

Site Assessment Survey

PROJECT TITLE: Construction of 1 pair of semi-detached houses

SITE ADDRESS: Land to the rear of 16-24 Chestnut Way, Gurnos,
Merthyr Tydfil

PLANNING REF: P/25/0094

DATE: 10th July 2025

The applicant is seeking planning consent to construct two, semi-detached, residential dwellings on a parcel of land behind 16-24 Chestnut Way in Gurnos, located in the county borough of Merthyr Tydfil. The site is centred at approximately SO 04990 08027. At present, the development site contains concrete hardstanding, scattered scrub, short perennial and tall ruderal habitat.

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

A council notice was issued in November 2024 to the site owner requiring them to remove overgrown vegetation and waste and on the proposed development site. This work is understood to have been undertaken by the land owner late last year.

Site Location

The proposed development site is situated on a rectangular parcel of land to the south of 16 to 24 Chestnut Way. The site is level, although the surrounding area gradually slopes downwards from Chestnut Way in a southerly direction. It is understood that the site was previously occupied by garages, which have since been demolished, leaving only a concrete hardstanding. The site has approximate dimensions of 19 m by 30 m and is accessible via a concrete drive between 24 and 26 Chestnut Way. The site abuts and is largely enclosed by the rear and side gardens of properties located on Chestnut Way, Laburnum Way, and Beech Grove.

Further to the north of the site, approximately 175 m, lies a parcel of undeveloped land adjoined to Pen-y-dre High School. Approximately 390 m to the west of the site lies the Prince Charles hospital. Cyfartha Park lies approximately 785 m to the southwest of the site. The A465 is located approximately 540 m north of the site and runs east to west across the wider landscape. The residential areas of Merthyr Tydfil extend to the south east and west from site. The Taf Fechan flows north to south through the wider landscape, approximately 1.5 km to the west of the site.

There appear to be a small number of waterbodies located within 500 m of the site when reviewing OS maps. Figure 1 below illustrates the potential location of ponds within the context of the development site. A pair of ponds appear to be present approximately 430 m to the southwest of the site within the land surrounding Prince Charles Hospital. No other ponds appear to be present within 500m of the development site. However ponds within woodland areas and residential properties may not be visible on maps and aerial images.



Fig.1 - Ponds Visible within 500m of the Development Site

Desktop Study

A data search was undertaken via Aderyn for the proposed development site and surrounding area (LERC reference: 0256-144). A 1 km buffer around a central point of the proposed development site was searched. **The site does not lie within or directly adjacent to a statutory protected site.**

- The site is located within a B-Lines Area. B-Lines are a series of 'insect pathways' running through the countryside, along which efforts to restore and create a series of wildflower-rich habitat stepping stones should be made. They are created to attempt to link existing wildlife areas together, creating a network across the UK landscape.
- There are five Site of Interest for Nature Conservation (SINC)s within 1 km of the site. The closest being Bryniau SINC, approximately 650 m to the northeast of the site, this is a semi-upland site designated for its complex mosaic of mainly acidic habitats associated with disused quarries (Bryniau Quarries) and spoil tips.
- There are two areas of Ancient Semi Natural Woodland (ASNW) within 1 km of the site boundary. The closest area is located approximately 490 m south west of the site. ASNW are 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.
- There are two areas of Restored Ancient Woodland within 1 km of the site boundary. This is located approximately 780 m southwest of the site within Cyfartha Park. Restored Ancient Woodland sites are believed to have been continuously wooded for over 400 years. They have been replanted with native or non-native species, most commonly with conifers. They currently have a canopy cover of more than 50% non-native conifer tree species and will have varying levels of remnant features of ASNW.

Protected species records of note returned within 500 m of the site include:

- One record of bat commuting and foraging activity was returned at approximately 380 m southeast of the site for Serotine (*Eptesicus serotinus*)
- One record of Palmate Newt (*Lissotriton helveticus*) was returned at approximately 245 m northeast of the site.
- Thirteen records of invertebrate species were returned within 500 m of the site for species including: Side-striped Snailkiller (*Tetanocera punctifrons*), Buff-tailed bumblebee (*Bombus terrestris*), Early Bumblebee (*Bombus pratorum*), Red-tailed Bumblebee (*Bombus lapidarius*),

Common Carder Bee (*Bombus pascuorum*), Cinnabar (*Tyria jacobaeae*), Long-winged Conehead (*Conocephalus fuscus*), Short-winged Conehead (*Conocephalus dorsalis*), Shore Bug (*Saldula orthochila*) and Small Heath (*Coenonympha pamphilus*). The first eight species listed above are the closest records all being 255 m north of the site.

