

Site Assessment Survey

PROJECT TITLE: Proposed creation of four linked Passivhaus residential dwellings with five parking spaces, detached communal laundry room, cycle shed and bin store.

SITE ADDRESS: Hornbeam Close, Gurnos, Merthyr Tydfil.

DATE: 6th August 2025

The applicant is seeking planning consent to develop a parcel of land which is currently a car park at Hornbeam Close, Gurnos, Merthyr Tydfil. The site consists of areas of semi-improved amenity grassland surrounding a concrete car park and several trees. Planning permission is sought to build four linked Pavishaus residential dwellings with five car parking spaces (one disabled), communal detached laundry room, cycle shed and bin store.

The site is centred at approximately SO 04487 08564. 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.

Site Location

The development site is rectangular in shape and sits at the north end of the Gurnos Estate with houses adjacent on three sides and Gurnos Ring Road to the north with the A465 Heads of the Valleys Road to the north of this.

The proposed development site is accessed via Hornbeam Close which is a short dead end road accessed to the east of Fernhill Close which acts as the western site boundary. Gurnos Ring Road runs east to west immediately to the north of the proposed development site and acts as the northern site boundary. Directly to the east and south of the site boundaries is residential housing and gardens.

The A465 Heads of the Valleys Road is located approximately 32m to the north of the site boundary at its closest point and is currently still undergoing duelling construction works at this location. The area to the south of the A465 is crisscrossed by roads in an area of mainly residential dwellings, Hospital and Schools making up the building stock. Housing stock is generally made up of traditional terraced housing plus the occasional bungalow and semi detached properties.

The Taf Fechan is the closest significant watercourse and meanders roughly north east to south west, with the closest section of the river approximately 526m away to the north west. A small un-named stream runs east to west immediately to the north of the A465 Heads of the Valleys Road.

There is one small area of standing water apparent on an OS map within the 1km data search radius which is located approximately 607m away to the south, the presence of ponds in nearby gardens cannot be discounted.

Green areas within and beyond the community of Gurnos include; sports fields, church yard, tree lines, scrub pockets of broad-leaved and mixed woodland. To the north of the A465 Heads of the Valley Road is open countryside consisting of; livestock grazing land, golf course, mixed woodland, riparian river corridor and the occasional farm building.

Desktop Study

A data search was requested from SEWBRc. The data search (LERC Reference: 0245-758) took a 1km buffer around a central point of the proposed development site. The site does not lie within or directly adjacent to a statutory protected site. Protected sites returned as part of the data search include:

- There is one National - Statutory designated Site of Special Scientific Interest (SSSI) within 1km of the proposed development site. Cwm Taf Fechan Woodlands SSSI is located approximately 331m away to the west at its closest boundary.
- Cwm Taf Fechan Woodlands is also designated as a Local - Statutory designated Local Nature Reserve (LNR), Local - Non-statutory designated Wildlife Trust Reserve, and Local - Non-statutory designated Site of Interest for Nature Conservation (SINC)
- There are five Local - non-statutory designated Site of Interest for Nature Conservation (SINC) within 1km of the proposed development site. The Gurnos is the closest such site and is located approximately 69m away to the north east at its closest section.
- There are seven sites of Ancient Semi Natural Woodland (ASNW) within 1km of the site. These 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. The closest such area of woodland lies approximately 102m away to the north east at its closest boundary.

- There are five sites of Restored Ancient Woodland Site within 1km of the site. These are woodlands which are predominately broadleaved now and are believed to have been continually wooded for over 400 years. They will have gone through a phase when canopy cover will have been more than 50% non-native conifer tree species and now have a canopy cover of more than 50% broadleaf. The closest such area of woodland lies approximately 364m away to the south west at its closest boundary.
- There is one area of Ancient Woodland Site of Unknown Category within 1km of the site. These woodlands which may be ASNW, RAWs or PAWS. These areas are predominantly in transition where the existing tree cover is described as shrubs, young trees, felled or ground prepared for planting. The closest such area of woodland lies approximately 431m away to the north west at its closest boundary.
- There is one Local - Non-statutory designated Important Plant Area (IPA) within 1km of the proposed development site. Cliffs of the Brecon Beacons National Park IPA is located approximately 352m away to the west at its closest boundary.
- Approximately 91.74% of the 1km search area including the whole of the proposed site is designated as a B-Line. B-Lines are non-statutory protected sites which aim to restore and create wildflower habitats forming stepping stones that link existing wildlife areas together creating a network of habitats across the landscape benefiting not only pollinators but a host of other wildlife.

