

Site Assessment Survey

PROJECT TITLE: Proposed Residential Development

SITE ADDRESS: Hylton Terrace, Bedlinog, Merthyr Tydfil, CF46 6TY

DATE: 5th July 2024

The proposed development site encompasses a parcel of land to the north east of Hylton Terrace, adjacent to Bedlinog Community Primary School, within Bedlinog (grid reference: SO 09148 01312). The site encompasses a steeply sloping banking with an area of approximately 0.1 Ha. It is proposed to create four semi detached properties with parking and garden areas within the site boundary.

An aerial image showing the development site location is provided in Appendix 1 at the end of this report. This report focuses on the land and habitats within the proposed development site boundary only.

Site Location

The development site is located to the west of the town of Bedlinog. The site is a parcel of land that slopes steeply upwards from Commercial Street. Commercial Street is located along the south west boundary of the site and the site rises up towards the north east where it meets a unnamed single lane. Immediately south east of the site is Bedlinog Community Primary School. North east of the site runs a tarmac, single lane road for Hylton Terrace houses and north west a number of terraced properties extend along Commercial Street.

Further south of the site lies woodland, scrub and open grassland and bracken. The Taff Bargoed is located approximately 90 m south of the site within the woodland area. The land then extends up over a valley hill towards a large area of woodland approximately 1.2 km away, near Merthyr Vale. Further east of the Primary School lies a small area of scrub and trees and a residential area along the B4255. Approximately 500 m east is the Nant Llwynog waterbody which connects to the Taff Bargoed further south. An area of tussocky grassland and bracken scrub lies north of the access lane for Hylton Terrace. Where the mountain extends upwards Bedw Road leads further north to residential houses within Bedlinog. Grassland and a patchwork of fields extends onto the mountain. Hylton Terrace and Maes Y Bedw road runs west through the valley following the Taff Bargoed approximately 720 m away towards a lake approximately 0.4 Ha in area.

Desktop Study

A data search was undertaken via Aderyn (LERC Reference: 0234-929) for the proposed development site and surrounding area. A 1 km buffer zone was searched and records returned within 500 m of site are noted below:

- Badger (*Meles meles*) - closest record being approximately 190 m southeast of the site.
- Otter (*Lutra lutra*)- closest record approximately 350 m south of the site.
- Common lizard (*Zootoca vivipara*)- closest record approximately 200 m north of the site.
- Common toad (*Bufo bufo*)- closest record approximately 350 m south of the site.
- Smooth newt (*Lissotriton helveticus*) - closest record being 350 m south of the site.
- Common frog (*Rana temporaria*) - closest record approximately 40 m east of the site.
- Hedgehog (*Erinaceus europaeus*) - closest record approximately 40 m east of the site.
- Bluebell (*Hyacinthoides non-scripta*)- closest record being 350 m south of the site.
- 8 records of Invasive Non-Native Plant Species (INNPS) were returned within 500 m of the site. Species include: Monkey flower (*Mimulus guttatus*), Himalayan cotoneaster (*Cotoneaster simonsii*), Himalayan honeysuckle (*Leycesteria formosa*), New Zealand willowherb (*Epilobium brunnescens*), Nuttall's waterweed (*Elodea nuttallii*), Snowberry (*Symphoricarpos albus*), Spanish bluebell (*Hyacinthoides hispanica*) and Wall cotoneaster (*Cotoneaster horizontalis*)- closest record being Monkey flower approximately 100 m south of the site.
- 5 records of bat commuting and foraging activity were returned within 500 m of the site for species: Common pipistrelle (*Pipistrellus pipistrellus*), Myotis species (*Myotis sp.*), Noctule (*Nyctalus noctula*), Soprano pipistrelle (*Pipistrellus pygmaeus*)- closest record being a Pipistrelle species 40 m east.
- 2 records of bat roosts were returned within 500 m of the site. Both were Common pipistrelle bat roosts approximately 190 m east and 420 m southeast.
- 10 records of invertebrate species were returned within 500 m of the site. Species include: Grayling (*Hipparchia semele*), Broom moth (*Ceramica pisi*), Buff ermine (*Spilosoma lutea*), Cinnabar (*Tyria jacobaeae*), Dingy skipper (*Erynnis tages*), Ear moth (*Amphipoea oculatea*), Ghost moth (*Hepialus humuli*), Shaded broad-bar (*Scotopteryx chenopodiata*), Wall moth (*Lasiommata megera*), Small heath (*Coenonympha pamphilus*)- closest being the Grayling approximately 250 m west of the site.