- There is one record of bird species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) for Kingfisher (*Alcedo atthis*).
- One record of Invasive Non-Native Plant Species (INNPS) was returned for Japanese Knotweed (*Fallopia japonica*) approximately 328 m southeast of site

Records of note returned for the rest of the 1 km buffer zone are detailed below:

- Nine records of Hedgehog (*Erinaceus europaeus*)
- Four records of Grey Squirrel (*Sciurus carolinensis*)
- Badger (*Meles meles*)
- Otter (*Lutra lutra*)
- 11 records of bat roosting activity were returned for Brown Long-eared Bat (*Plecotus auritus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Greater Horseshoe Bat (*Rhinopholus ferrumequinum*), Lesser Horseshoe Bat (*Rhinopholus hipposideros*) and *Pipistrellus spp.*
- 112 records of bat foraging and commuting activity were returned for species including Serotine (*Eptesicus serotinus*), Soprano Pipistrelle, Brown Long-eared Bat, Common Pipistrelle, Greater Horseshoe Bat, Lesser Horseshoe Bat, *Chiroptera spp.*, *Myotis spp.* and *Nyctalus spp.*
- Common Frog (*Rana temporaria*)
- Common Toad (*Bufo bufo*)
- Palmate Newt (*Lissotriton helveticus*)
- Smooth Newt (*Lissotriton vulgaris*)
- Nine bird species were listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) within the rest of the buffer zone. Species include: Firecrest (*Regulus ignicapilla*), Goshawk (*Accipiter gentilis*), Greenshank (*Tringa nebularia*), Kingfisher, Little Ringed Plover (*Charadrius dubius*), Peregrine (*Falco peregrinus*), Red Kite (*Milvus milvus*), Redwing (*Turdus iliacus*) and Whimbrel (*Numenius phaeopus*)
- 19 bird species are listed under Section 7 of the Environment (Wales) Act 2016 (EWA 2016) within the rest of the buffer zone. Species include: Bullfinch (*Pyrrhula pyrrhula*), Cuckoo (*Cuculus canorus*), Curlew (*Numenius arquata*), Dunnock (*Prunella modularis*), Goldeneye

(*Bucephala clangula*), Herring Gull (*Larus argentatus*), House Sparrow (*Passer domesticus*), Kestrel (*Falco tinnunculus*), Lapwing (*Vanellus vanellus*), Lesser Redpoll (*Acanthis cabaret*), Linnet (*Linaria cannabina*), Reed Bunting (*Emberiza schoeniclus*), Skylark (*Alauda arvensis*), Song Thrush (*Turdus philomelos*), Starling (*Sturnus vulgaris*), Tree Pipit (*Anthus trivialis*) Willow Tit (*Poecile montanus*) and Wood Warbler (*Phylloscopus sibilatrix*).

- 70 records of invertebrates were returned within the rest of the buffer zone for species including: Blood-vein (*Timandra comae*), Brindled Beauty (*Lycia hirtaria*), Broom Moth (*Ceramica pisi*), Brown-banded Carder Bee (*Bombus humilis*), Buff Ermine (*Spilosoma lutea*), Cinnabar (*Tyria jacobaeae*), Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*), Dot Moth (*Melanchra persicariae*), Dusky Brocade (*Apamea remissa*), Dusky Thorn (*Ennomos fuscantaria*), Garden Tiger (*Arctia caja*), Ghost Moth (*Hepialus humuli*), Grass Rivulet (*Perizoma albulata*), Green Brindled Crescent (*Allophyes oxyacanthae*), Rustic (*Hoplodrina blanda*), Sallow (*Cirrhia icteritia*), Shimmering Ruby-tailed Wasp (*Chrysis fulgida*), Shoulder-striped Wainscot (*Leucania comma*), Small Heath (*Coenonympha pamphilus*), Small Phoenix (*Ecliptopera silaceata*), Small Square-spot (*Diarsia rubi*), Wall (*Lasiommata megera*), White Ermine (*Spilosoma lubricipeda*) and Harlequin Ladybird (*Harmonia axyridis*).
- Bluebell (*Hyacinthoides non-scripta*), Canadian Water-weed (*Elodea canadensis*), Cherry Laurel (*Prunus laurocerasus*), Giant Knotweed (*Fallopia sachalinensis*) and Snowberry (*Symphoricarpos albus*) records were returned 624 m southwest of site.

