



**PROPOSED DEVELOPMENT**

**37 PARISH ROAD, BLAENGWRACH, NEATH**

**PRELIMINARY ECOLOGICAL APPRAISAL**

**ISSUE 1,VA**

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BE Ecological Ltd  
2 Park View House  
Heolgerrig  
Merthyr Tydfil  
CF48 1SY  
[info@beecological.co.uk](mailto:info@beecological.co.uk)  
[www.beecological.co.uk](http://www.beecological.co.uk)

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Proposed Development: 37 Parish Road, Blaengwrach, Neath

## Preliminary Ecological Appraisal

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## **NON-TECHNICAL SUMMARY**

BE Ecological Ltd. was commissioned to undertake a Preliminary Ecological Appraisal (PEA) to identify ecological constraints and potential solutions and to inform the design of a proposed development and planning application to develop land at 37 Parish Road, Blaengwrach, Neath.

Therefore, a Phase 1 habitat survey was undertaken and an assessment of the potential for protected species to be present on and adjacent to the site.

A number of habitats were recorded across the application boundary, including:

- Semi-improved grassland (poor);
- Bare ground;
- Hedge
- Tall ruderal
- Fences
- Wall

There is a potential for the following protected species to be present on or adjacent to the site:

- Reptiles;
- Bats
- Invertebrates
- Amphibians; and
- Breeding birds

It is considered that the site has a generally low ecological value at a local level and that further ecological surveys are unnecessary.

It is recommended that the site / development areas within the application boundary be cleared in accordance with a method statement and supervision to prevent causing harm to reptiles and amphibians

## **1 INTRODUCTION**

### **1.1 BACKGROUND**

It is proposed to develop land adjacent to Oakridge, Mountain Ash for housing. This PEA has been prepared to:

- collate and analyse existing ecological information relating to the site;
- identify the habitats present on site;
- identify the potential for protected species to be present on site;
- using the information gathered to determine whether there will be any impacts (both positive and negative) on the species and habitats present;
- provide recommendations for further survey as necessary; and
- suggest outline mitigation and enhancement ideas and principles

### **1.2 SITE DESCRIPTION**

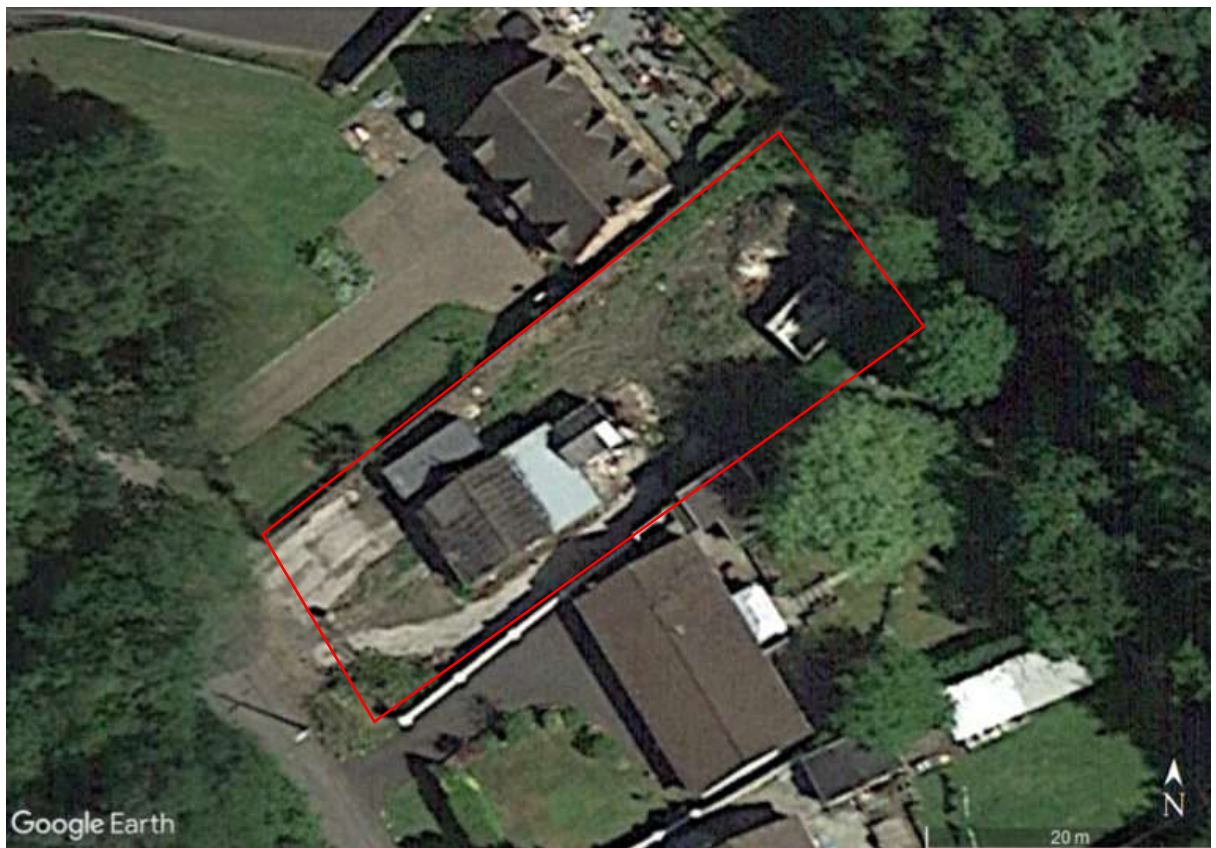
The site was previously a house and garden. The house has been demolished leaving piles of rubble and top soil scattered throughout the plot.

