



**LAND AT PLYMOUTH HOUSES, TWYNYRODYN,
MERTHYR TYDFIL**

PRELIMINARY ECOLOGICAL APPRAISAL

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Land at Plymouth Houses, Twynyrodyn, Merthyr Tydfil

Ecological Appraisal

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NON-TECHNICAL SUMMARY

An ecological appraisal was undertaken of land at Plymouth Houses, Twynyrodyn, 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 a wholly urban area and is comprised of a field shelter, garden and associated infrastructure. There are a number of mature trees on the site.

Overall the site is of a generally low ecological value. Whilst it is possible that there may be a small population of reptiles within the site, it is likely to be low numbers only due to the managed nature of the majority of the site and its urban location.

The onsite trees are of low potential for roosting bats; however due to the size and nature of the trees, there is always the chance that there may be cavities that are not visible to surveyors. Any damage to the trees has either healed over or faces upwards and fills with water, all of which lowers the potential of the feature to support roosting bats. As such, it is thought that further surveys are not considered necessary providing that work is undertaken in line with a method statement and under ecological supervision.

All works to vegetation must be undertaken outside of the breeding bird season (March-September) unless the vegetation is checked by a suitably qualified ecologist for the presence of nests.

There are likely to be low populations of reptiles on the site. All works must be undertaken in line with the method statement appended to this report.

There is no evidence of any invasive or non-native species on the site. Should any non-native invasive species be found on site, all works will cease and an appropriate method statement from a qualified contractor will be sought.

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.

1.3 SITE DESCRIPTION

Photographs are at Appendix A.

The development site is located to the south west of Milbourne Terrace and its junction with Bro Dawel (Figures 1 & 2) in Merthyr Tydfil, South Wales.

The site extends to approximately 0.1ha and is the garden of Plymouth Houses. The habitats on the site are amenity grassland (lawn) surrounded by mature trees over a very sparse shrub layer. Please note, a number of trees have been removed over the years since the aerial view was taken, as such the aerial view does not give an exact picture of the site.

There is a metal (corrugated aluminium sheet) field shelter on the site used to house a pony. The site is bounded by close boarded fencing and block walls.

The site is located within a wholly urban environment surrounded by domestic houses, gardens and associated infrastructure.

Figure 1 - aerial view of the proposed development site (arrowed red)



Figure 2 – detailed view of the proposed development site (approximate extent outlined red)



1.4 PROPOSED DEVELOPMENT

Currently plans for the site are to erect four residential dwellings along with a new access. To facilitate the development, a number of trees will need to be removed. Please see page 5.

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) and certain species being given legal protection over and above that given by national legislation.

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

There are no known surveys of this site.

3 PROTECTED SITES

3.1 STATUTORILY DESIGNATED SITES

There are no statutorily designated sites designated for their bats on or adjacent to the proposed development site (within 150m). As a result, designated sites will not be mentioned further in this report.

There is a Site of Important for Nature Conservation (SINC) within 2km of the site, however, all work will be undertaken within the confines of the site and as a result will not impact any of the features the site is designated for. As such, this site will not be mentioned 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:

- Amenity grassland (garden)
- Scattered trees
- Building

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

- Bats
- Birds
- Reptiles

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 17th June 2019 by Beth Evans of BE Ecological Ltd.

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 Data Search

The South East Wales Biodiversity Records Centre (SEWBReC) were formerly requested to supply a Bat and Roof-nesting Birds (BARB) survey for the site. The survey to provide; bat records within a 2km buffer, roof nesting birds within 150m buffer plus a list of all Special Areas of Conservation (SAC) and sites of Special of Special Scientific Interest (SSSI) designated for bat species within a 10km site buffer.

4.3.2 Field survey:

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

4.4 CONSTRAINTS

There were no constraints to the survey.

4.5 RESULTS

4.5.1 Habitats

The following habitats were found on the site:

4.5.1.1 Building

The only building to be affected is a flimsy timber framed corrugated metal field shelter situated to the north of the site. This building has three elevations only and has been used to house a small pony. The building is extremely exposed to the elements and no evidence of bats or birds was found in this location.

