Anguis fragilis*), common lizard (*Zootoca vivipara*) and grass snake (*Natrix helvetica*). The closest record was of slow worm located approximately 160 m southwest from the proposed development site boundary.

**Field observations:** No reptiles or signs of reptiles were identified during the field survey and the site did not contain any habitat piles. The scrub, bracken, tall ruderal and grassland habitats on site had the potential to support foraging and basking common reptile species. The building may offer hibernating opportunities for common reptiles.

### 3.9.8. Badger

**Desk study:** The desk study returned one record of a badger latrine located approximately 550 m east from the proposed development.

**Field observations:** No badger, badger signs or badger setts were identified within the site boundary or immediately outside of the development site. The site and surrounding habitat offer foraging and/or commuting opportunities for badger.

### 3.9.9. Otter

**Desk study:** The desk study returned one record of otter (*Lutra lutra*) within the 1 km search area. The record was of fresh spraints located approximately 500 m east alongside the Nant Tir Jenkins stream.

**Field observations:** No otter, otter signs or holts were identified within the site boundary or immediately outside of the development site. The watercourse (Nant y Garth) located within the site offered suboptimal opportunities for foraging otter. The site may have potential for commuting and temporary resting spots for otter within the bracken and tall ruderal vegetation along the stream.

### 3.9.10. Small Mammals

**Desk Study:** The desk study returned six small mammal records within the 1 km search area. Species include stoat (*Mustela erminea*), weasel (*Mustela nivalis*) and West European hedgehog (*Erinaceus europaeus*). The closest record was of West European hedgehog located approximately 380 m northeast from the proposed development boundary.

**Field observations:** No protected or priority small mammals or their fields signs were identified within or immediately outside of the site boundary. The building and habitats on site were suitable for foraging, commuting and potentially nesting/ hibernating hedgehog. The site is considered unlikely to support mammal species such as stoat and weasel, however, this site is located close to suitable habitat and therefore their presence cannot be ruled out.

### 3.9.11. Invertebrates

**Desk Study:** The desk study returned 29 invertebrate records within the 1 km search area. The closest record was of autumnal rustic (*Eugnorisma glareosa*) located approximately 160 m southwest from the proposed site boundary (a full list of invertebrate species is listed in Appendix D).



**Field observations:** Common invertebrate butterfly and bee species were observed using the habitats on site. The habitats on site are unlikely to support protected or priority invertebrate species.

### **3.9.12. Invasive species**

**Desk Study:** The desk study returned 15 non-native invasive species records within the 1 km search area. Species include Canada Goose (*Branta canadensis*), New Zealand pigmyweed (*Crassula helmsii*), montbretia (*Crocasmia pottsii x aurea = C. x crocosmiiflora*), Japanese knotweed (*Fallopia japonica*), harlequin ladybird (*Harmonia axyridis*), Himalayan balsam and Eastern grey squirrel (*Sciurus carolinensis*). The closest record was of harlequin ladybird located approximately 150 m west from the proposed site boundary.

**Field observations:** Hollyberry cotoneaster (TN1 and Plate 19) and Himalayan balsam (refer to drawing BE001-001 and Plate 20) were identified within the proposed site boundary. Himalayan balsam was recorded as scattered across the majority of the southern section of the site noted as both locally abundant and scattered within dense scrub, bracken and tall ruderal habitats. A single stand of Hollyberry cotoneaster was identified near the site entrance on the proposed sites' northwest boarder.

## 4. DISCUSSION

### 4.1 Ecological features scoped out

The following ecological features have been scoped out as not requiring further consideration with regard to the proposed development (no likely significant effect are anticipated).

- **Statutory Designated Sites:** there were no statutory designated sites within 2 km of the site and therefore will not be discussed further in this report.
- **Non-designated sites:** Rudry Woodlands SINC, Caerphilly/ Machen Disused Railway (east of Trethomas) SINC and Nant Gwaunybara Mire (east of Caerphilly) SINC are located over 250 m away with no connecting pathways. Therefore, they are sufficiently distant from the proposed development and considered to cause no significant impacts.
- **Priority habitats:** Priority Area Woodland (PAWS) is located 400 m away with no connecting pathways. Therefore, it was sufficiently distant from the proposed development and considered to cause no significant impacts.
- **Protected and Notable Plant Species:** No protected plant species were recording during the survey and the bluebell records that were returned as part of the desk study were located outside of the site boundary, therefore there will be no impacts on protected or notable plant species.
- **Invertebrates:** The site offered habitats suitable to support invertebrates. However, the vegetation clearance required in preparation for construction will be localised and there were larger areas of similar habitat within the wider area. Therefore, there will be no significant impacts on invertebrates.

### 4.2 Ecological features scoped in

The following ecological features have been scoped in as needing further consideration regarding the proposed developments (potential for significant effects).

- **Non-statutory Designates Sites:** Mynydd Rudry Common SINC is located immediately south and east of the proposed site, therefore, in the absence of mitigation, any pollution generated during construction (e.g., dust and runoff) could impact Mynydd Rudry Common SINC.
- **Priority Habitats:** A restored ancient woodland resides immediately east of the site (within Mynydd Rudry Common SINC) and, therefore, in the absence of mitigation, any pollution generated during construction (e.g., dust and runoff) have the potential to impact this habitat.  
**Rivers and Streams:** The Nant y Garth (classified as running water in this report) flows through the site (located within 10 m of the proposed works) and is hydrologically connected to the Rhymney River, therefore, in the absence of mitigation, any pollution (e.g., dust and runoff) generated during construction has the potential to impact the Nant y Garth and habitats located downstream (i.e., SINC, ancient woodland and the Rhymney River).

- **Invasive Plant Species:** Himalayan balsam and hollyberry cotoneaster were recorded on site, therefore, in the absence of mitigation the development of this site has the potential to spread invasive plant species during vegetation clearance and via vehicles using the site.
- **Bats:** The building and trees on site did not provide opportunities for roosting bats. However, records identified four species of bats within the 2 km search radius and the immediately neighbouring habitats provide opportunities for commuting, foraging and roosting bats.

The site did not contain artificial lighting and was considered suitable for commuting and foraging bats, therefore, in the absence of mitigation artificial lighting used during construction and/ or incorporated into the post-development lighting design has the potential to disturb commuting and foraging bat species.
- **Hazel Dormouse:** The immediately neighbouring habitats contain records of hazel dormouse and much of the site perimeter contained bramble scrub that was connected to suitable dormouse habitat, However, the majority of habitats identified within the proposed development boundary were considered to be located on the outskirts of their preferred habitat range, which offered limited cover, connectivity and food resources across the majority of the site.