Currently the plot comprises of regenerating semi-improved (poor) grassland, tall ruderal and bare ground. The habitats are sparse and of poor quality. There is a species poor privet hedge in the eastern corner of the site. The other boundaries comprise of fences and walls with the boundary to the west open to the main road.

The west of the site has been levelled slightly and now has a caravan stationed on it.

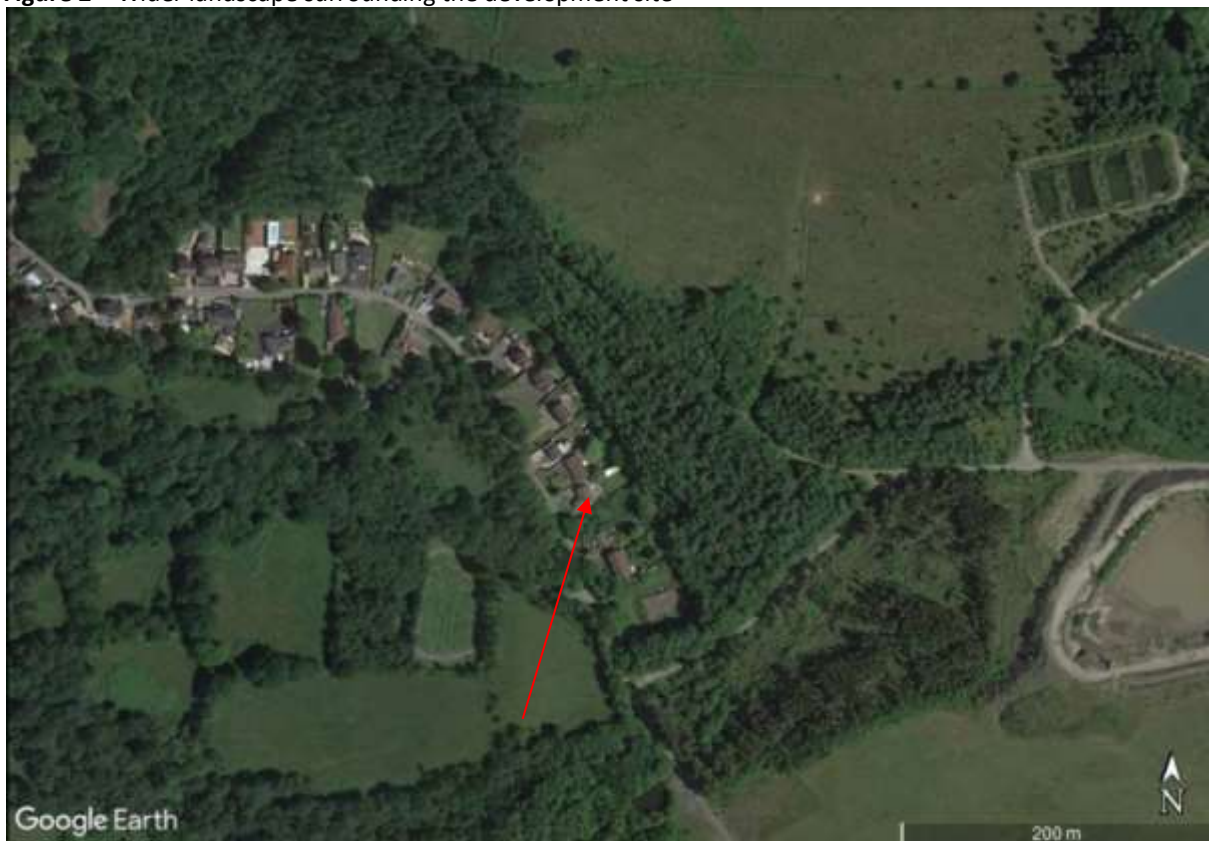
Parish Road is enclosed by woodland to the east and west with houses immediately to the north and south of the plot. There is good connectivity to the wider landscape further afield, however, the site is relatively isolated by fences and walls.