- Bird species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include: Dunnock (*Prunella modularis*), House sparrow (*Passer domesticus*), Pied flycatcher (*Ficedula hypoleuca*), Reed bunting (*Emberiza schoeniclus*), Spotted flycatcher (*Muscicapa striata*), Cuckoo (*Cuculus canorus*), Herring gull (*Larus argentatus*), Wood warbler (*Phylloscopus sibilatrix*).
- Birds: Species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) include: Barn owl (*Tyto alba*), Fieldfare (*Turdus pilaris*), Red kite (*Milvus milvus*), Redwing (*Turdus iliacus*).

Records of note returned for the rest of the buffer zone are detailed below:

- 3 records of Slow worm (*Anguis fragilis*) were returned all approximately 670 m southeast.
- Bird species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include: Black-headed gull (*Chroicocephalus ridibundus*), Grey partridge (*Perdix perdix*), Kestrel (*Falco tinnunculus*), Lesser redpoll (*Acanthis cabaret*), Skylark (*Alauda arvensis*), Tree pipit (*Anthus trivialis*), Yellowhammer (*Emberiza citrinella*).
- Birds: Species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) include: Goshawk (*Accipiter gentilis*), Peregrine (*Falco peregrinus*), Kingfisher (*Alcedo atthis*).

Protected Sites

The data search also considered statutory and non-statutory protected sites within proximity to the development site.

- There are no Statutory Protected Sites within 2 km of the site.
- There are no Statutory Protected Sites for bats within 10 km of the site.
- There are 8 Wildlife Sites of Interest for Nature Conservation (SINCs) within 1 km of the site. Cwm Bargoed SINC is the closest such site and lies approximately 20 m south of the development site.
- There are 14 areas of Ancient Semi-Natural Woodland (ASNW) within 1 km of the site. The closest being approximately 20 m south of the site, situated on the opposite side of Hylton Terrace road. This ASNW fills the same area as the Cwm Bargoed SINC. Ancient Semi Natural Woodlands area broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400

years. The ground vegetation will reflect the naturalness of these woodlands and will frequently feature species which provide clear indication of long and continued woodland cover. They will have been woodland for centuries and contribute substantially to our natural and cultural heritage.

Survey Constraints

The site visit was completed during March which is a sub optimal time of year to undertake habitat assessments. However, it was still possible to draw broad conclusions on habitat types within the site boundary.

Given the dense scrub within the site boundary, access to the lower, east areas of the site was difficult. However good vantage points from less-dense areas of vegetation within the site were gained.

The optimal time period to carry out ground-based visual assessments of trees for bat roosting potential is between December to March inclusive, when broad-leaved trees are devoid of leaves and features are more readily visible. It should be noted that ground based assessments are inherently constrained and potential roosting features present upon the skyward facing surfaces of limbs and branches will most likely be missed.

Site Visit

A walkover survey of the site was completed on the **7th March 2024**. Photographs of the site are provided in Appendix 2 of this report. A habitat map is provided in Appendix 3.

The site comprises of a square shaped area of steep banking adjacent to Bedlinog Community Primary School. The School **metal fence** line forms the south eastern and south boundary of the site. A **stone wall** lines the west of the site with some ivy and periwinkle growing around it. The site slopes steeply from Commercial Street to the south west up towards the north east. A small **rubbish pile** is present at the top of slope, along the north eastern boundary of site.

A strip of **semi-improved grassland** lines the tarmac, unnamed, single lane along the north east of the site, at the top of the banking. Species in this area include: Yorkshire fog, Periwinkle, Cut-leaved crane's bill, Clover, ribwort plantain and Lesser celandine. A small area of **tussocky semi-improved grassland** can also be found further down the banking on the west of the site with species including: Yorkshire fog, Cut-leaved crane's bill, Clover, Ribwort plantain and Lesser celandine, Fescue sp., Dandelion sp., Barren strawberry, Crosswort, Wood avens, Calamint, Harts tongue fern, Rosebay willow herb, and Square stalked willow herb.

