



**LAND TO THE REAR OF 9-15 NEWTON STREET,
ABERCANAID, MERTHYR TYDFIL**

ECOLOGICAL APPRAISAL

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Ecological Appraisal

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NON-TECHNICAL SUMMARY

An ecological appraisal was undertaken of land to the rear of Newton Street, Abercanaid, Merthyr Tydfil, South Wales. The work included assessments of the habitats, the presence of protected sites, the potential for protected species to be present and assessments of any potential impacts on those habitats sites and species present.

The site lies within the Afon Taff SINC.

1) Bats

It is likely that bats will forage over the site. There are records of bats using the site. There is some roosting potential for bats on the site. However, these areas will be retained.

2) Breeding birds

There are records of birds from the site. Birds should be assumed to use the trees and taller vegetation present within the boundaries of the site. This vegetation will be retained but may be pruned. Pruning will be undertaken between September and March, outside of the breeding bird season.

3) Reptiles

There are records of reptiles from the site. The site provides some habitat for all four common species of reptiles for foraging, basking and sheltering. There is hibernation habitat on the site for members of this group, all of which is scattered throughout the site.

Given the small size of the site and adjacent habitats, it can be assumed that a small number of reptiles will use the site and that therefore clearance should be undertaken in a manner which prevents harm to reptiles.

This group will be considered further in this report.

4) Otter

There is no evidence of otter using the site currently. A pre-commencement check of the water course will be undertaken prior to works commencing.

5) Non-native invasive species

There is Japanese knotweed present on the site. An appropriate method statement from a qualified invasive species contractor will need to be sought for the removal and treatment of the knotweed prior to any works commencing on the site.

1 INTRODUCTION

1.1 OBJECTIVE

The objectives of this report are to:

- collate and analyse existing ecological information relating to the site;
- identify the habitats present on site;
- identify the presence of protected sites;
- 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 protected sites, species and habitats present;
- provide recommendations for further survey as necessary; and
- suggest outline mitigation and enhancement ideas and principles

1.2 METHODOLOGY

Phase 1 habitat survey

To achieve the objectives set out above, the following actions were taken:

- Field based assessments in respect of
 1. Habitats; and
 2. Protected species

The assessment has been undertaken by ecological feature rather than by section i.e. each subject is discussed and assessed separately and summarised in conjunction with the others.

The South East Wales Biodiversity Records Centre were formally requested to supply records of designated sites and protected species within 2km of the site **(0190-461)**.

1.3 SITE DESCRIPTION

The site is located to the south of Abercanaid and is accessed via the A4054 to the south of Merthyr Tydfil.

Parts of the following site description has been taken from the original Merlin Bio - Surveys report (Merlin Bio-Surveys, 2014) as it is of relevance to the apparent habitat type present.

Anecdotal evidence supported by the proposed development baseline map (Fig 2) and data downloaded from the 'Historic Landscape of Merthyr Tydfil' support MBS interpretation that the site was once part of an extensive area of allotments.

"The original settlement of Abercanaid was established c1850 with the area between the settlement and the River Taff largely given over to extensive allotments".

(http://www.ggat.org.uk/cadw/historic_landscape/Merthyr%20Tydfil/English/Merthyr_018.htm)



(Merlin Bio-Surveys, 2014)

The site is currently unused and is largely overgrown, with dominant vegetation consisting of creeping buttercup *Ranunculus repens*, bramble (*Rubus fruticosus* agg), hogweed *Heracleum sphondylium*, rosebay willowherb *Chamerion angustifolium*, broad-leaved dock *Rumex obtusifolius*, white clover *Trifolium repens* and various grasses. The site is bounded by an unmanaged hedge with occasional standards, and the dominant species being hazel *Corylus avellana*, hawthorn *Crataegus monogyna* and ash *Fraxinus excelsior*.