Given the localised and small scale nature of the development proposals it is highly unlikely any protected sites will be impacted as part of the proposed works.

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

- Common Pipistrelle (*Pipistrellus pipistrellus*) - Many records were returned from the 1km data search in particular along the Taf Fechan which runs north east to south west through the western periphery of the data search area. The closest record is located approximately 369m away to the south west and involved a roost within a residential dwelling.
- Badger (*Meles meles*) - Three records were returned from the 1km data search, the closest record is located approximately 159m away to the north east and involved a road mortality.
- Otter (*Lutra lutra*) - Seven records were returned from the 1km data search, the closest record is located approximately 173m away to the north and involved a road mortality.

- Hedgehog (*Erinaceus europaeus*) - Nine records were returned from the 1km data search, the closest record is located approximately 293m away to the west and involved a road mortality.
- Viviparous Lizard (*Zootoca vivipara*) - Many records were returned from the 1km data search with the majority to the west of the Taf Fechan. The closest record is located approximately 469m away to the north west and involved a field record.
- Birds - Species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) include; Peregrine (*Falco peregrinus*) and Red Kite (*Milvus milvus*).
- Birds - Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Bullfinch (*Pyrrhula pyrrhula*), Dunnock (*Prunella modularis*), Herring Gull (*Larus argentatus*), House Sparrow (*Passer domesticus*), Linnet (*Linaria cannabina*), Song Thrush (*Turdus philomelos*) and Starling (*Sturnus vulgaris*).
- Butterflies - Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Small Heath (*Coenonympha pamphilus*) - Eleven records were returned from the 1km data search, the closest record is located approximately 194m away to the south.
- Hymenoptera - Brown-banded Carder Bee (*Bombus humilis*) - One record was returned from the 1km data search, the record is located approximately 47m away to the south, however this was recorded to 1km resolution.

Protected species records of note returned beyond 500m and within the 1km data search include:

- Bat roosts - Lesser Horseshoe Bat (*Rhinolophus hipposideros*) and Natterer's Bat (*Myotis nattereri*).
- Bats foraging/commuting - Brown Long-eared Bat (*Plecotus auritus*), Daubenton's Bat (*Myotis daubentonii*), Greater Horseshoe Bat (*Rhinolophus ferrumequinum*), Noctule Bat (*Nyctalus noctula*), Serotine Bat (*Eptesicus serotinus*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*).
- Amphibians - Common Frog (*Rana temporaria*), Common Toad (*Bufo bufo*), Great Crested Newt (*Triturus cristatus*) and Palmate Newt (*Lissotriton helveticus*).
- Reptiles - Slow Worm (*Anguis fragilis*).
- Birds - Species listed under Schedule 1 of the Wildlife & Countryside Act 1981 (WCA1.1) include; Barn Owl (*Tyto alba*), Brambling (*Fringilla montifringilla*), Fieldfare (*Turdus pilaris*), Kingfisher (*Alcedo atthis*) and Redwing (*Turdus iliacus*).
- Birds - Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Cuckoo (*Cuculus*), Kestrel (*Falco tinnunculus*), Pied Flycatcher (*Ficedula hypoleuca*), Redpoll (*Acanthis flammea*), Skylark (*Alauda arvensis*),

Spotted Flycatcher (*Muscicapa striata*), Tree Pipit (*Anthus trivialis*) and Willow Tit (*Poecile montanus*).

- Butterflies - Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Dingy Skipper (*Erynnis tages*), Grayling (*Hipparchia semele*), Small Pearl-bordered Fritillary (*Boloria selene*) and Wall (*Lasiommata megera*).
- Moths - Species listed under Section 7 (S7) of the Environment (Wales) Act 2016 (EWA 2016) include; Brindled Beauty (*Lycia hirtaria*), Broom (*Ceramica pisi*), Buff Ermine (*Spilarctia luteum*), Cinnabar (*Tyria jacobaeae*), Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*), Dot (*Melanchra persicariae*), Dusky Brocade (*Apamea remissa*), Flounced Chestnut (*Anchoscelis helvola*), Galium Carpet (*Epirrhoe galiata*), Ghost (*Hepialis humuli*), Grass Rivulet (*Perizoma albulata*), Green-brindled Crescent (*Allophones oxycanthae*), Grey Dagger (*Acronicta psi*), Knotgrass (*Acronicta rumicis*), Neglected Rustic (*Xestia castanea*), Shaded Broad-bar (*Scotopteryx chenopodiata*) and Small Phoenix (*Ecliptopera silaceata*).
- Fish - Brown/Sea Trout (*Salmo trutta*).
- Plants - Bluebell (*Hyacinthoides non-scripta*)