The majority of the north area of the site was dominated by **bracken scrub** with some **scattered woody scrub** though this area. Species include: hawthorn, willow sp., butterfly bush, bramble and honeysuckle. As you ascend down the slope towards the centre of the site **bramble scrub** becomes dominant. The remainder of the site is considered to be **broadleaved woodland** with species including: Ash, Willow sp., Hawthorn and an understory of bramble and Dog rose. The woodland area extends from the centre of the site down to the south along Commercial Street. The woodland is considered to be young and naturally established after historic clearance of the site.

A tree in the southeast corner of the site (approximate grid reference: SO 09142 01298) was noted to have bat roost suitability with 1 potential roost feature (PRF) for bats present in its main trunk approximately 2 m high.

Potential Development Impacts

It is expected that the majority of the site will need to be cleared of vegetation to allow for the building of four residential properties and associated hardstanding and garden space. This includes, trees, scrub and a small area of semi-improved grassland.

- The proposed development will likely result in the loss of broadleaved woodland, scrub and semi improved grassland. The habitats within the site are considered to be of moderate value for biodiversity as the woodland areas have established in the recent past as opposed to being well established woodland.
- A common lizard record was returned in the data search approximately 200 m north with good connectivity to the site. The woodland, scrub and stone walling are considered suitable for reptile and amphibian hibernation use. The grassland and scrub edges are suitable for basking and foraging use by reptile and amphibian species.
- Reptile surveys are not recommended in this instance due to the dense scrub and woodland making access to large areas of the site difficult, instead it is proposed to assume the presence of reptile species within the site and provide appropriate mitigation measures as part of the development.
- No evidence of the presence of badger were noted within the site such as latrines, mammal paths or snagged hair. There are records of badger presence approximately 190 m to the south east. The presence of a sett within or directly adjacent to the site is considered unlikely, however badger are likely to use the site for foraging purposes at least on occasion throughout the year. The potential presence of badger within the site cannot be ruled out.
- There are no dormouse records within 1 km of the development site. The woodland and scrub habitat within the site boundary are suitable for dormouse use. However this areas is small in size and is highly unlikely to support a population of dormouse. The site does have some habitat connectivity to areas of woodland in the wider landscape

i.e the riparian corridor of Taff Bargoed. However a road does separate the site from this adjacent habitat. While roads do not deter dormouse crossing, it does make movement across them less likely. Given the lack of dormouse records in the area and small area of habitat suitable for use by the species in the site, the presence of dormouse is considered to be unlikely.

- No evidence of the presence of otter was found within the site boundary. No mammal paths were noted into or out of the site however the dense scrub could provide some cover for this species. The data search returned a record for otter approximately 350 m south of the site. There is some habitat connectivity to the site from the Taff Bargoed watercourse but this is severed by Commercial Street along the south west of the site. The potential presence of otter within the site cannot be ruled out.
- The trees within the site boundary were subject to a ground based visual assessment for bat roosting presence. Direct access to all trees on site was hampered by the dense scrub understory, however a broad visual inspection was possible. All trees on site appeared to be mature but young in age. The trunks of the vast majority of trees were all smooth with no gaps and cracks visible from exterior vantage points. One tree was identified during the survey visit as having bat roost suitability. A callous roll approximately 2 m high, facing southeast was present within the trunk of Tree 1 (T1) (approximate grid reference: SO 09142 01298).
- The habitats within the site boundary are considered suitable for use by bat species for foraging and commuting. Woodland, scrub and open grassland is present to the south west and north east of the site, creating good habitat connectivity. Given the overall small size of the development site the woodland and scrub are considered likely to be used by small numbers of common bat species. The loss of this habitat, providing suitable mitigation measures i.e low level lighting, is not considered to be significant for local bat populations. Therefore no further survey work is recommended in this instance.
- The scrub and woodland habitat within the site boundary are considered suitable for nesting bird use. A precautionary approach to the removal of habitat with bird nesting potential will be required. Compensation measures for the loss of bird foraging and nesting habitat will be required.
- Hedgehog is considered likely to be present within the site at least on an infrequent basis for foraging and overwintering. Rubbish piles in the north of the site, grass vegetation and scrub on site provide suitable habitat for hedgehog to frequent. Hedgehog is considered to be a species of principal importance, for the purpose of maintaining and enhancing biodiversity in relation to Wales. As such consideration must be given to this species in any plans proposed for the site.