Figure 1 – detailed view of the proposed development site (boxed red)

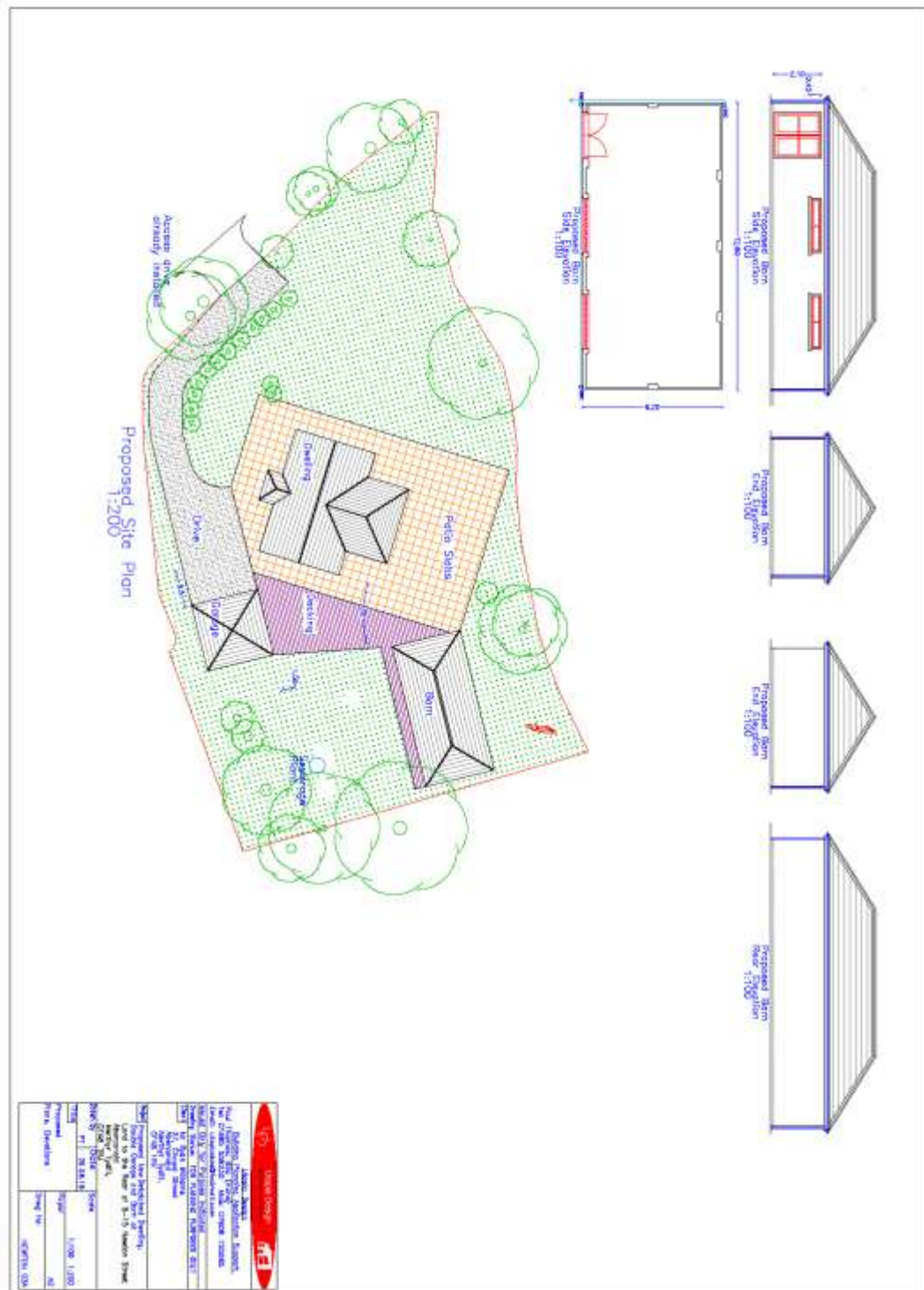


Figure 2 – aerial view of the proposed development site (arrowed red)



1.4 PROPOSED DEVELOPMENT

Currently plans for the site are to erect a residential dwelling, a barn and a detached garage.



1.5 STUDY AREA

The field survey looked at the development area itself and up to 50m from the site boundaries.

1.6 PLANNING FRAMEWORK

The proposed development will be undertaken wholly under the auspices of the Town and Country Planning Act 1990 (as amended).