The vegetation clearance is not anticipated to impact the areas of scrub that are connected to suitable dormouse habitat. Therefore, the clearance works are unlikely to impact hazel dormouse. However, any artificial lighting used during the works or lighting incorporated into the development design have the potential to disturb dormouse during nocturnal activities. In the absence of mitigation, the use of artificial lighting has the potential to disturb hazel dormouse.
- **Great Crested Newt:** The site does not contain any breeding opportunities for great crested newts and the pond located approximately 50 m south from the proposed site boundary was calculated as having 'Poor' suitability to support great crested newts. Furthermore, the vegetation clearance is anticipated to clear a maximum of 1000m<sup>2</sup> from the total 3,200m<sup>2</sup> of habitat on site and will not sever existing connectivity. However, records returned during the desk study identified two great crested newt records approximately 150 m west from the proposed development site (opposite side of Garth Place road within a resident's garden). Additionally, the building, bracken, scrub, tall ruderal and grassland habitats within the site boundary offered commuting, foraging and potentially hibernating opportunities for great crested newts during their terrestrial phase. Therefore, it is possible that in the absence of mitigation the proposed vegetation clearance, dismantling of the building and the construction of a new dwelling has the potential to disturb and /or harm great crested newts.
- **Otter:** Records identified otter spraint on the Nant Tir Jenkins watercourse, which is hydrologically connected to the Nant y Garth. There were no habitats on site to support holts or offer optimal food sources for otter. However, otter may rest up within or commute through the site. Therefore, in the absence of mitigation, any artificial lighting used at night during and/ or post-development may disturb otter during their nocturnal activities.

- **Reptiles:** The desk study identified reptile records within 200 m of the proposed development and the building and habitats on site offer foraging, basking and hibernating opportunities for common reptiles, therefore, if any reptiles are present, they may be harmed during the dismantling of the building and vegetation clearance.
- **Common Amphibians:** There were no breeding opportunities for common amphibians within the proposed site. However, The building and habitats on site offered potential shelter and foraging opportunities. Therefore, the dismantling of the building, vegetation clearance and the construction of a new dwelling has the potential to disturb and/ or harm common amphibian species.
- **Nesting Birds:** The building and habitats on site offered opportunities for nesting birds. Therefore, the dismantlement of the building and localised vegetation clearance has potential to disturb and/ or harm nesting birds and their eggs/ young.
- **Badger:** No evidence of badger was identified during the survey and the habitats on site were unsuitable for badger setts. However, the woodland immediately south and east of the site was suitable for badgers and their setts. The site is easily accessible and offers commuting opportunities for badger and possibly foraging. Therefore, badger may commute through and/ or forage within the site boundary and may be disturbed by artificial lighting or harmed by open excavations.
- **Hedgehog:** The building and habitats on site offer potential habitat for foraging and nesting/ hibernating hedgehogs, therefore the dismantling of the building and vegetation clearance has the potential to disturb or harm hedgehogs.
- **Stoat and Weasel:** The immediately neighbouring Mynydd Rudry Common SINC and restored ancient woodland offer habitat for mustelids (such as stoat and weasel) and they may be disturbed during their nocturnal activities by artificial lighting or harmed by open excavations and/ or inappropriately stored materials.

## 5. RECOMMENDATIONS AND MITIGATION

The following mitigation is intended as a guide only and may be subject to change.

### 5.1 SINCs and Ancient Woodland Habitats

A Construction Environmental Management Plan (CEMP) should be prepared and include Standard best practice and pollution control measures in accordance with relevant guidance (e.g. CIRIA, 2015) and Environment Agency Guidelines for Pollution Prevention (GPP)) to ensure that Mynydd Rudry Common SINC, the Nant y Garth and habitats located downstream are not adversely affected by dust, uncontrolled surface water run-off, inappropriate storage of materials and inappropriate refuelling of machinery.

### 5.2 Bats

The habitats on site are suitable for foraging and commuting bats, therefore, night working, and the use of artificial lighting should be avoided. If this is not possible then any lighting should be directional and positioned away from the woodland.

### 5.3 Dormouse

The neighbouring Mynydd Rudry Common SINC and restored ancient woodland was confirmed as containing hazel dormouse. Therefore, the bramble scrub located along the site's east and south fence-line boundary will need to be retained to prevent any risk of disturbing and/ or potentially harming nesting and foraging hazel dormouse.

Night- time work using artificial lighting should be avoided to prevent disturbance to hazel dormouse. If night- time work cannot be avoided, then any lighting used should be directional and facing away from the adjacent woodland habitats during the works and sensitive lighting should be incorporated into the final design.

### 5.4 Great Crested Newts

SEWBRc records identified great crested newts within the same village and the site offered opportunities during their terrestrial phase. However, There were no breeding opportunities for great crested newts within 300 m of the proposed development site and works are anticipated to remove a maximum of 1000m<sup>2</sup> of habitat.

Therefore, a cautionary approach is recommended in the form of a Method Statement (MS) for the dismantling of the building and vegetation clearance, which should be followed for the duration of the works.

The Method Statement should include the following:

- Schedule the works during periods when great crested newts are typically active (between March- October);
- Contractors should receive a toolbox talk to inform them of any ecological constraints;

- Works should be supervised by an experienced ecologist;
- Two stage vegetation clearance should be completed with handheld tools only (refer to section 5.6 for details);
- Newt fence should be installed around the proposed development footprint to prevent great crested newts from entering the site for the duration of the works; and
- Habitat piles should be created in retained habitat located south of the site.

In the unlikely even that great crested newts are discovered during the dismantling of the building and vegetation clearance, then works will have to stop and a European Protected Species (EPS) licence will need to be applied for and granted by Natural Resources Wales (NRW) before works can continue.

## 5.5 Nesting Birds

The building and habitats on site have the potential to provide nesting opportunities for birds. Therefore, the building should be emptied of all equipment and machinery before being dismantled, and the vegetation clearance should be undertaken outside of the breeding bird season (i.e., carried out between September to February inclusive):

If this is not possible then the clearance should be conducted carefully under an ecological watching brief. The ecologist should check the building and habitats on site for active bird nests, immediately prior to the work. If an active nest is discovered, all works in the immediate area should cease and the nest protected until the young have fledged and/or the nest is no longer active.

## 5.6 Reptiles and Common Amphibians

Vegetation should be cleared using phased strimming between March – October (when reptiles are active) to encourage reptiles and amphibians to move into retained habitat.