- Based on the Invertebrate Habitat Potential Assessment (IHPA) the site, in its current state, is considered to have unsuitable habitats to support species of invertebrate and the IHP does not meet the threshold for 'further action' based on the outcomes outlined in the table in Appendix 4. A summary of the site assessment can be found in Appendix 4 of this report.
- Careful consideration must be given to the use of lighting within the development site, as this can adversely affect the activity of a variety of fauna, particularly foraging bats, nesting birds and invertebrates. Light spillage into adjacent semi-natural habitats must be avoided and brightness kept to the lowest permissible level in the areas adjacent to such habitats.

Legislation

Amphibian and Reptiles

Reptiles such as the Slow-worm, Common lizard, Adder and Grass snake are protected under the Wildlife and Countryside Act 1981 (as amended). They are protected from killing, injuring and sale. They are protected from killing, injuring and sale. They are also listed in section 6 of The Environment (Wales) Act 2016.

The four widespread species of amphibian i.e. the Smooth and Palmate newts, Common frog and Common toad, are protected under the Wildlife and Countryside Act 1981 (as amended) by Section 9(5) of the Wildlife and Countryside Act 1981. This section prohibits sale of these species. Common toad is listed in section 6 of The Environment (Wales) Act 2016.

Reptiles prefer a mosaic of habitats with diverse vegetation structure creating open areas and nearby cover to provide protection from predators and the elements. Common amphibian species require still pools of water for breeding purposes and damp conditions with foraging habitat during their terrestrial life stages.

Badger

Badgers are protected under the Protection of Badgers Act 1992. In summary they are protected from:

- Taking, killing or injuring;
- Cruelty;
- Interfering with a badger sett;
- The selling and possession of badgers;

- Marking or ringing.

Badgers are also listed on schedule 6 of the Wildlife and Countryside Act 1981 as amended.

Badgers tend to have a variety of setts with different uses and functions within the territory for the family unit. In general there is usually a main sett which the family will use the most. There are then annex, subsidiary and or outlier setts which depending on family structures and environmental pressures may be used at different times of the year. As female Badgers tend to have their cubs over winter the disturbance and damage of badger setts is prohibited between December and June inclusive. NRW are the licensing body for any actions which may contravene the above legislation.

Badgers favour a dry sloping site for digging their setts preferably within woodland or even under a large hedgerow bank. Badgers are creatures of habit and tend to follow regular pathways between their setts and foraging grounds.

Bats

All British bats are a European protected species and are protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Schedule 5 of The Wildlife and Countryside Act (1981) also protects all species of British bat and their roosting locations. British bats are protected from intentional or reckless disturbance and or obstruction of their roosting places. Barbastelle, Bechstein, Noctule, Brown long-eared, Common pipistrelle, Soprano pipistrelle, Greater horseshoe and Lesser horseshoe bats are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Birds

All breeding birds are protected under schedule 1 of the Wildlife and Countryside Act (1981) as amended. Under this Act it is an offence to:

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

Enhanced protection is afforded to species listed on Schedule 1 of the Act, this additional protection makes it an offence to:

- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

Otters

The Otter is a European protected species and is protected under the Conservation of Habitats and Species Regulations 2017. In summary, they are protected from:

- Deliberate capture, killing and injuring,
- Deliberate disturbance of a breeding site or resting place,
- Damage or destruction of a breeding site or resting place.

Otter are listed on schedule 5 of The Wildlife & Countryside Act 1981 which protects them from intentional or reckless disturbance or obstruction when using a structure or place for shelter and / or protection. It is also an offence to sell, offer or expose for sale an otter. Otter is listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Otters tend to prefer secluded locations for their holts to help prevent them being disturbed by other animals. It is accepted that otters can travel long distances from river corridors to find acceptable holt sites.

Other Mammals

Other notable mammal species listed under S7 of the Environment (Wales) Act 2016 which returned records within 1 km include Hedgehog (approximately 70 m south) and Polecat (approximately 580 m east)

Conclusions and Recommendations

Broad recommendations are made below to help inform the design process. Discussion has been undertaken with the design team regarding the need for suitable ecological mitigation, compensation and enhancement measures to be demonstrated as part as the development proposals. Given the engineering required to achieve the development proposals it is likely that the vast majority of habitats within the site boundary will be lost . Our general recommendations are:

- Tree 1 (T1) (approximate grid reference: SO 09142 01298) will be lost as part of the development proposals. An attempt to undertake an endoscope survey of the potential

roost feature was made on the 3rd July 2024. The dense understory surrounding the tree made it impossible to access the tree at this time. Given the transitory nature of bats and the limited shelf life of surveys, updated surveys of the tree are likely to be required in the future. As the development proposals are outline and given the difficulties of accessing the tree, it is recommended that a suitably worded condition is attached to any consent the planning department may be minded to grant. The condition could request an aerial inspection of the tree prior to any vegetation clearance work taking place within the site boundary. The results of the survey must be reported to the planning authority for agreement on a suitable way forward.