The existing house will be retained in its entirety. The house is in good order and well maintained. The removal of the trees is a necessity due to the fact that they have been declared as dying. There is no additional lighting proposed for the site, the third party vegetation will be retained, so connectivity will still be maintained to the woodland beyond and there are no works proposed to the main house. As such it is thought that further survey effort is not considered necessary.

4.5.1.2 Amenity grassland

This habitat is found across the site. The grass has a relatively short sward and has been regularly maintained either by grazing or mowing until the current planning application was submitted.

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

4.5.1.3 Scattered trees

There are a number of scattered trees within the site boundary scheduled for removal, species include mature sycamores, cherry laurel and mature holly. Some of the trees have TPO's, however, the client has informed us that the tree report states that a number of these are not safe and should therefore be removed.

The trees to be removed will be discussed further in the bat section below.

There is a line of trees to the north east and the west of the site, however these are behind the walls and close board fencing and are not within the client's ownership or part of the application site. Observations from within the clients ground did not note any obvious bat roosts facing the site. The site will have no additional lighting and replanting will be undertaken.

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

THE ENVIRONMENT (WALES) ACT 2016

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.

4.5.2.2 Bats (trees only) – methodology

The tree inspections were undertaken in accordance with current best practice. Each tree or discrete group of trees was assessed from ground level to the canopy using close focusing binoculars and a high powered torch. Potential roost features (PRFs) likely to be used by bats (see list below of features of interest) were noted and, where possible, were inspected using a torch and endoscope. Evidence of bat usage was also recorded where present. Each tree was scored, as detailed below.

Features include:

- Knot holes;
- Rot holes;
- Woodpecker holes;
- Hazard beams (cracks/splits in major limbs);
- Other vertical or horizontal cracks and splits (e.g. frost cracks)
- Loose and partially detached bark;
- Tear outs
- Man-made holes;
- Cankers with cavities;
- Other hollows e.g. butt rots;
- Double leaders forming compression joints;
- Gaps between overlapping branches / stems;
- Gaps behind partially detached ivy with stem diameters in excess of 50mm;

In addition to features of interest, evidence of bats was searched for including:

- Live and dead bats;
- Bat droppings;
- Staining below PRFs;
- Characteristic scratches;
- Smell of bats and/or droppings; and
- Noise (squeaking) made by bats.

The trees inspected were graded according to table 1 below

Tree grade	Category description
Negligible	Negligible habitat features likely to be used by bats
Low	A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only some very limited roosting potential
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection and conditions
High	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and

	potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
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4.5.2.3 Bats-data search

There are 79 records of bats within 2km of the development site. Species include, common pipistrelle, soprano pipistrelle, brown long-eared bat, Daubentons bat, noctule bat, Chiroptera (unknown bat) and myotis sp. The majority of records refer to bats in flight.

The closes roosting record is within the roof of one of the neighbouring properties (56m from the development site). The roost refers to a single pipistrelle bat.

4.5.2.4 Bats-ground based tree assessment results

Tree number	Photograph	Description	Category
1		Beech, approximately 15m. No obvious features for roosting bats, relatively smooth barked	Low No further surveys necessary. Tree to be section felled. Tree to be section felled in accordance with method statement and ecological supervision
2		Beech, approximately 18m. No obvious features for roosting bats, relatively smooth barked	Low. No further surveys necessary. Tree to be section felled. Tree to be section felled in accordance with method statement and ecological supervision

3			Sycamore, approximately 18m. No obvious features for roosting bats, relatively smooth barked. Evidence of historic limb removal/pruning/damage, however the previous wounds show evidence of inclusion (repair) and as a result no cavities are present.	Low No further surveys necessary. Tree to be section felled. Tree to be section felled in accordance with method statement and ecological supervision
4			Sycamore, approximately 18m. No obvious features for roosting bats, relatively smooth barked. Evidence of historic limb removal/pruning/damage, however the previous wounds show evidence of inclusion (repair) and as a result no cavities are present	Low No further surveys necessary. Tree to be section felled in accordance with method statement and ecological supervision