Site Visit

A walkover survey of the site was completed on the **5th June 2025** by Abi Small of Ecological Services Ltd. Photographs of the site can be found in Appendix 2. A habitat map is provided within Appendix 3. **This report concentrates on the land within and immediately adjacent to the north of the proposed development site boundary only.**

The proposed development site is a rectangular shaped parcel of land with **metal fencing** forming the northern, eastern and western boundaries and a **wooden fence** forming the southern boundary. Access to the site is gained through the eastern boundary via a gate in the metal fence. A **concrete base** covers the ground throughout the site. There is evidence of **fly-tipping** present across the site.

Upon entering the site, on the eastern boundary, running from north to south, there is an area of dense **scrub** dominated by bramble (*Rubus fruticosus*), some bare concrete and **short perennial** vegetation containing species such as, Herb Robert (*Geranium robertianum*), Wood Avens (*Geum urbanum*) and Dandelion (*Taraxacum spp.*). Continuing south along the eastern boundary there is an area of **tall ruderal vegetation** dominated by Nettle (*Urtica dioica*) that adjoins the southern boundary. The southern boundary is mostly bare concrete with some young bramble growth.

Adjacent to the southern boundary are three **brash piles**, which appear to be clearance material from the council order to remove overgrown vegetation.

The western boundary, running from south to north, has areas of **ornamental shrub**, patches of bramble interspersed with Common Reed (*Phragmites australis*), and a large area of dense **bramble dominated scrub** that adjoins the northern boundary. Trees from bordering gardens overhang into the site. The northern boundary has a continuation of dense bramble dominated scrub, a large Dog Rose (*Rosa canina*) shrub, introduced **ornamental shrub** (*Spirea douglasii*), a **brash pile** and another area of dense **bramble scrub** which adjoins the eastern boundary. A fledgling bird was noted in the scrub during the visit.

In the central part of the site there are four narrow strips of Field Horsetail (*Equisetum arvense*) dominated **tall ruderal vegetation** running across the site from east to west. These appear to be growing in areas between the concrete hardstanding. There are areas of poor drainage where water has accumulated and moss (*Bryophyte spp.*) growth is present. Growing amongst the Field Horsetail and between other sections of the concrete base are; Ribwort Plantain (*Plantago lanceolata*), Creeping Buttercup (*Ranunculus repens*), Cleavers (*Galium aparine*), Common Knapweed (*Centaurea nigra*), Willowherb (*Epilobium spp.*), Creeping thistle (*Cirsium arvense*), Common ragwort (*Jacobaea vulgaris*), Ivy (*Hedera helix*), Nipplewort (*Lapsana communis*), Dock species (*Rumex spp.*), Sedge spp. (*Carex spp.*), Yorkshire Fog (*Holcus lantus*) and Sweet Vernal Grass (*Anthoxanthum odoratum*).

There are patches of low, multi-stemmed willow (*Salix spp.*) interspersed across the site, these appear to have been cut recently due to the size of the regrowth, likely as part of the council order clearance.

Legislation

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.

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 Bat (*Barbastella barbastellus*), Bechstein Bat (*Myotis bechsteinii*), Noctule Bat (*Nyctalus noctula*), Brown Long-eared Bat (*Plecotus auritis*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Greater Horseshoe Bat (*Rhinolophus ferrumequinum*) and Lesser Horseshoe Bats (*Rhinolophus hipposideros*) are also listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

Reptiles and Amphibians

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 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.

Potential Development Impacts

Plans for the proposed development include two, semi-detached, dwellings with associated gardens and parking areas to be created within the site boundary. The habitats within the site are considered to have biodiversity value at a local level only. The loss of the majority of habitats within the site is expected.

- The ornamental shrub, scrub and scattered scrub are considered likely to be suitable for used by **nesting birds**. Any vegetation removal or work immediately adjacent to such features has potential to disturb nesting birds during the bird nesting season of March to August inclusive. All wild birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended).