- The habitats within the site boundary are considered suitable for use by common reptile species. A reptile mitigation strategy is required to support any development works. The reptile mitigation strategy must include, but not be limited to:
 - o Sensitive timings of works
 - o A phased cut of suitable vegetation to naturally encourage reptiles to move away
 - o Supervised destructive searching where necessary
 - o Enhancement measures within any development plans to allow reptiles to recolonise the site.
- The scrub and woodland on site have the potential for use by nesting birds. Any tree or scrub removal must be completed outside of nesting bird season (March to August inclusive). If this is not achievable an ecologist must inspect any vegetation with the potential for birds to be present for active nests prior to removal works beginning. If an active nest is identified a buffer zone of at least 5 m around the nest must be observed until chicks have fledged. Only then can vegetation be removed. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.
- Ideally all excavations within the site will be securely covered over if left unattended. Any excavations that have a depth in excess of 0.5 m and that are left open overnight will have a means of escape let for any mammals (e.g. hedgehog) that may fall into them. A wooden board or equivalent will be left from the bottom to the top of the hole at an angle no steeper than 45°. This will allow any mammal to escape and avoid increased stress from being trapped.
- A root protection zone (RPZ) must be implemented around any retained trees which lie adjacent to or within the boundary of the proposed development site. British Standard BS 5837, *Trees in relation to design, demolition and construction - Recommendations* will be followed. Measures will include clear marking of the RPZ to guarantee no machinery is used or digging carried out in that area. This will ensure that there is no detrimental impact to the trees and the flora or fauna it supports.

- A pre inspection check of all scrub habitat is recommended immediately prior to vegetation clearance works. Whilst the presence of badger and otter within the site boundary is considered unlikely it cannot be completely ruled out. A pre inspection check of vegetation immediately prior to clearance work will check for any large mammal signs.
- Artificial lighting has the potential to affect a wide range of nocturnal species. All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and Artificial Lighting at Night in the UK document <https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released>
- Plan AL(00)003 by ArdenKitt Architects proposes that the north eastern half of the development site is to be retained as a wildlife corridor. The land will require a native species only planting scheme and must aim to create broadleaf woodland in the long term. A landscape maintenance scheme of 5 years will be required to ensure all planting establishes however long term maintenance is proposed to be very low key to allow woodland to naturally mature.

Biodiversity Enhancements & Green Infrastructure

The Environment Act (Wales) 2016 places a duty on competent authorities and councils to conserve and enhance biodiversity. Chapter 6 of Planning Policy Wales (version 12), paragraph 6.2.5 requires Green Infrastructure considerations to be included with all planning applications. Development proposals must detail how green infrastructure considerations which are proportionate to the scale and nature of the plans are being provided.

Green infrastructure currently within the site takes the form of woodland, grassland and scrub. Detailed development plans are not available at present however general considerations to green infrastructure to be considered as part for the development include:

- Paragraph 6.4.42 of Planning Policy Wales (version 12) requires that at least 3 trees of a similar type and compensatory size are planted for every tree lost. It is unlikely that replacement planting can be achieved within the site boundary. Discussions with the Local Planning Authority regarding off site compensation should be explored.
- Sensitive lighting to prevent light spill into adjacent natural habitat. Light spill could affect how wildlife move through habitat within the site and also the habitats adjacent to the site.

The Environment Act (Wales) 2016 places a duty on competent authorities such as Merthyr Tydfil County Borough Council to conserve and enhance biodiversity. The below bullet points are some simple measures that could be achieved to enhance the biodiversity of the site. All mitigation and enhancement measures must be shown on architectural drawings.