5		Sycamore stump. Stump does not appear to be hollow. One small hole noted in right hand limb. Limb faces upwards and would quickly fill with water. Unlikely to support bats.	Low No further surveys necessary. Tree to be section felled in accordance with method statement and ecological supervision
6		Sycamore, approximately 18m. No obvious features for roosting bats, relatively smooth barked. Evidence of historic limb removal/pruning/damage, however the previous wounds show evidence of inclusion (repair) and as a result no cavities are present. There is a single snapped limb in the canopy. The snap is an upward snap and again likely to fill with water and not be suitable for roosting	Low No further surveys necessary. Tree to be section felled in accordance with method statement and ecological supervision

			bats.	
7			Laurel, approximately 3m, trunk, diameter approximately 0.2m, relatively thin stemmed, smooth barked, no evidence of bats or obvious potential roosting features.	Low- no further surveys required
8			Appears to be an old holly tree (may be non-native). Approximately 3m, trunk diameter approximately 0.2m. Smooth barked, thin stemmed, no obvious potential roosting features or signs of bats.	Low- no further surveys required

9				Oak, approximately 3m, diameter 0.2m. Smooth bark, thick stemmed, no obvious features suitable for bat use.	Low- no further surveys required
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Bats are likely to use the western and southern boundaries of the site for foraging and commuting. These areas are behind the close board fencing (outside of client's ownership) and will be retained in their entirety. Please note, close up pictures have features have not been provided due to their great height and location. Binoculars were used to observe the features present within the trees. There will be no additional lighting to the site.

4.5.2.5 Bats (buildings)

The onsite house is to be retained in its entirety. It was noted that comments from the local planning authority ecologist suggested that bats that may be roosting within the house may be affected by the onsite trees. It is considered that the trees are of a distance far enough from the house that, while they may be used as a foraging resource, they are unlikely to be the only form of shelter for any bats that might roost within the house, retained vegetation will continue to provide a foraging and commuting resource as well as suitable connective habitat.

The house is already lit across the whole north western elevation; there are also skylights in the roof of the extension between the house and the most likely flight line. The roof of the house (most likely roost areas) extends to the south east and the adjoining property; none of the potential roost spaces within these buildings will be lost to the development.

There is no roof void within the building. The roof is relatively well sealed, however, there are a small number of gaps beneath lifted slates. The client has stated that the application does not have anything to do with the main house and that the trees will need to be removed this winter even if planning consent is not granted.

There will be no additional lighting to the site and new planting will be undertaken throughout the development. In addition to this, the trees have been labelled as a hazard to public health.

Please note, the site is no way as sheltered as the aerial photography suggests. The site is light and airy. Trimming of the trees, and the falling of various trees during bad weather has resulted in a much less dense site that the aerial photography suggests.



Figure 3- distance of canopy from house: red line= approximately 8m, yellow line= approximately 26m; blue line= approximately 15m

The onsite building to be affected (metal field shelter) is extremely exposed to the elements and is unlikely to provide the stable conditions required for day roosting bats. Whilst it is possible that bats may use this structure for night roosting, there are no known roosts of the species (horseshoe bats) that it is likely to be suitable for. Besides the above, all aspects and areas of the building were able to be inspected and no evidence of any bats was found throughout.

4.5.2.6 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.

4.5.2.7 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.

It should be assumed that low numbers of reptiles will use the site. The number of reptiles likely to be present will be lowered due to high levels of disturbance, due to the fact that there are solid boundaries surrounding the site and due to the fact the grass has been grazed or mown up until recently. A method statement will be followed and reptiles allowed to disperse into neighbouring habitat..

4.5.2.8 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.

4.5.2.9 *Breeding birds- data search*

There are 18 records of birds within 2km of the development site. Species include jackdaw, magpie, house sparrow, wren, herring gull, pied wagtail, great tit, starling and swift.