**Figure 1** - aerial overview of the application site (outlined red)



(Image courtesy of Google Earth)

**Figure 2** – Wider landscape surrounding the development site



## **2 HABITATS SURVEY**

### **2.1 BACKGROUND**

A Phase 1 habitat survey was carried out to assess the existing habitats, identify any protected habitats that may be present, determine the impact of the proposed works on them, and identify any mitigation measures that may be necessary. This was done by undertaking both a biological records data search and a field survey.

The survey was undertaken on the 11<sup>th</sup> Deember 2020

Phase 1 habitat survey is a way of recording the basic habitat data to form a baseline level of knowledge of the ecology of a site and provide recommendations for future surveys if considered necessary.

### **2.2 METHODOLOGY**

#### **2.2.1 Desk study:**

A biological data search was not undertaken in this instance. The site is isolated from the wider landscape by walls and fences. The site is made up of regenerated vegetation on top of rubble piles and waste. All surrounding habitats will be protected from indirect effects.

#### **2.2.2 Field survey:**

Experienced surveyors from BE Ecological Ltd carried out a habitat assessment and mapping exercise in March 2020 using the Phase 1 habitat survey technique. Nomenclature follows Stace (1997)<sup>1</sup>.

Features of note are assigned Target Notes (TN) and referenced accordingly and described at **Table 7** in section 3.1.2 below and shown at **Figure 3**.

### **2.3 CONSTRAINTS**

The field survey was undetaken at a time of year when the full botanical diversity may not have been apparent; however, this is thought not to pose a constraint due to the number of species that were seen and the obvious habitats present.

There were no other constraints to the surveys and assessments undertaken.

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<sup>1</sup> Stace, C (1997). *New Flora of the British Isles* (2nd Ed.). Cambridge University Press

### **3 RESULTS**

The following habitats were found to be present on the site:

Semi-improved (poor) grassland

Tall ruderal

Bare ground

Hedgerows

Fence/Wall

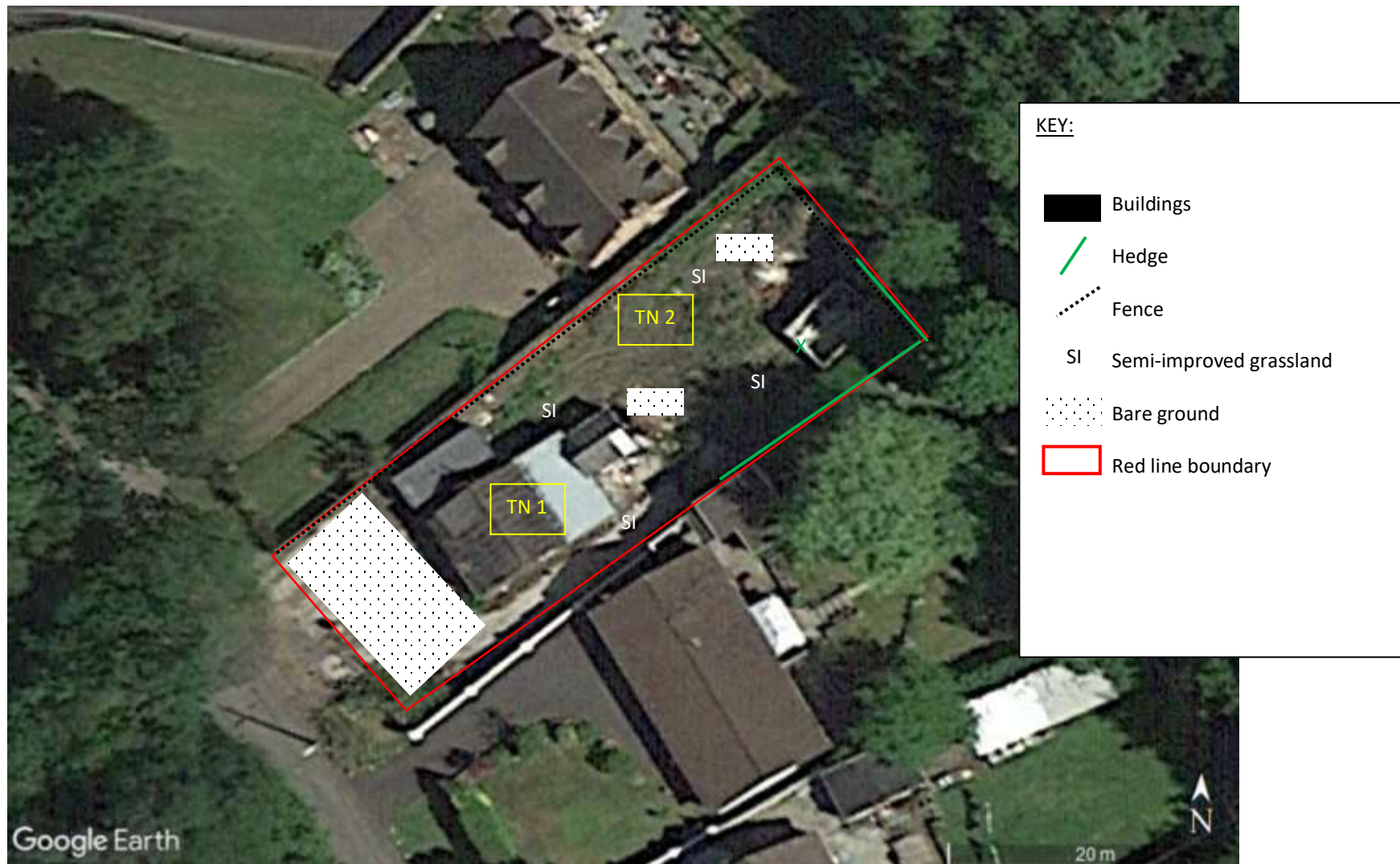
Rubble piles

Semi-improved grassland, bare ground and tall ruderal are found in a mosaic across the site. As such these habitats will be discussed as one.

Walls and fences will not be mentioned further as they have no ecological value. The small area of hedgerow appears to be on the neighbour's boundary and therefore will be retained and not discussed further.

Rubble piles themselves do not have any ecological value but do have value as a result of things that reside in them. As such, they will only be discussed in the relevant species sections.

**Figure 3** – Habitat survey results



## **4 HABITATS - EVALUATION, IMPACT CHARACTERISATION & ASSESSMENT**

### **4.1 SEMI-IMPROVED POOR GRASSLAND/TALL RUDERAL/BARE GROUND**

#### **4.1.1 Evaluation**

These habitats are spread in a mosaic across the site. The species present are typical of regenerating habitat and former garden. Species found here include soft rush, creeping buttercup, daisy, ribwort plantain, bramble, cocksfoot, timothy, creeping bent, willowherb, nipplewort, ragwort, dog rose, white clover, red clover, springy turf moss, common field speedwell, monbretia, common birds foot trefoil, dandelion, wood avens, dogwood, spear thistle, creeping thistle, self heal, salad burnet, common nettle, privet curled dock, broad leaved dock and Himalayan honeysuckle.

The habitat and species present are fast growing first to colonise species and the habitat is therefore considered to be of a **low local (site)** ecological importance.

#### **4.1.2 Impact characterisation**

It is anticipated that this habitat will be lost.

#### **4.1.3 Impact assessment without mitigation**

It is considered that the removal of the habitat will result in a certain permanent adverse impact on the habitat but have **no adverse** ecological impacts other than in relation to reptiles which will be dealt with later in this report.

#### **4.1.4 Potential mitigation measures**

Mitigation in the short term is not required; however, consideration should be given to planting with native species within any post-development landscaping plan.

#### **4.1.5 Impact assessment with mitigation**

Not applicable.

#### **4.1.6 Significance of the impact**

##### Without mitigation:

It is anticipated that the significance of the impacts due to the development will be **neutral**.

##### With mitigation:

It is anticipated that the significance of the impacts due to the development will be **neutral**.

## 5 SPECIES - EVALUATION, IMPACT CHARACTERISATION & ASSESSMENT

### 5.1 BATS

#### 5.1.1 Bats – evaluation

Bats are protected by international and domestic legislation, a reflection of their increasingly threatened status; bats are therefore of **high** international value.

There are buildings on the development site; however, they do not offer bats any potential roosting habitat as all that remains of them are footings.

There are no trees on the site which offer bats any potential roosting features.

Overall, within the context of the surrounding land use, it is considered that the development site is of negligible value to and for roosting bats. The site provides foraging habitat for bats.

#### 5.1.2 Bats – Impact characterisation

It is considered that there will be no adverse impacts on roosting bats.

Bats will be able to continue using the boundaries of the site for foraging purposes and the gardens of the new houses during the operational phase of the development.

#### 5.1.3 Bats - impact assessment without mitigation

It is considered that there will be a **certain minor medium term adverse impact** on bat foraging activity at a **local (site)** level.

#### 5.1.4 Bats - potential mitigation measures

Although it is unlikely that bat roosts will be affected by the proposed development and bat foraging habitat is not protected *per se* it is proposed to undertake the following actions:

- All lighting requirements will be minimised and be of a type which causes least impact on bats;
- All vegetation and tree clearance will be minimised to retain as much of the existing boundary habitat as possible;
- All lighting will be directed away from the woodland to the rear and boundary features;
- A licensed bat ecologist will be “on call” for the duration of the project in the unlikely event that bats are discovered, in which case the work will cease immediately, Natural Resources Wales (NRW) will be contacted. A development licence may be required prior to any further work being carried out. No further work will be undertaken without the approval of NRW.