- **Phase 1:** The vegetation should be strimmed down to 150 mm using handheld tools only (i.e., brush-cutter/trimmer) with the arisings raked and removed from the works footprint. (The building should be dismantled by hand and removed from the works area). Vegetation clearance should begin at the edge of the works furthest away from areas of suitable reptile habitat and move methodically towards the area's most suitable for reptiles. The disturbance and vibration will encourage reptiles to move out of the working corridor of their own accord. The cleared area should be left undisturbed for at least 24 hours, or an appointed ecologist can inspect the site and transfer any remaining reptiles by hand into retained habitat.
- **Phase 2:** Following an inspection or at least 24 hours, vegetation should be strimmed to ground level (using hand tools only). The arisings must then be raked off and removed from the works area.

## 5.7 Hedgehog

Reasonable avoidance measures should be put in place to avoid harm to hedgehog and include the following:

- Ensure the building is thoroughly checked before dismantling; and
- Any incomplete excavations should be covered overnight, or a ramp provided to allow escape of any animals that may become trapped.

## 5.8 Badger, Otter, Stoat and Weasel

Any excavations should be securely fenced off and covered over at the end of the working period, at weekends or when not in use and construction materials, tools and machinery should be stored appropriately when not in use. Habitat connectivity should be maintained at all times. Night work should be avoided to prevent artificial light from disturbing these species.

## 5.9 Invasive Species

The appointed contractors should provide an appropriate Invasive Species Method Statement for the proposed works that should be followed for the duration of the works to minimise the risk of spreading invasive non-native species Himalayan balsam and hollyberry cotoneaster.

## 5.10 Artificial Lighting Restrictions

The use of artificial lighting inappropriately can result in significant disturbance to bats and other nocturnal animals using the site. Although the site experiences some lighting (from neighbouring properties), any new lighting to be introduced should be designed to minimise light spillage during construction and/ or from the final design (by following the Bat Conservation Trust's guidance on lighting (BCT, 2023)) and not directed onto any of the bat boxes, the Nant y Garth or adjacent habitat to maintain dark flight corridors and foraging opportunities. If lighting cannot be avoided, then it should be designed to avoid light spill onto foraging and commuting routes and should be warm coloured LEDs (maximum of 3000 kelvin) to reduce disturbance and insects being attracted away from dark corridors. If night-works cannot be avoided, advice must be sought from an appropriately qualified ecologist.

**Note:** In the unlikely event that protected species are discovered on site during the dismantling of the building and/ or vegetation clearance, then works should stop immediately and an ecologist should be informed.



## 6. ENHANCEMENT OPPORTUNITIES

Planning Policy Wales 11 supports the enhancement of biodiversity in relation to development. The following enhancement measures are recommended to comply with this policy:

- Bat and bird boxes (approximately three of each) should be installed on as part of the final design or on suitable trees within the immediate surrounding habitat to provide additional bat roosting/ bird nesting opportunities;
- Any landscape planting proposed for the scheme should include native and wildlife attractive plant species that produce a variety of flower, fruit, nut and berries to provide food sources throughout the year;
- Habitat piles should be created by using materials produced from site clearance and located in retained suitable habitat and should include dead wood, logs and brash piles. This will provide suitable habitat for foraging and housing reptile, amphibian, hedgehog and a range of invertebrate species;
- Welsh meadow seed mix; and/ or
- Incorporate and harvest rainwater to create natural water features for birds; and/ or create a wildlife pond.

## **7. CONCLUSION**

The proposed works have the potential to impact the Nant y Garth stream that flows through the site and the neighbouring Mynydd Rudry Common SINC and restored ancient woodland through pollution (i.e., dust and runoff). The works also have the potential to disturb, injure and/ or kill protected priority bat species, hazel dormouse, great crested newts and common amphibians, otter, reptile, badger, nesting birds, hedgehog, stoat and weasel. The works risk spreading Himalayan balsam and hollyberry into the wider environment. Therefore, the vegetation clearance and the construction works will need to consider protected and priority species and habitats within the site and neighbouring habitats, while maintaining compliance with relevant legislation.