4.5.2.10 *Breeding birds- results*

There was no evidence of breeding birds within the building or the trees on the site at the time of writing. It should be assumed that breeding birds will utilise the boundaries and trees on the site. However, at the time of survey, no nests were observed within any of the onsite vegetation. Any tree removal or pruning must be undertaken outside of the breeding bird season (March-September) unless nests are found to be absent by a suitably qualified ecologist.

4.5.2.11 *Non-native invasive species*

There was no evidence of non-native invasive species on the site.

4.5.3 **Other features**

None.

5 **CONCLUSION**

Overall the site is of a generally moderate ecological value. Whilst it is possible that there may be a small population of reptiles within the site, it is likely to be low numbers only due to the managed nature of the majority of the site and its urban location.

It is BE Ecological Ltds opinion that the onsite trees are likely to be of low potential for roosting bats, however due to the size and nature of the trees, there is always the chance that there may be cavities that are not visible to surveyors. The damage to the trees has either healed over or faces upwards and fills with water, all of which lowers the potential of the feature to support roosting bats. As such, it is thought that further surveys are not considered necessary providing that work is undertaken in line with a method statement and ecological supervision. The Local Planning Authority ecologist has stated that in their view that the trees on site are of moderate potential. As such, in order to satisfy this opinion, the trees will be the subject of a climbing inspection prior to felling. All potential roosting features will be inspected by a licensed ecologist via rope access.

All works to vegetation must be undertaken outside of the breeding bird season (March- September) unless the vegetation is checked by a suitably qualified ecologist for the presence of nests.

6 RECOMMENDATIONS

A method statement to safeguard the unlikely presence of roosting bats in trees will be required (appended to this report). The trees will be climbed and inspected prior to felling.

A method statement to safeguard the presence of a small number of reptiles.

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.

The client has informed that there will be no additional lighting to the site.

Enhancements should be included within the final design. A Schwegler 1SP Sparrow Terrace will be mounted on the western elevation of plots 1 and 3. A Schwegler 1FR bat tube will be installed on the western elevation of plot 2.

7 REFERENCES

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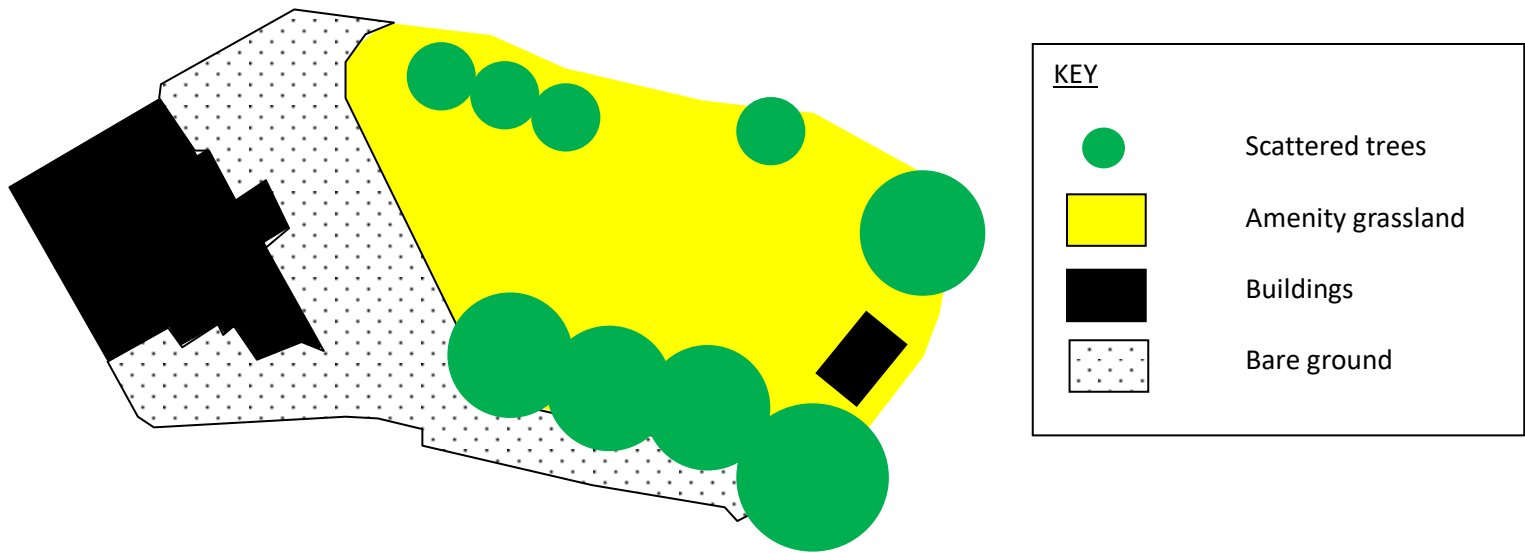
The Conservation of Habitats and Species Regulations 2017.