#### 5.1.5 Bats - impact without mitigation

It is considered that without mitigation there would be an **unlikely minor short term adverse impact** at a **local (site)** level.

#### 5.1.6 Bats - significance of the impact

##### Without mitigation

It is considered that the significance of the impact is **slight**.

##### With mitigation

It is considered that with appropriate mitigation, the significance of the impact is **neutral**.

### 5.2 BREEDING BIRDS

#### 5.2.1 Summary

Breeding birds are likely to utilise the privit hedge in the eastern corner.

#### 5.2.2 Breeding birds - evaluation

Due to the legislative protection afforded to them, breeding birds are considered be of **medium – high national** importance.

There is suitable habitat for birds to utilise for breeding, in the hedge in the eastern corner.

Within the context of the site and the proposed development, it is considered that breeding birds are of **low local** importance.

#### 5.2.3 Birds - impact characterisation

The hedgerow will remain.

It is possible that the hedgwrow will need pruning. If pruning was to be undertaken during the breeding season, there is the potential for birds to be disturbed killed or injured and / or their nests to be disturbed, damaged or destroyed.

#### 5.2.4 Birds - impact without mitigation

It is considered that without mitigation, there would be an **probable minor short term adverse** impact at a **local (site)** level.

#### 5.2.5 Birds - potential mitigation measures

Mitigation will be required and should include (but not be limited to) the following measures:

- Any pruning required will be undertaken outwith the breeding season i.e. between mid-August / September and April inclusive;
- Any clearance close to the start and end of this period should only be undertaken following an assessment by a suitably experienced ecologist as the breeding season is not fixed and is subject to annual variation;
- Where pruning is required during the breeding season, all areas should be subject to an assessment no more than 48 hours in advance to check for the presence of breeding birds;

- Should evidence of breeding birds, in particularly nests, be recorded, no pruning may be undertaken within 15m of any nest site until such time as the nest is vacated naturally; and

Consideration should be given to including measures to benefit birds within the housing development e.g. installation of bird boxes on new buildings.

It is considered likely that the gardens of the new properties will eventually provide suitable habitat both for breeding and foraging opportunities; however, it is not possible to include this as mitigation or accurately assess the potential value at this stage.

#### 5.2.6 Birds - impact with mitigation

It is considered that with mitigation, there would be a **very unlikely minor short term adverse** impact at a **local** level.

#### 5.2.7 Birds - significance of the impact

##### Without mitigation

It is considered that the significance of the impact is **neutral**.

##### With mitigation

It is considered that with appropriate mitigation, the significance of the impact is **neutral**.

### 5.3 AMPHIBIANS

#### 5.3.1 Summary

There are no waterbodies on the site which would provide great crested newts or other amphibians with breeding habitat. There is no connection to suitable areas.

There is suitable terrestrial habitat on the site which amphibians could potentially use.

Given the lack of waterbodies on the development site and the constant disturbance, it is considered unlikely that great crested newts will be present on the site.

#### 5.3.2 Amphibians - evaluation

Amphibians are protected by UK legislation and therefore they are of **medium to high national** ecological importance. Great crested newts are protected by international legislation incorporated into UK legislation by the Habitat Regulations (as amended).

It is possible that common species such as frog and toad will be present on the site.

#### 5.3.3 Amphibians - impact characterisation

It is possible that animals may be killed or injured during works if they are present on the site.

There is suitable hibernation habitat present on the site.

#### 5.3.4 Amphibians - impact characterisation without mitigation

It is considered that in the absence of mitigation there would be a **probable minor short term adverse** impact at a **local (site)** level.

#### 5.3.5 Amphibians - mitigation measures

As long as reptile presence is assumed and site clearance is undertaken in accordance with an appropriate method statement, it is considered that a full trapping and translocation exercise is not required, and that habitat manipulation and denial is an appropriate method of ensuring that reptiles are not harmed during the site clearance.

Therefore, the following measures will be adopted:

- Clearance will be conducted in accordance with a Method Statement to ensure that should amphibians be found in the course of site clearance or any other development activity, they will not be harmed and can be adequately cared for
- Clearance will only be undertaken during the active season (March-October, inclusive);
- Clearance outwith this period is possible, but depends on weather and temperatures being suitable to ensure that animals are likely to be active;
- There will be no clearance of hibernation features outwith the active season; and
- Animals will be excluded from entering or re-entering the site during clearance/operational phase of works by ensuring that the site is kept as bare ground i.e. clear of any vegetation or other shelter.

#### 5.3.6 Amphibians - impact characterisation with mitigation

It is considered that there will be an **unlikely minor short term adverse impact** at a **local (site)** level as a result of the proposed development.

#### 5.3.7 Amphibians - significance of the impact

##### Without mitigation

It is considered that the significance of the impact is **slight**.

##### With mitigation

It is considered that the significance of the impact is **neutral**.