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## **DRAWINGS**

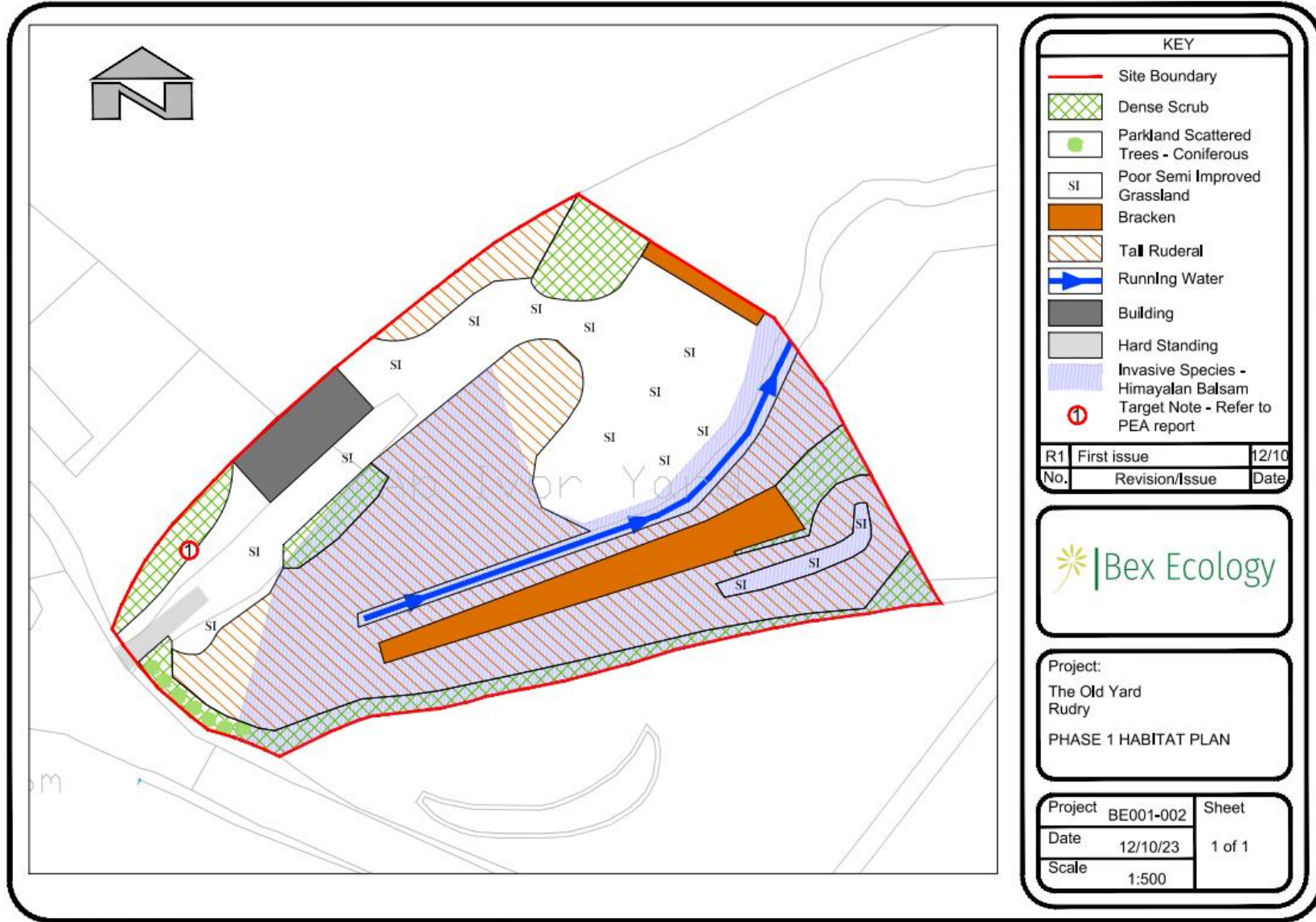
Non-designated Sites BE001 - 001

Phase 1 Habitat Plan BE001 – 002

GD Lodge Architects – Indicative Block Plan as Proposed – Option 2 – SK\_03



*The Old Yard – Preliminary Ecological Appraisal (PEA)*



The Old Yard – Preliminary Ecological Appraisal (PEA)





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*The Old Yard – Preliminary Ecological Appraisal (PEA)*

## **APPENDICES**

APPENDIX A – Legislation and policy

APPENDIX B – Photographs

APPENDIX C – Local Biological Records Centre Data



## APPENDIX A – Legislation and Policy

Ecological constraint	Rationale
<p>European Designated sites (Special Areas of Conservation, Special Protection Areas and Ramsar Sites)</p>	<p>Under the Conservation of Habitats and Species Regulations 2017, as amended, an assessment is required where a plan or project may give rise to significant effects upon 'European Sites' including SACs, SPAs, and Ramsar sites. The process of assessing the implications of development on European Sites is known as Habitats Regulations Assessment (HRA).</p> <p>The initial stage of the HRA is Screening. This process initially identifies the likely impacts upon a European Site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts may be significant.</p> <p>Natural Resources Wales must be consulted in relation to the outcome of Screening. Unless the likelihood of a significant effect can be ruled out on the basis of objective information, then an Appropriate Assessment must be undertaken (this is the next stage of the HRA).</p>
<p>Nationally Designated Sites (Sites of Special Scientific Interest)</p>	<p>It is a legal requirement to apply for 'assent' from Natural Resources Wales for any works which could potentially damage the flora, fauna or features for which a SSSI is designated (under the Wildlife and Countryside Act (1981) (as amended)).</p>
<p>Non-native invasive Plants (Rhododendron, Giant Hogweed, Japanese Knotweed, certain species of Cotoneaster, Variegated Yellow Archangel, Canadian Waterweed, Japanese Rose, Monbretia, New Zealand Pigmyweed, Virginia Creeper, Water-fern etc.)</p>	<p>It is an offence under Section 14 of Wildlife and Countryside Act 1981 (as amended) to cause plants listed in Schedule 9 of this act to grow in the wild.</p> <p>Material contaminated with these species is classified as controlled waste under the Environmental Protection Act 1990 and should therefore be disposed of in an appropriately licensed landfill site.</p>
<p>European protected species (great crested newts, natterjack toad, sand lizard, smooth snake, bats, dormice, otters)</p>	<p>It is an offence under the Conservation of Habitats and Species Regulations 2017, to deliberately kill or injure a European protected species, to destroy breeding/ resting sites, or to deliberately disturb these species and affect their ability to survive, rear young, breed or hibernate.</p>
<p>Nationally protected species- those listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (Allis shad, twaite shad, great crested newt, natterjack toad, bats, dormice, otter)</p>	<p>It is an offence under the Wildlife and Countryside Act 1981, as amended to intentionally or recklessly disturb a species listed on Schedule 5 whilst it is in a place of shelter, or to obstruct access to a place of shelter.</p>
<p>Reptiles</p>	<p>It is an offence under the Wildlife and Countryside Act 1981 (as amended) to kill or injure common species of reptiles.</p>

Ecological constraint	Rationale
Nationally protected bird species- those listed under Schedule 1 of the Wildlife of the Wildlife and Countryside Act 1981 (as amended) (barn owl, peregrine falcon, red kite, kingfisher, firecrest etc.)	All nesting birds are protected whilst nesting as identified below. However, for those listed under Schedule 1 of the Wildlife and Countryside Act 1981, as amended it is also an offence to intentionally or recklessly disturb these birds at, on or near an active nest.
Nesting birds	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg.
Badger	It is an offence under the Protection of Badgers Act (1992) to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett.
Nesting birds	It is an offence under the Wildlife and Countryside Act 1981 (as amended) to damage or destroy a bird's nest whilst it is in use, and to kill or injure a bird or destroy an egg.
Badger	It is an offence under the Protection of Badgers Act (1992) to damage or destroy a badger sett; obstruct any entrance of a badger sett; and disturb a badger whilst it is occupying a badger sett.

## APPENDIX B – Photographs

Plate	Description	Photograph
1	Parkland scattered trees	
2	Dense scrub	
3	Semi-improved grassland	



Plate	Description	Photograph
4	Bracken	
5	Tall ruderal	
6	Running water	

Plate	Description	Photograph
7	Building	 A photograph showing a building with a corrugated metal roof. A red tractor is parked under the eaves of the building. The area is cluttered with various items, including blue buckets and some vegetation. A wooden post is visible on the right side of the frame.
8	Hard standing	 A photograph of a narrow, paved path or driveway. The path is surrounded by dense green vegetation, including tall grasses and bushes. The path appears to be made of asphalt or concrete and is somewhat overgrown.





Plate	Description	Photograph
9		 A photograph showing the interior of a cluttered shed or workshop. The roof is made of corrugated metal supported by wooden beams. The walls are also made of metal and wood, with various items hanging and stored on shelves. A red tractor is visible on the right side of the frame. The floor is dirt and covered with debris and plants.
10		 A photograph showing the exterior of a structure with a corrugated metal roof. The roof is supported by wooden posts and beams. The sky is blue with some clouds, and green foliage is visible in the background.