2 REGULATORY FRAMEWORK

2.1 INTERNATIONAL

European Union legislation requires that member states designate sites for the protection of habitats and species included in the annexes of both Council Directive 92/43/EC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive) and Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). This legislation is implemented in the UK by the Conservation of Habitats and Species Regulations 2017 (as amended) ("the Habitat Regulations"). This results in sites being designated as Special Areas of Conservation (SACs) and Special Protection Areas respectively (SPAs).

2.2 NATIONAL (UK)

The Wildlife and Countryside Act 1981 (as amended) allows sites to be designated as Sites of Special Scientific Interest (SSSI) for one or all of the following categories:

- Flora;
- Fauna;
- Habitat; and
- Geological importance.

European designated sites are automatically designated as SSSIs prior to their designation.

The relevant legislation includes:

- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended);
- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way Act 2000;
- Wild Mammals (Protection) Act 1996; and
- The Protection of Badgers Act 1992.

Biodiversity Action Plans (BAPs) are tools which are used to monitor, manage and enhance those habitats and species which are of significance to an area or organisation. The United Kingdom BAP lists a number of priority habitats and species which are of conservation concern.

Section 40 of the Natural Environment and Rural Communities Act 2006 (as amended) requires all public bodies to have regard wherever possible to conserving biodiversity. Section 42 of the Act requires that a list of habitats and species of Principle Importance for the Conservation of Biological Diversity in Wales be produced.

2.3 NATIONAL (WALES)

The Environment (Wales) Act 2016 requires that all public authorities, when carrying out their functions in Wales, seek to "maintain and enhance biodiversity" where it is

within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”.

This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

In Wales, this legislation replaces and enhances the Natural Environment and Rural Communities Act (2006) which sought to raise the profile of biodiversity and to make sure that it is considered in all local authority decisions by ensuring that “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”.

Other elements of NERC 2006 may still apply.

Planning Policy Wales Edition 10, December 2018 and Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, September 2009) set out the protection given to wildlife (sites, habitats and species) by the planning system operational in Wales.

2.4 LOCAL AND REGIONAL

The proposed development is wholly within the Merthyr Tydfil County Borough Council area of responsibility. Therefore, all policies adopted by the Council will apply.

2.5 PREVIOUS SURVEYS

Numerous surveys were undertaken by Merlin Bio-Surveys in 2014. The results of which will be referred to in the relevant sections throughout this report.

3 PROTECTED SITES

3.1 STATUTORILY DESIGNATED SITES

No Nationally or Internationally important sites (e.g. SSSIs, SACs or SPAs) lie within the search buffer.

The search area lies within the administrative area of Merthyr Tydfil County Borough Council, who have identified a series of Sites of Importance for Nature Conservation (SINCs)/ Wildlife Sites. The following SINCs lie within the search buffer:

- Abercanaid Fields
- Afon Taf
- Buarth-waunydd
- Graig Gethin
- Pentrebach Fields
- Pentrebach Tip
- Rhydicar West
- Troed-y-rhiw

3.2 LOCALLY DESIGNATED SITES

There site lies wholly within the Afon Taf SINC boundary.

3.3 LOCAL DESIGNATIONS – EVALUATION, IMPACT CHARACTERISATION AND ASSESSMENT

Table 1: Locally designated sites to be considered as part of this report

Site	Designation	Distance away (km)	Reason for designation
Afon Taf	SINC	0km	See 3.3.1.1 below

3.3.1.1 Afon Taf SINC - evaluation

This site should be considered as being of **high local** ecological importance due to the designation afforded to it. A description of the site can be found below.

The major river in the County Borough. Includes areas of bankside habitats, particularly towards the south where the river corridor is less industrialised than further north. Associated habitats are chiefly semi-natural woodland, including areas of ancient semi-natural woodland and linear wet woodlands. There are also numerous neutral grasslands, scrub patches and bracken stands, as well as small areas of marshy grassland and tall herb vegetation. Notable features of the river course include cobble banks which support localised plants. Otter occurs throughout the length of the river which is known to be of value to a wide variety of birds, fish, bats and reptiles.