### 5.4 REPTILES

#### 5.4.1 Summary

No reptile survey was undertaken at this time due to the time of year the visit was carried out; however a brief habitat assessment indicated that only limited areas of the site provide favourable habitat for reptiles, specifically the vegetation and rubble piles

The habitat assessment looked for features which would be attractive to reptiles such as:

- south facing banks;
- varied profile ground form;
- basking areas;

- vegetation cover;
- structurally diverse vegetation;
- potential hibernation sites; and
- evidence of suitable prey sources.

#### 5.4.2 Reptiles - evaluation

Reptiles are protected by UK legislation and therefore they are of **medium to high national** ecological importance.

Overall the site appears to be of a generally **low** value to reptiles due to the ongoing disturbance at the site. However, it is likely that they will be present in low numbers.

#### 5.4.3 Reptiles - impact characterisation

It is possible that reptiles may be killed or injured during works as part of the site clearance phase of the development.

There is suitable hibernation habitat present on the site in the rubble piles. However, the ground in December was extremely wet, so this may be reduced.

#### 5.4.4 Reptiles - impact characterisation without mitigation

It is considered that in the absence of mitigation there would be a **probable minor short term adverse** impact at a **local (site)** level.

#### 5.4.5 Reptiles - mitigation measures

As long as reptile presence is assumed and site clearance is undertaken in accordance with an appropriate method statement, it is considered that a full trapping and translocation exercise is not required, and that habitat manipulation and denial is an appropriate method of ensuring that reptiles are not harmed during the site clearance.

Therefore, the following measures will be adopted:

- Clearance will be conducted in accordance with a Method Statement to ensure that should reptiles be found in the course of site clearance or any other development activity, they will not be harmed and can be adequately cared for
- Clearance will only be undertaken during the reptile active season (April-October, inclusive);
- Clearance outwith this period is possible, but depends on weather and temperatures being suitable to ensure that reptiles are likely to be active;
- There will be no clearance of hibernation habitat outwith the active season;
- Reptiles will be excluded from entering or re-entering the site during clearance/operational phase of works by ensuring that the site is kept as bare ground i.e. clear of any vegetation or other shelter; and
- Consideration should be given to the inclusion of a reptile hibernaculum 4m x 2m (design at **Appendix** ) on the site to provide shelter for reptiles. The location of the hibernaculum will be confirmed in consultation with an ecologist on completion of the final site layout / design.

#### **5.4.6 Reptiles - impact characterisation with mitigation**

It is considered that there will be an **unlikely minor short term adverse impact** at a **local (site)** level as a result of the proposed development.

#### **5.4.7 Reptiles - significance of the impact**

##### **Without mitigation**

It is considered that the significance of the impact is **slight**.

##### **With mitigation**

It is considered that the significance of the impact is **neutral**.

## 5.5 INVERTEBRATES

### 5.5.1 Summary

No invertebrate survey was undertaken at this time due to the time of year the visit was carried out; however a brief habitat assessment indicated that the site can provide favourable habitat for this varied group, with the taller vegetation closer to the site boundaries being the more diverse areas and most likely to provide suitable habitat.

### 5.5.2 Invertebrates - evaluation

No invertebrates are protected by legislation with the exception of the large blue butterfly (*Phengaris arion*); this species is not found in this region and will therefore not be considered further. Other species of invertebrate are listed on Schedule 7 of the Environment (Wales) Act 2016 and are therefore of a **high national (Welsh)** ecological importance. Of these, the marsh fritillary butterfly (*Euphydryas aurinia*) is present in good numbers in the area surrounding the development site with the Blaen Cynon SAC being designated for its presence.

The food plant for the marsh fritillary butterfly (Devil's-bit scabious – *Succisa pratensis*) is not present on the site.

Overall the site appears to be of a generally **low** value to invertebrates as the dominant habitat type appears to be relatively disturbed and species poor.

### 5.5.3 Invertebrates - impact characterisation

It is probable that the site clearance will result in the loss of habitats suitable for this group and that slow moving species may be killed or injured during the clearance.

### 5.5.4 Invertebrates - impact characterisation without mitigation

It is considered that in the absence of mitigation there would be a **probable moderate short term adverse** impact at a **local (site)** level.

### 5.5.5 Invertebrates - mitigation measures

Therefore, the following measures will be adopted:

- Minimisation of vegetation removal through design;
- A phased site clearance to ensure that not all the habitat is cleared at once;

### 5.5.6 Invertebrates - impact characterisation with mitigation

It is considered that there will be an **unlikely minor short term adverse impact** at a **local (site)** level as a result of the proposed development.

### 5.5.7 Invertebrates - significance of the impact

#### Without mitigation

It is considered that the significance of the impact is **slight**.

**With mitigation**

It is considered that the significance of the impact is **neutral**.