Plate	Description	Photograph
11	building (west end)	 <p>A photograph showing the west end of a building. The building has a corrugated metal roof and wooden walls. In the foreground, there is a red tractor with a large tire, several blue barrels, and dense green vegetation. The scene is outdoors with some sky visible.</p>
12	building (east end)	 <p>A photograph showing the east end of a building. The building is made of weathered wood and is partially obscured by tall, green grass. The background shows a line of trees under a blue sky with some clouds.</p>





Plate	Description	Photograph
13	Two partly partitioned rooms	
14	Room 1 - Partly partitioned room (west wall).	







Plate	Description	Photograph
15	Room 1 - Partly partitioned room (east and north wall).	
16	Room 2 - Partly partitioned room (west and north wall).	

Plate	Description	Photograph
17	Room 2 - Partly partitioned room (north and east wall).	
18	Pond located 50 m south from the proposed development site.	



Plate	Description	Photograph
19	Hollyberry cotoneaster	
20	Himalayan balsam	

## APPENDIX C – Local Biodiversity Records Centre Data

Priority and Protected Species within 1 km (2 km bats)		
Common Name	Scientific Name	Designation
Autumnal Rustic	<i>Eugnorisma glareosa</i>	S7, LBAP (GWY, VOG)
Barn Owl	<i>Tyto alba</i>	WCA1.1, WCA9, Bern, CITES, LBAP (ANG, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, VOG, WRE), LI(VC43)
Bat	<i>Chiroptera</i>	EPS, WCA5, LBAP (ANG, DEN, FLI, RCT, SNP, TRA, TRF)
Beaded Chestnut	<i>Agrochola lychnidis</i>	S7, LBAP (GWY, VOG)
Blood-vein	<i>Timandra comae</i>	S7, LBAP (VOG)
Bluebell	<i>Hyacinthoides non-scripta</i>	WCA8, LBAP (ANG, CLY, CON, FLI, SNP, TRA, TRF)
Brambling	<i>Fringilla montifringilla</i>	WCA1.1, LBAP (CON), WBAm(RSPB)
Brindled Beauty	<i>Lycia hirtaria</i>	S7, LBAP (GWY, VOG)
Broom Moth	<i>Ceramica pisi</i>	S7, LBAP (GWY, VOG)
Brown Long-eared Bat	<i>Plecotus auritus</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF, VOG)
Buff Ermine	<i>Spilosoma lutea</i>	S7, LBAP (GWY, VOG)
Bullfinch	<i>Pyrrhula pyrrhula</i>	S7, WBR(RSPB), LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, TRF, VOG), UKBAm(RSPB)
Common Frog	<i>Rana temporaria</i>	HDir, WCA5, Bern, LBAP (ANG, CLY, CON, FLI, POW, TRA)
Common Lizard	<i>Zootoca vivipara</i>	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF, VOG)
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG)
Common Toad	<i>Bufo bufo</i>	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, TRA, VOG)
Cuckoo	<i>Cuculus canorus</i>	S7, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, VOG), UKBR(RSPB)
Curlew	<i>Numenius arquata</i>	BDir22, S7, WBR(RSPB), LBAP (ANG, BBNP, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, VOG), LI(VC43), UKBR(RSPB)
Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>	S7, LBAP (GWY, VOG)
Dark-breasted Barn Owl	<i>Tyto alba guttata</i>	WCA1.1, LBAP (ANG, CRM, DEN, FLI, SNP, TRA, WRE)

## Priority and Protected Species within 1 km (2 km bats)

Common Name	Scientific Name	Designation
Dingy Skipper	<i>Erynnis tages</i>	S7, RDB1 (UK) - VU, LBAP (BGW, BRG, CON, FLI, GWY, SWN, VOG), LI(SEWBRc)
Dot Moth	<i>Melanchra persicariae</i>	S7, LBAP (GWY, VOG)
Dunnock	<i>Prunella modularis</i>	S7, Bern, LBAP (CON, POW, VOG), UKBAm(RSPB)
Dusky Brocade	<i>Apamea remissa</i>	S7, LBAP (GWY, VOG)
Dusky Thorn	<i>Ennomos fuscantaria</i>	S7, LBAP (GWY, VOG)
Eurasian Badger	<i>Meles meles</i>	BA, Bern, LBAP (CLY, CON, DEN, FLI, PEM, POW, TRF, WRE)
Eurasian Otter	<i>Lutra lutra</i>	EPS, HDir, WCA5, S7, Bern, CITES, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG, WRE)
Feathered Gothic	<i>Tholera decimalis</i>	S7
Fieldfare	<i>Turdus pilaris</i>	BDir22, WCA1.1, LBAP (CON, POW), WBAm(RSPB), UKBR(RSPB)
Firecrest	<i>Regulus ignicapilla</i>	WCA1.1, Bern, LBAP (BRG, CON, GWY, POW), WBAm(RSPB), LI(VC43)
Goshawk	<i>Accipiter gentilis</i>	WCA1.1, WCA9, CITES, LBAP (CLY, CON, POW, VOG)
Grass Snake	<i>Natrix helvetica</i>	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, VOG), LBAP (ANG, CLY, DEN, FLI, POW, SNP, TRA, VOG)
Grasshopper Warbler	<i>Locustella naevia</i>	S7, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, VOG), UKBR(RSPB)
Great Crested Newt	<i>Triturus cristatus</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CLY, CON, DEN, FLI, MON, POW, SNP, TRA, TRF, VOG, WRE)
Great Crested Newt	<i>Triturus cristatus</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CLY, CON, DEN, FLI, MON, POW, SNP, TRA, TRF, VOG, WRE)
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>	S7, LBAP (GWY, VOG)
Hawfinch	<i>Coccothraustes coccothraustes</i>	S7, Bern, LBAP (CON, DEN, FLI, GWY, POW, VOG), WBAm(RSPB), UKBR(RSPB)
Hazel Dormouse	<i>Muscardinus avellanarius</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM, POW, SNP, TRA, TRF, VOG)
Hen Harrier	<i>Circus cyaneus</i>	BDir1, WCA1.1, S7, CITES, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, SNP, VOG), LBAP (BBNP, DEN, FLI, POW, SNP, VOG), LI(VC43)
Herring Gull	<i>Larus argentatus</i>	BDir22, S7, WBR(RSPB), LBAP (CON, GWY, POW, VOG), UKBR(RSPB)
Herring Gull	<i>Larus argentatus</i>	BDir22, S7, WBR(RSPB), LBAP (CON, GWY, POW, VOG), UKBR(RSPB)
Hobby	<i>Falco subbuteo</i>	WCA1.1, Bern, CITES, LBAP (CON, GWY, POW, VOG), LI(VC43)
House Sparrow	<i>Passer domesticus</i>	S7, LBAP (CLY, CON, FLI, GWY, VOG), WBAm(RSPB), UKBR(RSPB)