Site Visit

Lee Gregory from Ecological Services attended site on 14th January 2025 to assess the potential ecological impacts of the proposed works. The site visit was completed during mid January which is outside of the optimal timeframe for undertaking such surveys. However it was still possible to draw broad conclusions to the habitats present within the development site boundary. 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 the proposed development site boundary only.**

The northern site boundary is a tarmac pedestrian footpath which runs along the south side of the Gurnos Ring Road. The eastern site boundary is a narrow grass strip which steeply slopes up to a row of terrace houses (2-8 Hornbeam Terrace). The western and southern site boundaries are the roads of Fernhill Close to the west and the short dead end access road Hornbeam Close to the south.

Central to the site is a **concrete hardstanding** car park with curb stones around the edges, the car park is accessed at the south east corner via the east end of Hornbeam Close. **Short perennial vegetation** is growing around the edge of the car park curb stones and includes the following species; Bittercress sp. (*Cardamine* sp.), Broad-leaved Dock (*Rumex obtusifolius*), Cock's-foot (*Dactylus glomerata*), Common Mouse-ear (*Cerastium fontanum*), Common Sorrel (*Rumex acetosa*), Creeping Buttercup (*Ranunculus repens*), Dandelion (*Taraxacum* agg.), Dove's-foot Crane's-bill (*Geranium*

molle), Groundsel (*Senecio vulgaris*), Prickly Sow-thistle (*Sonchus asper*) and Willowherb sp. (*Epilobium* sp.). Given the limited extent of the habitat it has not been mapped within the habitat map in Appendix 3.

Surrounding the **concrete hardstanding** carpark on all sides are strips of regularly mown amenity **semi-improved grassland** which slope down to the road boundaries on the north, south and western sides. Species recorded from the grassland include; Black Medick (*Medicago lupulina*), Broad-leaved Dock, Cat's-ear (*Hypochaeris radicata*), Cock's-foot, Common Mouse-ear, Common Sorrel, Creeping Bent (*Agrostis stolonifera*), Creeping Buttercup, Daisy (*Bellis perennis*), Greater Plantain (*Plantago major*), Lesser Trefoil (*Trifolium dubium*), Mouse-ear Hawkweed (*Pilosella officinarum*), Prickly Sow-thistle, Ragwort (*Jacobaea vulgaris*), Ribwort Plantain (*Plantago lanceolata*), Selfheal (*Prunella vulgaris*), Spear Thistle (*Cirsium vulgare*), Springy Turf Moss (*Rhytidiadelphus squarrosus*), Willowherb sp, White Clover (*Trifolium repens*) and Yarrow (*Achillea millefolium*).

Three approximate 5m high Whitebeam sp. (*Sorbus* sp.) **trees** are spaced apart within the northern grassland strip to the north of the car park and a smaller approximate 3m high Whitebeam is located in the western grass strip to the south west of the car park. No birds nests were present within the trees.

At the eastern end of the northern boundary is a **stone and mortar wall** which supports the slope above from the footpath below. The stone wall appears to be recently constructed and has no gaps in the mortar.

Ground Level Tree Assessment

The trees within the proposed site boundary were given a Ground Level Tree Assessment (GLTA) to look for potential roosting features (PRF) for bats. The aim of a GLTA is to assess the tree for features which bats could use from the ground level. The surveyor is looking for any cavity, gap or crack in the tree which bats could use for roosting purposes.

The surveyor stood at the base of the tree and visually inspected it using close focusing binoculars. The tree was categorised either into NONE, FAR or PRF bat roost potential based on the features observed. An extract of Table 4.2 and 6.2 from the BCT Bat Surveys for Professional Ecologists - Good Practice Guidelines 2023 (4th Edition) is given below on how trees should be categorised.