3.3.1.2 Afon Taf SINC - impact characterisation

Whilst the site is within the boundary of the Afon Taf SINC, the information within this report identifies that the site boundary does not have any of the habitats that the site is designated for. There is evidence that the site is a former allotment.

The council have a duty to ensure that the scheme minimises harmful effects by retaining onsite features of benefit to biodiversity and/or features for which the SINC has been designated.

Providing appropriate measures are in place, important habitats will be retained and there will be no effect on any habitat type that the SINC is designated for. . However, there is a possibility of an indirect impact on the SINC as a result of a pollution incident e.g. sediment in the stream on the sites north western boundary.

3.3.1.3 Afon Taf SINC - impact assessment without mitigation

Without mitigation, it is considered that there will be no adverse impact on any of the terrestrial habitats for which the SINC is designated. However, there may be an unlikely minor short term adverse impact as a result of indirect impacts such as pollution.

3.3.1.4 Afon Taf SINC- mitigation measures

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

- Where possible, a minimum 5m buffer will be maintained between all watercourses and any clearance, construction or other development activities
- All vegetation removal and disturbance within 10m of a watercourse may only be undertaken following a check of the affected area and under ecological supervision;
- There will be no working within 5m of a watercourse without an appropriate permit to work and the appropriate statutory consents;
- All work on the proposed development site will be undertaken in accordance with relevant NRW / Environment Agency guidance on working in proximity to a watercourse;
- The free flow of water along the watercourse will be ensured at all times;
- There will be no lighting of the watercourse at all;
- Works within 5m of any the watercourses must not start any earlier than 1 hour after sunrise and must finish no later than 1 hour before sunset;
- There will be no access for personnel, plant and machinery into any watercourse unless required as part of the development; in this eventuality, access will be in accordance with an approved method statement, by permit only and strictly monitored;
- To prevent accidental discharge of sediment and other contaminants, the development site will be either bounded by sediment fencing or siltation ponds (or other sediment trapping devices e.g. silt busters) will be provided at appropriate locations to prevent sediment runoff during the construction phase of the development. These will be put in place prior to any earthworks commencing;

- Designated areas will be provided for parking, washing facilities, refuelling, storage of fuels, oils, lubricants and materials e.g. cement, concrete, none of which will be within 10m of the watercourse;
- Drip trays will be placed under all stationary and parked plant, machinery and vehicles during the construction period;
- Storage of fuels and other liquids will only be in bunded (to 110% capacity) containers;
- All plant, machinery and vehicles will be inspected for leaks and malfunctions on a daily basis;
- All plant and machinery will be washed down after leaving the previous contract site and before entering the compound / work site for the first time;
- Relevant construction activities will cease during high rainfall periods to ensure mitigation measures are not overwhelmed;
- Spill kits and other pollution restricting measures e.g. hay bales will be provided along with relevant and appropriate training for personnel as necessary);
- Activity specific permits linked to risk assessments and a risk register will be required before any works which might adversely impact on watercourses;
- All watercourses will be subject of visual monitoring of water quality at least twice per day during the construction phase: at start and close of the working day; more detailed monitoring may be required should it be necessary; and
- Dust suppression measures will be employed as necessary during spells of dry weather to ensure no dust is emitted from the site.

3.3.1.5 Afon Taff SINC- impact assessment with mitigation measures

It is unlikely that there will be an impact on the SINC.

3.3.1.6 Afon Taff SINC - significance of the impact

Without mitigation

It is considered that without mitigation, the significance of the development would be **slight**.

With mitigation

It is considered that with mitigation, the significance of the development would be **neutral**.

3.4 PROTECTED SPECIES RECORDS

There were 808 records of protected species returned within the data search. Those records of relevance to the site will be discussed under the relevant headings throughout the report.

Included in this, there are records of badger. There are no habitats suitable for these species to use the site as a resting place (within the site boundary) and there was no evidence to suggest that either had used the site for this purpose or for commuting during the current survey. As such, these species will not be considered further in this report.