## Priority and Protected Species within 1 km (2 km bats)

Common Name	Scientific Name	Designation
Kestrel	<i>Falco tinnunculus</i>	S7, Bern, CITES, WBR(RSPB), LBAP (ANG, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), LI(VC43), UKBAm(RSPB)
Knot Grass	<i>Acronicta rumicis</i>	S7, LBAP (GWY, VOG)
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM, POW, SNP, TRA, TRF, VOG, WRE)
Lesser Redpoll	<i>Acanthis cabaret</i>	S7, LBAP (CON), LBAP (DEN, POW, VOG), WBAm(RSPB), UKBR(RSPB)
Lesser Redpoll	<i>Acanthis cabaret</i>	S7, LBAP (CON), LBAP (DEN, POW, VOG), WBAm(RSPB), UKBR(RSPB)
Linnet	<i>Linaria cannabina</i>	S7, Bern, WBR(RSPB), LBAP (ANG, BBNP, CER, CLY, DEN, FLI, PEM, VOG), LBAP (CON, GWY), UKBR(RSPB)
Long-eared Bat species	<i>Plecotus</i>	EPS, HDir, WCA5, Bern, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Marsh Tit	<i>Poecile palustris</i>	S7, Bern, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, VOG), UKBR(RSPB)
Merlin	<i>Falco columbarius</i>	BDir1, WCA1.1, Bern, CITES, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, POW), LI(VC43), UKBR(RSPB)
Nightjar	<i>Caprimulgus europaeus</i>	BDir1, S7, Bern, LBAP (BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM, POW, SNP, VOG), WBAm(RSPB), LI(VC43), UKBAm(RSPB)
Nightjar	<i>Caprimulgus europaeus</i>	BDir1, S7, Bern, LBAP (BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM, POW, SNP, VOG), WBAm(RSPB), LI(VC43), UKBAm(RSPB)
Oak Hook-tip	<i>Watsonalla binaria</i>	S7, LBAP (GWY, VOG)
Osprey	<i>Pandion haliaetus</i>	BDir1, WCA1.1, CITES, LBAP (GWY), WBAm(RSPB), UKBAm(RSPB)
Palmate Newt	<i>Lissotriton helveticus</i>	WCA5, Bern, LBAP (ANG, CLY, CON, DEN, FLI, POW, TRA), LI(BIS)
Pied Flycatcher	<i>Ficedula hypoleuca</i>	S7, WBR(RSPB), LBAP (CON, GWY, POW, SNP, VOG), UKBR(RSPB)
Pipistrelle	<i>Pipistrellus pipistrellus</i>	EPS, HDir, WCA5, Bern, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VOG)
Pipistrelle Bat species	<i>Pipistrellus</i>	EPS, WCA5, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)
Red Kite	<i>Milvus milvus</i>	BDir1, WCA1.1, WCA9, CITES, LBAP (CON, CRM, GWY, POW), WBAm(RSPB)
Redwing	<i>Turdus iliacus</i>	BDir22, WCA1.1, LBAP (CON, POW), WBAm(RSPB), UKBR(RSPB)
Reed Bunting	<i>Emberiza schoeniclus</i>	S7, Bern, LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), WBAm(RSPB), UKBAm(RSPB)
Reed Bunting	<i>Emberiza schoeniclus</i>	S7, Bern, LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), WBAm(RSPB), UKBAm(RSPB)



## Priority and Protected Species within 1 km (2 km bats)

Common Name	Scientific Name	Designation
Ring Ouzel	<i>Turdus torquatus</i>	S7, Bern, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, VOG), LI(VC43), UKBR(RSPB)
Rosy Rustic	<i>Hydraecia micacea</i>	S7, LBAP (GWY, VOG)
Rustic	<i>Hoplodrina blanda</i>	S7, LBAP (GWY, VOG)
Sallow	<i>Cirrhia icteritia</i>	S7, LBAP (GWY, VOG)
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>	S7, LBAP (GWY, VOG)
Shoulder-striped Wainscot	<i>Leucania comma</i>	S7, LBAP (GWY, VOG)
Skylark	<i>Alauda arvensis</i>	BDir22, S7, LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRF, VOG), WBAm(RSPB), UKBR(RSPB)
Slow-worm	<i>Anguis fragilis</i>	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, VOG)
Slow-worm	<i>Anguis fragilis</i>	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, VOG)
Small Emerald	<i>Hemistola chrysoprasaria</i>	S7, LBAP (GWY, VOG)
Small Heath	<i>Coenonympha pamphilus</i>	S7, RDB1 (UK) - NT, LBAP (GWY, VOG)
Small Phoenix	<i>Ecliptopera silaceata</i>	S7, LBAP (GWY, VOG)
Small Square-spot	<i>Diarsia rubi</i>	S7, LBAP (GWY, VOG)
Song Thrush	<i>Turdus philomelos</i>	BDir22, S7, Bern, LBAP (ANG, BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, SNP, TRF, VOG, WRE), WBAm(RSPB), UKBR(RSPB)
Spotted Flycatcher	<i>Muscicapa striata</i>	S7, Bern, WBR(RSPB), LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), UKBR(RSPB)
Starling	<i>Sturnus vulgaris</i>	BDir22, S7, Bern, WBR(RSPB), LBAP (BBNP, CON, FLI, GWY, VOG), UKBR(RSPB)
Stoat	<i>Mustela erminea</i>	NRW, Bern, LBAP (ANG, BGW, BRG, CON, FLI, NEW, POW)
Tree Pipit	<i>Anthus trivialis</i>	S7, Bern, LBAP (CON, DEN, FLI, GWY, POW, VOG), WBAm(RSPB), UKBR(RSPB)
Tree Sparrow	<i>Passer montanus</i>	S7, WBR(RSPB), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, VOG), LI(VC43), UKBR(RSPB)
Weasel	<i>Mustela nivalis</i>	NRW, Bern, LBAP (ANG, BGW, BRG, CON, FLI, NEW, POW)
West European Hedgehog	<i>Erinaceus europaeus</i>	S7, Bern, LBAP (ANG, BGW, BRG, CON, FLI, GWY, NEW, POW, RCT, VOG)
White Ermine	<i>Spilosoma lubricipeda</i>	S7, LBAP (GWY, VOG)