- Two Vivara Pro Woodstone House Sparrow Nest Boxes will be provided on the north west elevation of the building. The boxes will be installed at first floor height. Three Ibstock Eco-habitat for Swift Boxes will be installed on the north west elevation of the building. The bat boxes will be installed as high as possible near to the roof line. An ecologist will check the boxes once installed and provide written confirmation to the owner and Local Planning Authority that they have been installed correctly.
- Four Integrated Crevice Bat Boxes will be provided on the south east elevation of the building. The bat boxes will be installed as high as possible near to the roof line. The access gaps will be left unobstructed to ensure bat access. An ecologist will check the boxes once installed and provide written confirmation to the owner and Local Planning Authority that they have been installed correctly.
- The use of native species within the soft landscaping works on the site. Suitable long term management of soft landscaping also helps ensure spaces are useful to wildlife. Consideration to management of grassland within the site to create a longer and shorter areas of vegetation or the provision of hedgerow or scrub planting would be welcomed around the edges of the site.
- All fencing across the site must be hedgehog friendly in design. A friendly design is considered to allow passage of small animals across the site. Close board or mesh fencing should provide either a continuous gap between the bottom of the fence and ground of approximately 13cm or 13cm by 13cm gaps cut every 3m along fencing.
- A reptile hibernacula can be created within the grounds of the development site using rubble and brash from on site clearance works. The hibernacula must at least measure 0.5m in depth, 2m wide and 2m long each. It will be made by creating layers of wood, brash, rubble and soil. The hibernacula will create a mound approximately 0.3m above ground level which will be covered over with soil and seeded using a native seed mix. A diagram of a Reptile Hibernacula is located in the appendix for reference.
- The creation of a butterfly bank within the site boundary could be created to encourage invertebrate populations.

Best Wishes

**Beth Lewis
Ecologist
Ecological Services Ltd**

Signed: Beth Lewis Date: July 2024

Appendix 1 – Development Site Location



Appendix 2 – Site Photographs



Photograph 1. North boundary of site. Semi improved grassland and bracken scrub along top of banking.



Photograph 2. North area of site. Bracken scrub at top of banking with tree line along middle of site.



Photograph 3. East boundary wall. With rubbish pile present near top of banking.



Photograph 4. Middle section of site. West view. Bracken scrub and grassland area.



Photograph 5. Middle section of site. Scattered tree line with bramble scrub understory.



Photograph 6. South section of site. East view. Bramble scrub and scattered trees along bottom of banking.



Photograph 7. South boundary of site. Bottom of banking.
Scattered trees and bramble scrub understory.



Photograph 8. Land north of the site. Access road and
tussocky grassland adjacent to top of banking.