The only records for invertebrates were small pearl bordered fritillary, dingy skipper and grayling. There is no suitable habitat on the site for this species. As such, they will not be considered further in this report.

There is a record of water vole (1.9km away from the development site). The banks of the stream are too densely scrubbed to support this species. There was no evidence of this species on site. As such, they will not be considered further in this report.

There are no records of dormouse within 2km of the site. There is no habitat scheduled for removal that would support dormice. This species will not be considered further in this report.

4 PHASE 1 HABITAT SURVEY

4.1 SUMMARY

A number of habitats were recorded on and around the survey area. These included:

- Tall ruderal
- Hedgerow
- Stream
- Invasive species

The potential for a number of protected species was recorded, including habitats suitable for:

- Birds
- Bats
- Otter
- Reptile

4.2 BACKGROUND

The Phase 1 habitat survey was carried out to assess the existing habitats, identify any protected habitats or species 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 desk study and field survey.

The survey was undertaken on 26th September 2019 by Beth Evans of BE Ecological Ltd.

The survey was undertaken by Beth Evans. Beth is the previous owner of BE Ecology and now owns BE ECOLOGICAL LTD and has a postgraduate degree in Environmental Biology: Conservation & Resource Management, specialising in British bats. Beth has ten years' experience of ecological surveys, both in a small scale and large multi-disciplinary context.

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.

4.3 METHODOLOGY

4.3.1 Field survey:

Experienced surveyors from BE Ecological Ltd carried out a habitat assessment and mapping exercise in September 2019 using the Phase 1 habitat survey technique. Nomenclature follows Stace (1997)¹.

4.4 CONSTRAINTS

N/A.

4.5 RESULTS

4.5.1 Habitats

The following habitats were found on the site:

4.5.1.1 Tall ruderal

Much of the site appears to be at a late 'secondary succession' phase with species such as broad-leaved dock (*Rumex obtusifolius*), common nettle (*Urtica dioica*) and rosebay willowherb (*Chamaenerion angustifolium*) over a dominant ground cover of creeping buttercup (*Ranunculus repens*).

Also present are large areas of bramble (*Rubus fruticosus* agg) and patches of both grey willow (*Salix cinerea*) and goat willow (*Salix caprea*).

The area is of some ecological value, it will be discussed further in this report in relation to reptiles and breeding birds.

4.5.1.2 Hedgerows

There are the remains of unmanaged hedgerows to the south and west. Species include hawthorn (*Crataegus mongyna*), hazel (*Corylus avellana*) and ash (*Fraxinus excelsior*) with a ground cover of nettle and buttercup.

The eastern boundary comprises a number of ash standards, field maple and sessile oak with an understorey of enchanters nightshade, fox glove and nettle.

Other than the pruning of overhanging branches, the hedgerows on the site will remain in their entirety.

The area is of ecological value, it will be discussed further in this report in relation to bats and breeding birds.

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

4.5.1.3 Stream

The Nant Canaid (a tributary of the River Taf) is found on the eastern and northern boundaries of the site. The stream has steep overgrown banks. There is debris in the water. There is Japanese knotweed present.

4.5.1.4 Invasive species

There are a number of stands of Japanese knotweed (*Fallopia japonica*) across the site. An appropriate method statement from a qualified invasive species contractor will need to be sought for the removal and treatment of the knotweed prior to any works commencing on the site.

4.5.2 Protected species assessment

4.5.2.1 Bats- legislation

CONSERVATION OF HABITATS & SPECIES REGULATIONS 2017

The Conservation of Habitats and Species Regulations (2017) provides safeguards for European Protected Species (those listed under Annex IV Habitats Directive). With regards to bats, this makes it an offence to:

- Deliberately (or recklessly in Scotland) capture, injure or kill a bat
- Deliberately (or recklessly in Scotland) disturb a bat in a way that would (significantly in Scotland) affect its ability to survive, breed or rear young (or hibernate or migrate in England, Wales and Northern Ireland) or (significantly in England, Wales and Scotland) affect the local distribution or abundance of the species.
- Damage or destroy a roost (this is an 'absolute' offence)
- Possess, control, transport, sell, exchange or offer for sale/exchange any live or dead bat or any part of a bat