## Priority and Protected Species within 1 km (2 km bats)

Common Name	Scientific Name	Designation
White-tailed Eagle	<i>Haliaeetus albicilla</i>	BDir1, WCA1.1, WCA9, Bern, CITES, UKBR(RSPB)
Wood Warbler	<i>Phylloscopus sibilatrix</i>	S7, WBR(RSPB), LBAP (CON, GWY, SNP, VOG), UKBR(RSPB)

## Species of Conservation Concern within 1 km

Common Name	Scientific Name	Designation
Cormorant	<i>Phalacrocorax carbo</i>	LBAP (CON, GWY, POW), WBAm(RSPB)
Dunlin	<i>Calidris alpina</i>	Bern, WBR(RSPB), LBAP (CON, GWY, POW), LI(VC43), UKBAm(RSPB)
Goldcrest	<i>Regulus regulus</i>	Bern, LBAP (CON, POW), WBAm(RSPB)
Green Woodpecker	<i>Picus viridis</i>	Bern, LBAP (CLY, CON, DEN, FLI, GWY, PEM, POW, SNP), WBAm(RSPB)
Greenfinch	<i>Chloris chloris</i>	Bern, LBAP (CON, POW), WBAm(RSPB)
Grey Heron	<i>Ardea cinerea</i>	LBAP (BRG, RCT), WBAm(RSPB)
Grey Wagtail	<i>Motacilla cinerea</i>	Bern, LBAP (CLY, CON, POW, TRA), WBAm(RSPB), UKBR(RSPB)
Jack Snipe	<i>Lymnocyptes minimus</i>	BDir21, LBAP (CON, POW), WBAm(RSPB)
Lesser Black-backed Gull	<i>Larus fuscus</i>	BDir22, LBAP (CON, GWY, PEM, POW, SNP), WBAm(RSPB), UKBAm(RSPB)
Lesser Black-backed Gull	<i>Larus fuscus</i>	BDir22, LBAP (CON, GWY, PEM, POW, SNP), WBAm(RSPB), UKBAm(RSPB)
Long-tailed Tit	<i>Aegithalos caudatus</i>	WBAm(RSPB)
Mallard	<i>Anas platyrhynchos</i>	BDir21, LBAP (CON, GWY), WBAm(RSPB), UKBAm(RSPB)
Meadow Pipit	<i>Anthus pratensis</i>	Bern, LBAP (CON), WBAm(RSPB), UKBAm(RSPB)
Mistle Thrush	<i>Turdus viscivorus</i>	BDir22, Bern, WBAm(RSPB), UKBR(RSPB)
Redstart	<i>Phoenicurus phoenicurus</i>	Bern, LBAP (CON, GWY, POW, SNP), WBAm(RSPB), UKBAm(RSPB)
Redstart	<i>Phoenicurus phoenicurus</i>	Bern, LBAP (CON, GWY, POW, SNP), WBAm(RSPB), UKBAm(RSPB)
Sand Martin	<i>Riparia riparia</i>	Bern, LBAP (CON, DEN, FLI, GWY, POW, VOG), WBAm(RSPB)
Snipe	<i>Gallinago gallinago</i>	BDir21, LBAP (ANG, CON, DEN, FLI, GWY, POW), WBAm(RSPB), LI(VC43), UKBAm(RSPB)



## Species of Conservation Concern within 1 km

Common Name	Scientific Name	Designation
Swallow	<i>Hirundo rustica</i>	Bern, LBAP (ANG, CON, GWY, POW, VOG), WBAm(RSPB)
Swift	<i>Apus apus</i>	LBAP (BRG, RCT, VOG), WBAm(RSPB), UKBAm(RSPB)
Welsh Poppy	<i>Meconopsis cambrica</i>	RDB2 (UK) - S, LBAP (CON, DEN, NPT), LI(VC43), LI(VC48, LS), LI(VC49, LS)
Wheatear	<i>Oenanthe oenanthe</i>	Bern, LBAP (BRG, CON, POW), WBAm(RSPB)
Whinchat	<i>Saxicola rubetra</i>	Bern, WBR(RSPB), LBAP (BRG, CON, DEN, FLI, GWY, PEM, POW, RCT), UKBR(RSPB)
Whitethroat	<i>Curruca communis</i>	WBR(RSPB), LBAP (CON, POW)
Willow Warbler	<i>Phylloscopus trochilus</i>	WBR(RSPB), LBAP (CON), UKBAm(RSPB)
Woodcock	<i>Scolopax rusticola</i>	BDir21, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, POW), LI(VC43), UKBR(RSPB)

## Locally Important Species within 1 km

Common Name	Scientific Name	Designation
Alder Buckthorn	<i>Frangula alnus</i>	LBAP (GWY, NEW), LI(SEWBRc), LI(VC47), LI(VC48, LR), LI(VC49, LR), LI(VC50, LR), LI(VC51, LR)
Azure Damselfly	<i>Coenagrion puella</i>	LBAP (CLY, SNP), LI(BIS)
Bent-leaved Beard-moss	<i>Leptodontium flexifolium</i>	RDB1 (Wales) - LC, LI(VC35, LR), LI(VC41, LR), LI(VC42, LR), LI(VC44, LR), LI(VC45, LS), LI(VC46, LR), LI(VC51, LR), LI(VC52, LR), LI(WWBIC)
Blomer's Rivulet	<i>Venusia blomeri</i>	LBAP (BRG, CLY, NPT), LI(BIS)
Broad-bodied Chaser	<i>Libellula depressa</i>	LBAP (CLY, SNP), LI(BIS)
Bullhead	<i>Cottus gobio</i>	HDir, LBAP (CLY, CON, DEN, FLI, POW, TRA)
Buzzard	<i>Buteo buteo</i>	CITES, LBAP (CLY, CON, POW)
Caloplaca aurantia	<i>Caloplaca aurantia</i>	RDB1 (Wales) - LC, LI(VC42, R), LI(VC47, R)
Caloplaca flavocitrina	<i>Caloplaca flavocitrina</i>	RDB1 (Wales) - LC, LI(VC42, RU), LI(VC43, RU), LI(VC47, RU)
Cladonia verticillata	<i>Cladonia verticillata</i>	LI(VC43, R), LI(VC47, R)
Common Darter	<i>Sympetrum striolatum</i>	RDB1 (UK) - DD, LBAP (CLY, SNP), LBAP (SNP), LI(BIS)
Common Pocket-moss	<i>Fissidens taxifolius</i>	RDB1 (Wales) - LC, LI(VC35), LI(VC35, LR), LI(VC42, LR), LI(VC44, LS), LI(VC48, LR), LI(VC49, LR), LI(WWBIC)