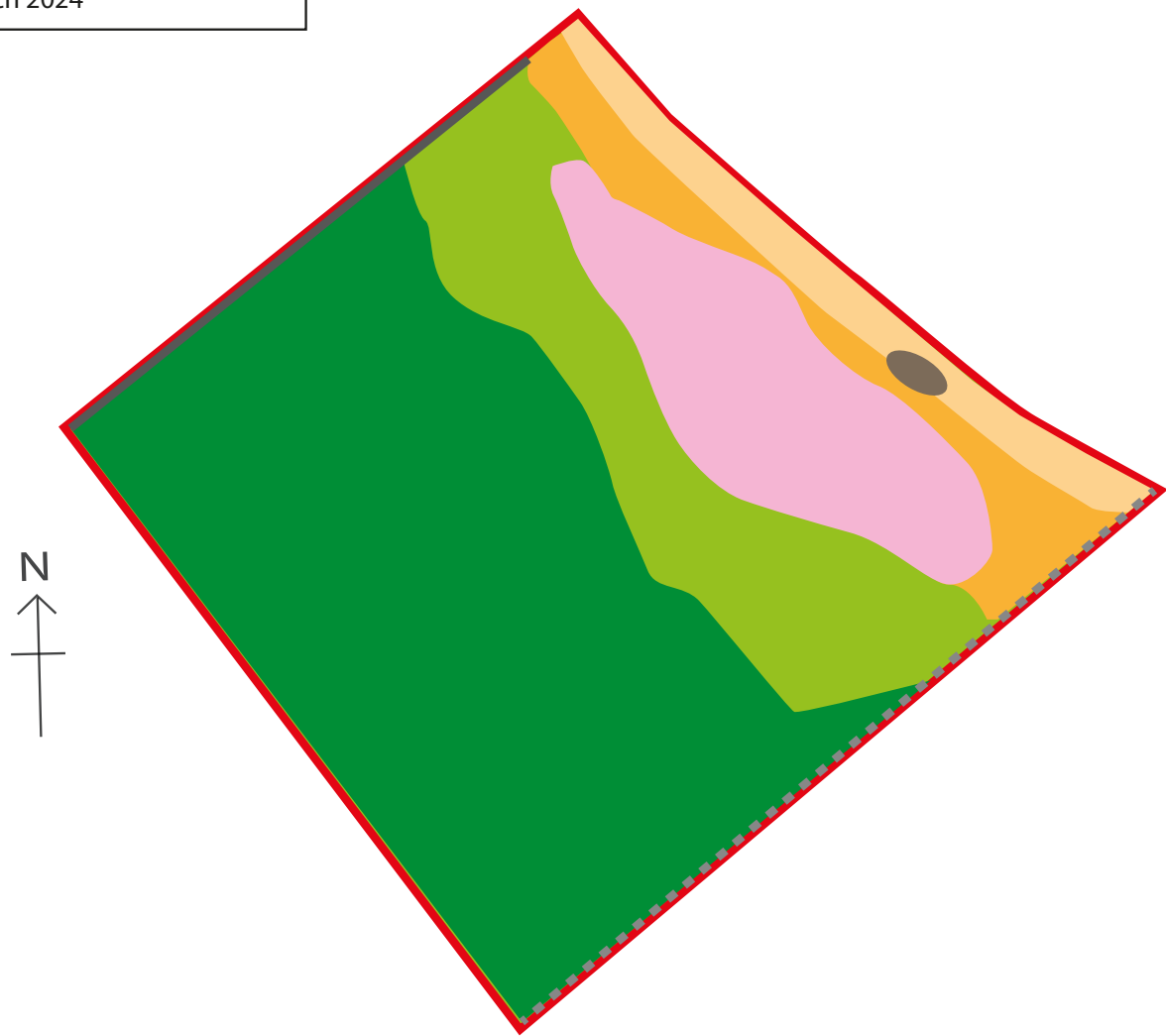
Photograph 9. T1. Tree with bat roost suitability. Callous roll
potential roost feature (PRF).