WILDLIFE & COUNTRYSIDE ACT 1981

The Wildlife & Countryside Act 1981 (as amended) is the legislation for England and Wales for nature conservation, making it an offence to:

- Intentionally or recklessly disturb a bat at a roost
- Intentionally or recklessly obstruct access to a roost

4.5.2.2 Bats-results

There are 234 records of bats within 2km of the development site. Species included common pipistrelle, soprano pipistrelle, brown long-eared, *Myotis* sp., unidentified bat and noctule. The majority of records refer to bats in flight. There are a number of records of bats from the site. Species include common pipistrelle, soprano pipistrelle, noctule and brown long-eared. The species are known to forage and commute throughout the site.

The ash standards within the site boundaries have some potential for roosting bats.

Bat surveys were undertaken in 2014. The site has not changed since the previous survey. Four species were identified using the site and it is likely that they will continue to do so in 2019 given the lack of changes across the site. Due to the fact that all of the trees will be retained and only pruned back (those limbs overhanging the site, do not provide any obvious bat roosting features), it is not thought necessary that any further bat surveys are required providing that the boundaries of the site remain unlit.

4.5.2.3 Reptiles

Legislation

The four more common reptile species mentioned above are protected by the Wildlife and Countryside Act 1981 (as amended) against killing, injury and sale.

Smooth snake (*Coronella austriaca*) and sand lizard (*Lacerta agilis*) are not found in this area, having very specific geographical distribution within Britain, and so will not be referred to in this report despite the higher legislative protection afforded to them.

Reptiles-results

The site provides some habitat for all the common species of reptiles, particularly grass snake (*Natrix natrix*), slow worm (*Anguis fragilis*) and common lizard (*Lacerta vivipara*). It is less likely that adder (*Vipera berus*) would use the site.

There is a record of a single slow worm from the site.

Due to the amount of natural refugia already present on the site, it is considered reasonable to assume presence of reptiles and site clearance undertaken in a manner which ensures the safety of reptiles i.e. implementing a habitat manipulation and denial exercise pushing animals into safe and / or retained areas of suitable habitat.

All vegetation and debris clearance must be undertaken in line with a method statement (appended to this report) and ecological supervision.

4.5.2.4 Breeding birds

In Britain, all naturally occurring avian species are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). The legislation protects all birds, their nests and eggs, and it is an offence to:

- Intentionally kill, injure or take a wild bird;
- Intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built; and
- Intentionally take or destroy the egg of any wild bird.

In addition, birds listed on Schedule 1 of the Act, such as the Red Kite (*Milvus milvus*), are afforded further protection, and it is an offence to:

- Intentionally or recklessly disturb the bird whilst nest building or while at (or near) a nest with eggs or young; and
- Disturb the dependant young of such a bird.

Birds- results

There are 76 records of birds from within 2km from the development site. The following species have been recorded on the site

Species	Welsh status	Site status
Herring gull	Red	Fly over
Willow warbler	Red	Casual foraging
Spotted flycatcher	Red	Casual foraging
Lesser black-backed gull	Amber	Fly over
Green woodpecker	Amber	Heard on 1 occasion
Common buzzard	Green	Fly over
<i>Wood pigeon</i>	<i>Green</i>	<i>Breeding - proved</i>
<i>Magpie</i>	<i>Green</i>	<i>Breeding - proved</i>
Blue-tit	Green	Casual foraging
Great-tit	Green	Casual foraging
Common chiffchaff	Green	Casual foraging
Willow warbler	Green	Casual foraging
<i>Blackcap</i>	<i>Green</i>	<i>Breeding – probable x2</i>
Wren	Green	Casual foraging
Blackbird	Green	Casual foraging
Robin	Green	Casual foraging
House sparrow	Green	Casual foraging
Common chaffinch	Green	Casual foraging

(Merlin Bio-surveys, 2014)

There was no evidence of breeding birds on the site and no birds were noted using the site when the survey was undertaken. It should be assumed that breeding birds will utilise the boundaries and longer vegetation of the site. The boundaries of the site will be retained, however, any pruning must be undertaken outside of the breeding bird season (March-September) unless nests are found to be absent by a suitably qualified ecologist.