## Locally Important Species within 1 km

Common Name	Scientific Name	Designation
Common Spotted-orchid	<i>Dactylorhiza fuchsii</i>	LBAP (CLY, TRA)
Cowslip	<i>Primula veris</i>	LBAP (CLY), LI(VC47), LI(VC48, LS)
Curnow's Pocket-moss	<i>Fissidens bryoides</i> <i>var. caespitans</i>	RDB1 (Wales) - LC, LI(VC35, LR)
Devon Carpet	<i>Lampropteryx otregiata</i>	LBAP (BRG, CLY, NPT), LI(BIS)
Early-purple Orchid	<i>Orchis mascula</i>	LBAP (CLY, TRA), LI(VC47), LI(VC48, LS)
Emerald Damselfly	<i>Lestes sponsa</i>	LBAP (CLY, SNP), LI(SEWBRc), LI(VC42), LI(VC43), LI(VC47), LI(VC50)
Emperor Dragonfly	<i>Anax imperator</i>	LBAP (CLY, SNP), LI(BIS)
Ficaria verna var. bulbifer	<i>Ficaria verna</i> var. <i>bulbifer</i>	LI(VC49, LS), LI(VC52, LS)
Golden-ringed Dragonfly	<i>Cordulegaster boltonii</i>	LBAP (CLY, SNP), LI(BIS), LI(SEWBRc)
Heterocladium heteropterum	<i>Heterocladium heteropterum</i>	RDB1 (Wales) - LC, LI(VC52, LR)
Lamiastrum galeobdolon subsp. montanum	<i>Lamiastrum galeobdolon</i> subsp. <i>montanum</i>	WCA9, LI(VC48, LS), LI(VC49, LS), INNS
Large Red Damselfly	<i>Pyrrhosoma nymphula</i>	LBAP (CLY, SNP), LI(BIS)
Leafy Rush	<i>Juncus foliosus</i>	LBAP (GWY), LI(SEWBRc), LI(VC47), LI(VC49, LR), LI(VC51, LR)
Migrant Hawker	<i>Aeshna mixta</i>	LBAP (CLY, SNP), LI(BIS)
Mountain Fork-moss	<i>Dicranum montanum</i>	RDB1 (Wales) - LC, LI(VC41, LR), LI(VC42, LR), LI(VC43, LR), LI(VC44, LR), LI(VC48, LR), LI(VC50, LR), LI(WWBIC)
Pointed-leaved Stubble-moss	<i>Weissia rutilans</i>	RDB1 (Wales) - LC, LI(VC35, LR), LI(VC41, LR), LI(VC42, LR), LI(VC43, LR), LI(VC44, LR), LI(VC45, LR), LI(VC48, LR), LI(VC49, LR), LI(VC50, LR), LI(VC52, LR), LI(WWBIC)
Potato Bryum	<i>Bryum bornholmense</i>	RDB1 (Wales) - LC, LI(VC41, LR), LI(VC43, LR), LI(VC44, LR), LI(VC45, LS), LI(VC47, LR), LI(VC48, LR), LI(VC50, LR), LI(WWBIC)
Red Wood Ant	<i>Formica rufa</i>	LBAP (BBNP, CLY, CON, GWY, PEM, POW, TRF)
Round-leaved Mint	<i>Mentha suaveolens</i>	RDB1 (Wales) - DD, RDB1 (UK) - DD, RDB2 (UK) - S, LI(SEWBRc), LI(VC48, LS), LI(VC49, LS), LI(VC50, LR)
Satin Lutestring	<i>Tetheella fluctuosa</i>	LBAP (BGW, CLY), LI(BIS)

## Locally Important Species within 1 km

Common Name	Scientific Name	Designation
Scallop Shell	<i>Rheumaptera undulata</i>	LI(BIS)
Silene latifolia subsp. alba	<i>Silene latifolia subsp. alba</i>	LI(VC48, LS)
Silver-washed Fritillary	<i>Argynnis paphia</i>	LBAP (BRG, CDF, CON, FLI, MON, NEW, POW, SWN), LI(SEWBRcC), LI(VC43)
Southern Hawker	<i>Aeshna cyanea</i>	LBAP (CLY, SNP), LI(BIS)
Toninia aromatica	<i>Toninia aromatica</i>	RDB1 (Wales) - LC, LI(VC47, RU)
Viola palustris subsp. palustris	<i>Viola palustris subsp. palustris</i>	LI(VC47)
Wall Screw-moss	<i>Tortula muralis</i>	RDB1 (Wales) - LC, LI(VC35, LR)
White Water-lily	<i>Nymphaea alba</i>	LBAP (GWY), LI(SEWBRcC), LI(VC49, LS)
Yellow-necked Mouse	<i>Apodemus flavicollis</i>	LBAP (CLY, FLI)

## Non-native Invasive Species within 1 km

Common Name	Scientific Name	Designation
Butterfly-bush	<i>Buddleja davidii</i>	INNS
Canada Goose	<i>Branta canadensis</i>	BDir21, WCA9, INNS
Cherry Laurel	<i>Prunus laurocerasus</i>	INNS
Eastern Grey Squirrel	<i>Sciurus carolinensis</i>	WCA9, INNS
Harlequin Ladybird	<i>Harmonia axyridis</i>	INNS
Himalayan Balsam	<i>Impatiens glandulifera</i>	WCA9, INNS
Japanese Knotweed	<i>Fallopia japonica</i>	WCA9, INNS
Lamiastrum galeobdolon subsp. argentatum	<i>Lamiastrum galeobdolon subsp. argentatum</i>	WCA9, INNS
Mandarin Duck	<i>Aix galericulata</i>	WCA9, INNS
Montbretia	<i>Crocasmia pottsii x aurea = C. x crocosmiiflora</i>	WCA9, INNS

## Non-native Invasive Species within 1 km

Common Name	Scientific Name	Designation
New Zealand Pigmyweed	<i>Crassula helmsii</i>	WCA9, INNS
Snowberry	<i>Symphoricarpos albus</i>	INNS
Three-cornered Garlic	<i>Allium triquetrum</i>	WCA9, INNS
Wilson's Honeysuckle	<i>Lonicera nitida</i>	INNS

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