- Illumination of adjacent habitat should be avoided to reduce disturbance to potential nesting birds within scrub and shrubs. The loss of bird nesting and foraging habitat within the site will require mitigation and compensation measures.
- The vast majority of the development site is concrete hardstanding which provides no suitable cover for reptiles to use. The dense areas of scrub and brash are potentially suitable for reptile use, however they are isolated from surrounding suitable habitat for reptiles to use, being immediately surrounded by residential developments. It is accepted that residential gardens can be used by reptile species but given the current limited amount of suitable reptile habitat within the site boundary and historic site use as garages, the likelihood of reptiles using the site is considered limited. Reptile surveys are not considered a proportionate response to limited potential of the site to be used by such species.
- The site is surrounded by metal palisade fencing and wooden fencing. This prevents access into site for late mammal species such as otter or badger. It is considered highly unlikely that badger or otter are present within the site boundary.

Biodiversity Enhancements & Green Infrastructure Considerations

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.

Some vegetation clearance has taken place within the site boundary. The vegetation clearance appears to have been restricted to clearing willow scrub which has been left in brash piles within the site. However it is understood that the clearance was undertake after a notice requiring action under section 4 of the Prevention of Damage By Pests Act 1949 was issued by the council to the land owner in November 2024. As per paragraph 6.4.16 of Planning Policy Wales (version 12) the biodiversity value of a site is based on the site condition prior to vegetation clearance works. Prior to the clearance works willow scrub may have been more prevalent but the overall biodiversity value of the site is still considered to have been of local value only.

Green infrastructure features currently found within the site boundary are limited to bramble scrub and tall ruderal vegetation. Current plans for the site would likely result in the loss of all of the habitat currently present within the site boundary.

Space within the development site is limited therefore opportunities to provide soft landscaping are few. The garden space within the grounds of the new dwellings could seek to plant a range of native pollinator friendly species within the flower beds. The plans will also provide bat and bird boxes within the newly built residential building, providing additional habitat for such species not currently found at site.

Conclusions and Recommendations

Planning permission is sought to create a small residential development within the site boundary. At present, the development site contains tarmac hardstanding, a small area of tall ruderal, short perennial and scrub. Given the potential impacts of the proposed development the below mitigation measures are proposed:

- The areas of ornamental shrub and scrub within the development site have the potential to be used by nesting birds. Vegetation removal must be completed outside of the **bird nesting season of March to August inclusive**. If this is not achievable an ecologist must inspect any trees or ground vegetation with the potential for birds to be present for active birds' nests prior to works beginning. If an active nest is identified a buffer zone of at least 5 m around the nest must be observed until the chicks have fledged. Only then can the 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.
- 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, foraging and nesting birds and badger. 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. All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and Artificial Lighting at Night. <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>.

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. At least two of the below features will be implemented to ensure an overall biodiversity gain is secured.

- It is proposed that one PRO UK Rendered Build-in Swift Box is installed on the gable end of each building. These boxes must be integrated into the brickwork during construction, positioned as close to the gable apex as possible, and no lower than eaves level. Care must be taken to ensure that the access hole remains unobstructed and open.

- It is proposed that one Vivara Pro Build-In Woodstone Bat Box is installed on gable end of each building. The bat boxes must be built into the brickwork during construction and positioned as close to the gable apex as possible, at a height no lower than eaves level. The access hole must remain unobstructed and open. To prevent disturbance or exclusion of bats, no windows or external lighting should be installed within 2 m of any bat box location
- The use of soft landscaping to strengthen boundary features would be a welcome enhancement to the site. Tree and hedgerow planting along with long term management would help to create screening around individual units for privacy and also integrate the development into the landscape.
- 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 13 cm or 13 cm by 13 cm gaps cut every 3 m along fencing.

Best Wishes

Abi Small
Ecologist
Ecological Services Ltd

Signed: Abi Small Date: June 2025

Appendix 1 - Aerial View of Site Location



Appendix 2- Site Photographs



Photo.1. Wooden fence forming southern boundary with brush piles, bare concrete & short perennial



Photo.2. Central area of site with scattered scrub, short perennial & Field Horsetail



Photo.3. Area of bramble scrub in northwestern corner of site



Photo.4. Spirea douglasii, bramble scrub & brush pile in northeastern corner of site



Photo.5. Tall ruderal in southeastern corner of site



Photo.6. Looking into site through eastern boundary

Appendix 3- Habitat Map

LAND TO THE REAR OF CHESTNUT
WAY, MERTHYR TYDFIL

Habitat Map

June 2025