4.5.2.5 Otter

There is suitable habitat for otter on the site. No evidence of otter was found on the site. A pre-commencement check for otter of the stream must be undertaken prior to works commencing. The stream must remain unlit.

4.5.2.6 Non-native invasive species

There is Japanese knotweed present throughout the entire site. An appropriate method statement from a qualified invasive species contractor will need to be sought for the removal and treatment of the knotweed prior to any works commencing on the site.

4.5.3 Other features

None.

5 CONCLUSION

The proposed development will affect a small area of land within the Afon Taf SINC. The area subject to this survey is an overgrown allotment and does not appear to support any of the habitat types that the SINC is designated for. The removal of this habitat is unlikely to have a significant impact on the integrity of the Afon Taf SINC.

The site is of some ecological value to bats, breeding birds, reptiles and invertebrates.

There is Japanese knotweed present on the site.

A reptile population has been identified on the site (slow worm).

Breeding birds should be assumed to use the tall ruderal and boundaries of the site for nesting purposes.

The eradication of Japanese knotweed, the retention of the stream and the enhancements within the final design are likely to provide a positive impact in the long term.

6 RECOMMENDATIONS

A method statement to safeguard the presence of reptiles will be required (appended to this report).

Should European Protected Species be identified on site, an NRW development licence will be required, This can only be sought on receipt of planning consent.

Habitats should be retained wherever possible with clearance minimised as far as possible.

Vegetation clearance will be undertaken outside of the breeding bird season (March-September) unless the presence of nests are ruled out by an appropriately qualified ecologist.

An appropriate method statement from a qualified invasive species contractor will need to be sought for the removal and treatment of the knotweed prior to any works commencing on the site.

Any limbs to be pruned back will first be checked by an appropriately qualified and licensed bat ecologist to ensure that there are no potential bat roosting features present.

Although no evidence of otter was found, a pre-commencement check for otter on the Nant Canaid must be undertaken prior to works commencing.

Enhancements for bats, reptiles and birds should be included within the final design. A Schwegler 2FE bat box will be erected on the southern elevation of the main dwelling and barn. A Schwegler 1SP sparrow terrace will be erected on the western elevation of the barn and main dwelling. A reptile hibernaculum will be placed within the garden of the development.

Passage for hedgehogs will be maintained within the development via the boundaries being made permeable with 15cm x 15cm holes.

There will be no lighting of the site boundaries.

The retained area to the east of the site will be fenced off from any of the development.

7 REFERENCES

Bat Conservation Trust (2016) *Bat Surveys - Good Practice Guidelines*. Bat Conservation Trust, London.

EC Directive 92/43/EEC (The Habitats Directive) (1992). Annexes II and V.

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Joint Nature Conservation Committee (2003). *Herpetofauna Workers' Manual* JNCC
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Planning Policy Wales (2018).

Protection of Badgers Act (1992).

The Conservation of Habitats and Species Regulations 2017.

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

The Wildlife and Countryside Act 1981 (as amended).