Appendix 3 - Habitat Map

HYLTON TERRACE, BEDLINOG

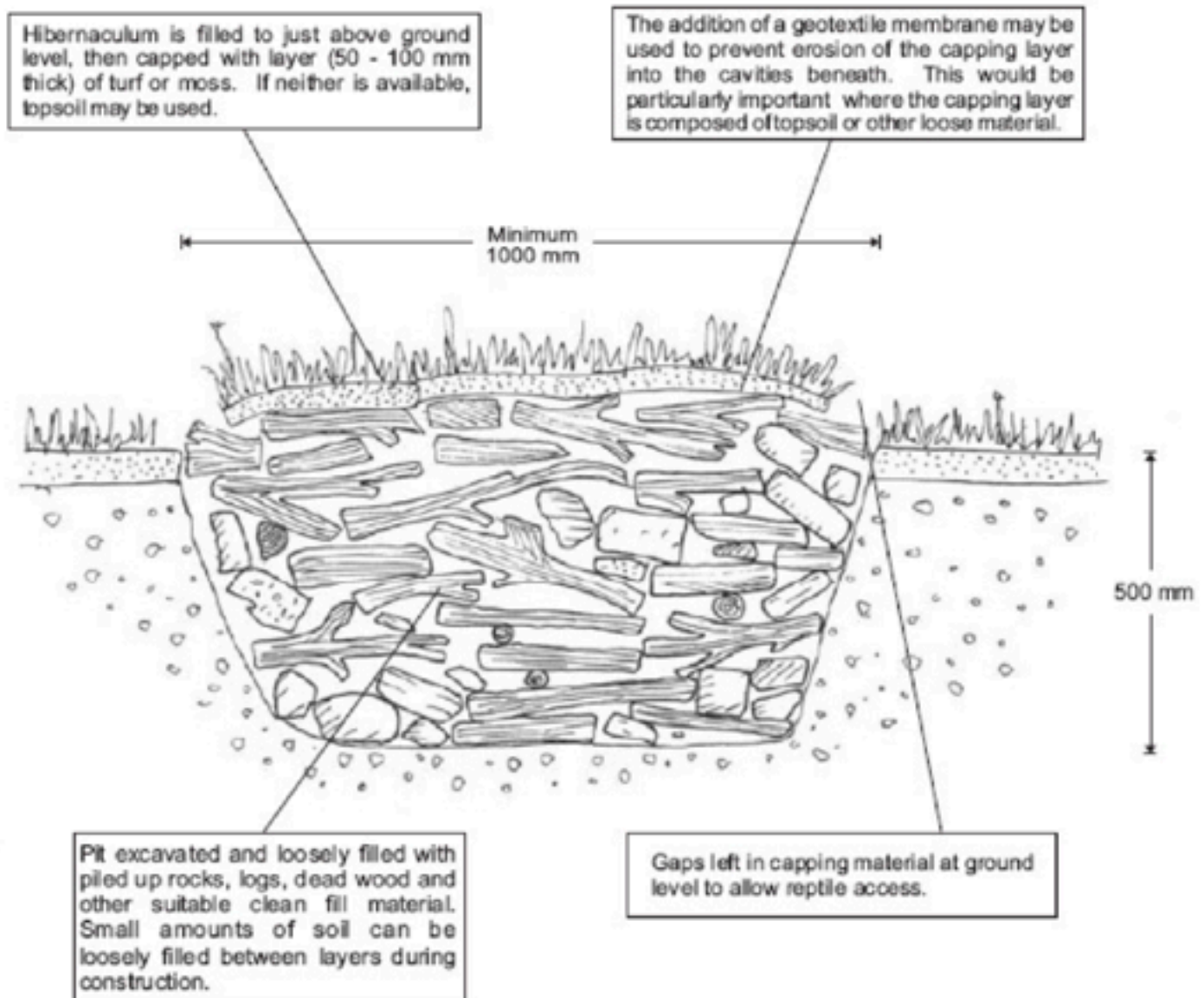
Habitat Map

March 2024



	Broadleaved Woodland		Rubbish Pile
	Bramble Scrub		Stone Wall
	Bracken Scrub		Metal Fence
	Tussocky Semi Improved Grassland		Site Boundary
	Semi Improved Grassland		

Appendix 4 - Reptile Hibernacula Design



Source: Highways Agency (2005) *Design Manual for Roads and Bridges: Volume 10 Section 4 Part 7 – Nature Conservation Advice in Relation to Roads and Reptiles*

Appendix 4 - Invertebrate Habitat Assessment Table

Table 1. Summary of the 11 habitat elements assessed by IHP survey.

Habitat element	No.	Comments
Decaying Wood	HE1	In all its forms; from decaying wood on/in large trees to woodland floor debris
Rotational Management	HE2	Planned or serendipitous; and whether for nature conservation or other purposes
Nectar Resources	HE3	As a proxy for nectar- and pollen resources, as assessment of pollen resources is impracticable on a walk-through survey
Wet Substrates	HE4	Including marginal, marshy, muddy and seasonally inundated habitats, as well as flushes
Open Water Habitats	HE5	The open water element of rivers, lakes, ponds, streams, ditches, etc.
Structural Patchwork	HE6	Habitat mosaics, including, but by no means restricted to open mosaic habitats on previously developed land
Still Air (S)	HE7	Suntraps and still-air microclimates in open situations, the term 'still air' is used in preference to 'wind breaks' as many rigid wind breaks are likely to produce turbulent air in their lee
Still Air (H)	HE8	Humid still-air microclimates in sheltered and shaded situations
Connectivity	HE9	Landscape-scale connectivity between the site and external habitats
Ecodines	HE10	A graded transition between two or more broad habitats
Bare Earth	HE11	Unshaded bare or sparsely vegetated well-drained substrate, regardless of soil type

Habitat Element	Grade
Decaying Wood – H1	D - Minor
Rotational Management – H2	E – Negligible/Absent
Nectar Resources – H3	D - Minor
Wet Substrates – H4	E – Negligible/Absent
Other Water Habitats – H5	E – Negligible/Absent
Structural Patchwork – H6	D - Minor
Still Air (S) – H7	D - Minor
Still Air (H) – H8	E – Negligible/Absent
Connectivity – H9	C - Moderate
Ecoclines – H10	D - Minor
Bare Earth – H11	E – Negligible/Absent

Invertebrate assessment summary of site 7th March 2024.