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

The Wildlife and Countryside Act 1981 (as amended).

Welsh Assembly Government (2007).

APPENDIX A- Existing site plan



APPENDIX A- SITE PHOTOGRAPHS

Plate 1- photograph of amenity grassland



Plate 2- photograph of standard trees beyond close board fencing



Plate 3- photograph of field shelter



Plate 4- Photograph of boundary wall.



Plate 5- photograph of the north west elevation of the existing house



Plate 6- photograph of north east elevation



APPENDIX B – METHOD STATEMENT- REPTILES& NESTING BIRD

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. Should gaps not be present in any fence line, gaps will be created prior to any cutting to allow reptiles to disperse from the site.
11. 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.
12. All vegetation cutting will be directional as detailed in Figure 3 below. This ensures that any animals present will be pushed from the site into adjacent retained habitats.



13. After clearance, if the vegetation is allowed to regrow above 150mm high, it will be cut and raked as described above.

14. 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.

15. 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.

16. 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 (please see reptile receptor area)

17. 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.

18. 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.

Please note, should large numbers of reptiles be observed, an offsite receptor site will need to be agreed with the Local Planning Authority 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 – METHOD STATEMENT- BATS IN TREES

SECTION FELLING –

Identify features suitable for bat use and inspect them via rope access and endoscopes.

Inspect for evidence of bats/use by bats where safe and practicable to do so.

Any parts of the tree containing bat roosting potential e.g. cavities in the trunk or splits in branches must be roped, sectioned and gently lowered to the ground, maintaining their current orientation as far as possible.

Section felling/pruning cuts must avoid cross cutting in proximity to cavities/crevices/splits etc. Only cut through solid wood. In most cases bats prefer to move & roost upwards from the point of entry. Therefore the section above holes/splits is the most critical and most likely to be used by bats.

Split limbs that are under tension may need to be wedged open to prevent their closure when pressure is released. (to avoid crushing any hidden bats).

Any sections containing potential roost sites should be left in a safe location, close to the felled tree; for a minimum of 24hours frost free weather and more closely inspected before further works & disposal

Make sure that all potential points of egress from the sectioned timber are left open, to ensure any bats hidden within can escape during the night.

SOFT FELLING –

Some of the trees may be rotten. If this is the case, the arborist may recommend soft felling.

soft felling techniques are recommended for this kind of tree; the object of which is to bring the tree down in a more controlled manner to minimise any damage to potential roost sites/ features whilst allowing a more thorough inspection of the tree on the ground, before section cutting after a minimum of 24hours of frost free weather.

Different methods can be used to help cushion the impact of the tree hitting the ground. (Safety comes first).

For example:

- utilising the crown of the tree to cushion the fall
- felling the tree onto a pile of brash.
- using a winch to control the direction and rate of fall.
- using an excavator to push over small trees.

If at any point bats or evidence of bats are found, all works must cease, and NRW notified. Further survey effort and/or a European Protected Species Licence may be required prior to works recommencing.