Plate 1: Photograph of tall ruderal and Japanese knotweed



Plate 2: Photograph of northern boundary



Plate 3: Photograph of heavily vegetated stream



Plate 4: Photograph of southern boundary



Plate 5- photograph of northern boundary



Plate 6- photograph of tall ruderal vegetation



APPENDIX B – METHOD STATEMENT- REPTILES

1. All clearance will be supervised by a suitably experienced ecologist until such time as the ecologist states that direct supervision is not necessary.
2. The ecologist will be on call for the duration of clearance works.
3. Vegetation will be cleared from directly affected areas only and the area minimised wherever possible.
4. All vegetation and brash removal will preferentially be undertaken during the winter months i.e. between November and February inclusive.
5. If this is not possible, all areas to be cleared must be subject of a finger-tip search by an ecologist immediately prior to and during any clearance work; the ecologist should also be present while all post hole excavation (or other ground breaking should it be required) is being undertaken.
6. Should evidence of breeding birds, in particularly nests, be recorded, no clearance may be undertaken within 5m of any nest site until such time as the nest is vacated naturally.
7. No spraying of vegetation to be carried out. Vegetation will be maintained close to ground using repeated cutting only. 1x Hibernaculum will be added to an area of the garden remaining unaffected by the development. Materials already onsite (e.g., brash, logs) will be used.
8. Woody vegetation will be cleared (ONLY IF NECESSARY) to ground level using a chainsaw with all arisings stacked in unaffected areas NOT on areas of tall vegetation (over 300mm). Where necessary, stumps and roots will only be removed by machine (under ecological supervision) once the clearance is complete.
9. All woody vegetation will be checked by the ecologist prior to cutting for the presence of bird nests.
10. Vegetation will be cut in three phases. The first phase will reduce the vegetation height to 150mm; the second will reduce it to ≈50mm; the third phase will reduce the height to as close to ground level as possible.
11. All vegetation cutting will be directional. This ensures that any animals present will be pushed from the site into adjacent retained habitats.
12. After clearance, if the vegetation is allowed to regrow above 150mm high, it will be cut and raked as described above.
- 13. Where necessary, potential hibernacula (brash, log piles, stumps, roots etc) will only be cleared during the active season (March-October) while day time 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.**

14. If a bird's nest is observed on the site, the ecologist will assess it to determine whether or not it is active, the species concerned, the lifecycle state of any occupants and provide advice on next steps.

15. 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.

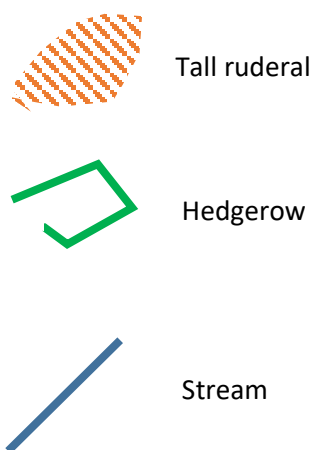
16. Habitat and the unlikely presence for other species (e.g. dormice, otter, great crested newts & other amphibians etc.) can be identified and avoided by following this method statement.

17. In the event that a European Protected Species is observed during the clearance,, all work will stop, and the ecologist consulted. It will be necessary to consult with Natural Resources Wales; further surveys and a development licence may be required before work can recommence.

If large numbers of reptiles are discovered, an offsite receptor area should be suggested to be agreed by the County Ecologist.

NOTE: should it be required, a Natural Resources Wales development licence for European Protected Species is likely to take up to 30 working days to be issued following submission

Appendix C- Habitat plan



Appendix D- Species list form the site

<i>Acer campestre</i>	maple
<i>Corylus avellana</i>	hazel
<i>Crataegus monogyna</i>	hawthorn
<i>Fraxinus excelsior</i>	ash
<i>Ilex aquifolium</i>	holly
<i>Ligustrum vulgare</i>	wild privet
<i>Quercus petraea</i>	oak
<i>Rubus fruticosus</i> agg	bramble
<i>Salix caprea</i>	goat willow
<i>Salix cinerea</i>	grey willow
<i>Sambucus nigra</i>	elder
<i>Plantago lanceolata</i>	ribwort plantain
<i>Plantago major</i>	greater plantain
<i>Prunella vulgaris</i>	self heal
<i>Ranunculus repens</i>	creeping buttercup
<i>Rumex acetosa</i>	common sorrel
<i>Rumex acetosella</i>	sheep's sorrel
<i>Rumex obtusifolius</i>	broad-leaved dock
<i>Senecio jacobaea</i>	common ragwort
<i>Stachys sylvatica</i>	hedge woundwort
<i>Taraxacum officinalis</i> agg	dandelion
<i>Torilis japonica</i>	upright hedge-parsley
<i>Trifolium dubium</i>	lesser trefoil
<i>Trifolium repens</i>	white clover
<i>Urtica dioica</i>	common nettle
<i>Vicia sativa</i>	common vetch

Appendix E- Plans including enhancements