## **6 CONCLUSION**

A number of habitats were identified at the proposed development site at 37 Parish Road. Of the habitats identified, it was determined that the majority were of a low ecological value. The site is relatively isolated despite being situated between woodland.

Overall, it is concluded that the site is of a low ecological value at a local site level.

The presence of reptiles and amphibians should be assumed.

The presence of breeding birds in the hedge should be assumed between March and August.

Mitigation will be required as described in the individual sections above.

This PEA and the recommendations as described in the sections above may require updating on completion of a final design and layout and in light of any any planning requirements.

## 7 REFERENCES

Chartered Institute of Ecology and Environmental Management (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal*, 2nd Edition. (Winchester)

Joint Nature Conservation Committee (2001) *Handbook for phase 1 habitat survey: A technique for environmental audit*. JNCC.

Planning Policy Wales (2018).

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The Conservation of Habitats and Species Regulations 2017.

The Environment (Wales) Act 2016. (HMSO)

The Natural Environment and Rural Communities Act (2006) (as amended) (HMSO).

The Wildlife and Countryside Act 1981 (as amended).

Welsh Assembly Government (2007). *Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning*.

## APPENDIX A - PHOTOS











## **APPENDIX B – TARGET NOTES**

TN1= footings of old house

TN2= Rubble piles throughout site

## APPENDIX C – REPTILE METHOD STATEMENT.

### Background:

Following a reptile habitat assessment, it was considered that the site has the potential to support a population of slow worm (*Anguis fragilis*), common lizard (*Lacerta vivipara*) and possibly grass snake (*Natrix natrix*). It is less likely that adder (*Vipera berus*) is present but possible. The presence of reptiles should therefore be assumed, hence the need for a Method Statement to ensure that works are carried out in such a way as to avoid harm to reptiles.

Once the areas for clearance have been identified, implementation of this method statement will avoid having to undertake a full reptile translocation exercise as animals can be pushed into safe areas using habitat denial and manipulation techniques.

### General comments:

Vegetation will be cleared from directly affected areas only e.g. areas to be built on, used for storage, be part of the construction site or forming part of any landscaping scheme.

Once cleared, the vegetation will be maintained as close to bare ground as possible either by spraying or ongoing repeated cutting using brush cutters with knife blades to ensure that there is no potential for reptiles to utilise the site after the initial clearance.

Reptile fencing will not be required as long as the bare ground / short vegetation habitat is maintained.

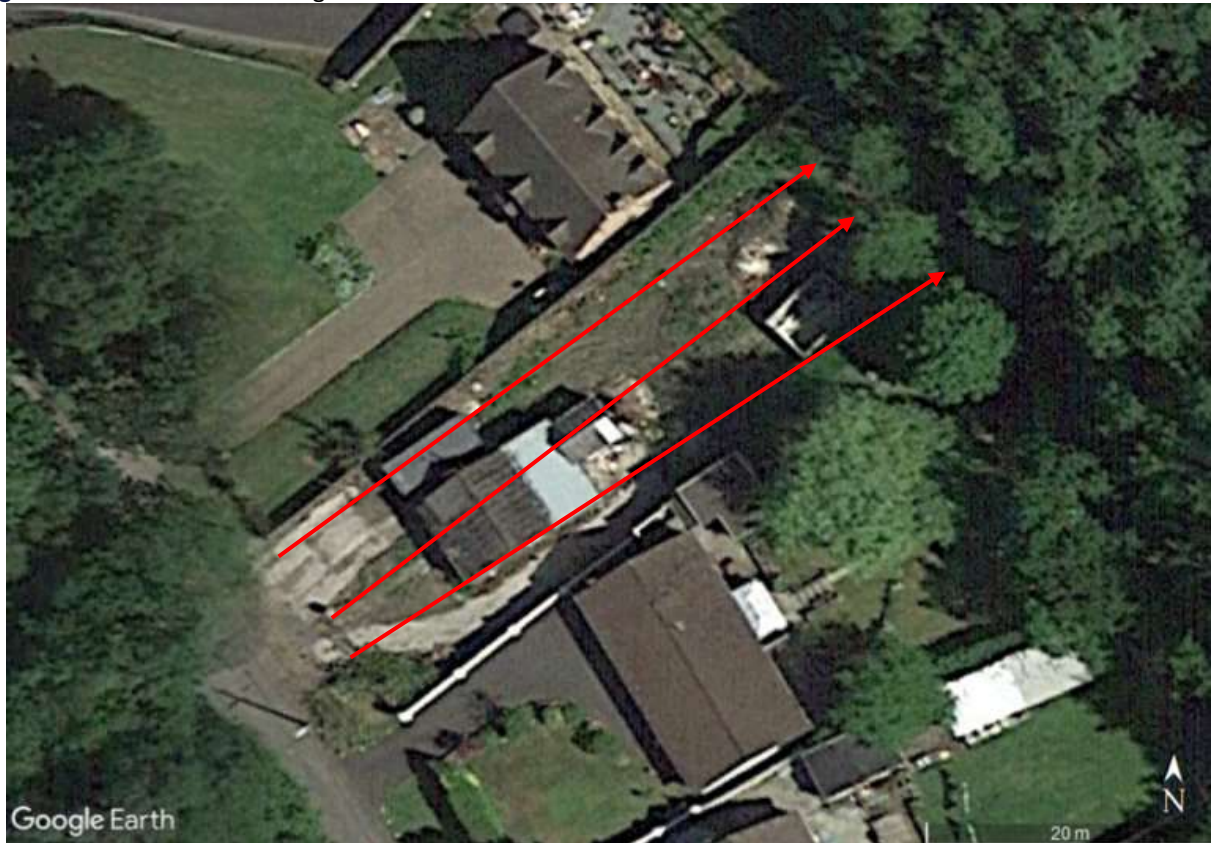
The grassland on the site may be cut at any time of year. Scrub should only be cut during the autumn and winter months to avoid breeding birds unless otherwise permitted following a check by a suitably experienced ecologist (see separate methodology).

The ground and any tree stumps should only be excavated once temperatures are consistently above twelve degrees for at least a week.

### Method statement:

1. Vegetation will only be cut using brushcutters fitted with knife blades: the use of strimming cord will not be permitted.
2. Vegetation will be cut in three phases. The first phase will reduce the vegetation height to 150mm; the second will reduce it to ≈75mm; the third phase will reduce the height to as close to ground level as possible.
3. There will be a time delay of 24 hours between the first and second cuts.
4. Vegetation to be cut will be inspected for the presence of reptiles immediately prior to every phase of cutting unless the supervising ecologist states otherwise.
5. The orientation of cutting will be designed to push animals into unaffected and retained land. Therefore, the cutting will start at the site's north eastern point and progress in a south westerly direction (**Figure 2**).

**Figure 2** – orientation of cutting

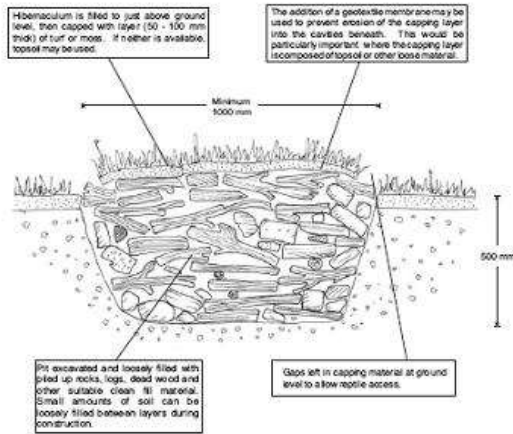


6. All arisings will be raked off and formed into habitat piles on unaffected land or removed from site for disposal. The location of any habitat piles will be determined by the ecologist on site in light of current conditions.
7. There will be no clearance of trees, hedges or scrub.
8. After clearance, should the vegetation be allowed to regrow above 150mm high, it will be cut again as described in this method statement.
9. Excavation may only take place during the reptile active season unless the site is found to be unsuitable for hibernation purposes.
10. Potential hibernacula will only be cleared while daytime temperatures are consistently over 12°C for a period of at least seven days prior as otherwise reptiles may be killed or injured as a result of inconsistent (low) temperatures (during the day and night) and/or low prey availability. Potential hibernacula will only be dismantled by hand unless the supervising ecologist gives the approval for machine dismantling.
11. If reptiles are observed within the clearance area during the works, a decision on how to deal with them will be made on site in light of the conditions on site at the time and the state of the animals themselves. There are three options for dealing with them:
  - It may be possible to leave the animals alone to find their own way into cover, depending on where they are seen, what they are doing and their apparent activity levels; or
  - Capture, remove from site and take into temporary captivity until such time as they can be released adjacent to the cleared area (a vivarium has been prepared in case it is required); or

- Should conditions allow, capture and translocate the animals to a safe area immediately adjacent to the site.
12. Habitat enhancement measures will be provided in the form of a hibernacula at the location marked on yellow at **Figure 2**.
  13. Habitat (e.g. hibernation sites for other species especially amphibians) can be identified and avoided by following this method statement.
  14. All vegetation and site clearance will be supervised by a suitably experienced ecologist.

#### Hibernaculum on free-draining ground

Where ground conditions allow, the hibernaculum should be incorporated into a shallow pit. This design is more likely to remain frost-free, and will be less obtrusive and thus unlikely to be subject to interference.



#### Hibernaculum on impermeable ground

Where ground conditions are impermeable, then an 'above-ground' or mounded design should be utilised in order to prevent the hibernaculum from flooding. This design should also be used if it is not possible to excavate a pit for any other reason.