Suitability	Description of Roosting Features
NONE	Either no PRFs in the tree or highly unlikely to be any
FAR	Further Assessment Required to establish if PRFs are present in the tree
PRF	A tree with at least one PRF present

Suitability	Description of Roosting Features
PRF-I	Tree with PRFs which are only suitable for individual or very small numbers of bats due to size of lack of suitable surrounding habitat
PRF-M	Tree with PRFs which are / is suitable for multiple bats. Maternity colony maybe present

4x Whitebeam sp. (*Sorbus sp.*) - All the trees are well maintained with evidence of recent tree surgery work, there is no dead wood or cavities within the trees. The trees were deemed to be of an age too young to support Bat roosting features (PRFs). **All trees were scored as NONE.**

None of the trees are currently earmarked for removal and will remain through construction.

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 auritus*), 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 & Amphibians

Reptiles such as Slow Worm (*Anguis fragilis*), Common Lizard (*Zootoca vivipara*), Adder (*Vipera berus*) and Grass Snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 (as amended) from killing injury and sale. All four common reptiles are also listed as 'Section 7' species in Wales. In Wales Sand Lizard (*Lacerta agilis*), Smooth Snake (*Coronella austriaca*), Adder, Grass Snake, Slow Worm and Common Lizard are listed in section 7 of the Environment (Wales) Act 2016 which makes them a key species to sustain and improve biodiversity.

The four widespread species of amphibian i.e. the Smooth Newt (*Lissotriton vulgaris*), Palmate Newts (*Lissotriton helveticus*), Common Frog (*Rana temporaria*) and Common Toad (*Bufo bufo*), 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

The proposed development will likely result in the loss of an area of concrete hardstanding. Indicative plans show the retention of the grassland and trees around the periphery of the hardstanding. However some temporary disturbance to the land may be experienced during construction works. The habitats within the site are considered to have biodiversity value at a local level only.

- The trees within the site boundaries are considered to have low potential to be used by nesting birds as the trees sit adjacent to a footpath and car park frequently used by the local residents. **Any building work immediately adjacent 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). Removal of this vegetation could also result in the loss of nesting habitat.

- No evidence of well used mammal paths through the site were noted during the site visit. The site is unfenced around its boundaries and is likely to be used by mammals such as Hedgehog for foraging purposes on occasion only.
- The semi-improved grassland around the periphery of the site have very low potential to support reptiles during the summer months. The grassland is regularly mown and offers little cover for reptiles to hide from predators. Reptile surveys are not recommended in this instance as a large portion of the adjoining semi-improved grassland will be retained as it is outside of the proposed construction boundary which reptile species can utilise during any construction work.
- Any additional external lighting, may impact on nocturnal species, such as bats and invertebrates using the site for feeding and commuting, however the site is in a highly urbanised area and already likely to be well illuminated by street lighting.

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.

Green infrastructure features currently found within the site boundary are limited to individual trees and semi-improved grassland. The site is unfenced around the entire site boundary, beyond the site boundaries are busy roads and buildings, therefore direct connectivity to surrounding habitat is limited. The current biodiversity value of the site is considered to be of local value only.

The proposed plans indicate that the majority of current natural habitats on site will be retained during development. Direct habitat loss implications within the development site can be limited if compensatory planting can be incorporated within the site plans.

The proposals should seek to improve the remaining habitat as part of the development proposals to increase the quality of green infrastructure and overall biodiversity value within the site. Development plans could seek to plant a range of native pollinator friendly species within the flower beds, additional tree planting and provide native hedgerow around and between the plot boundaries. The plans will also provide additional bat and bird boxes within the newly built residential buildings, providing additional habitat for such species not currently found at site.

Planning Policy Wales - Trees and Planning in Wales (January 2024 update) advises that compensatory planting for trees lost should be sought at a ratio of **3 for 1**. Compensatory planning must be equivalent to the quality, environmental and of ecological importance of

the tree(s) lost - this must be preferably onsite or immediately adjacent to the site. No tree loss is expected during construction works.

Conclusions and Recommendations

Planning permission is sought to change the use of the site and build four linked Pavishaus residential dwellings with five car parking spaces (one disabled), communal detached laundry room, cycle shed and bin store. Given the potential impacts of the proposed development the below mitigation measures are proposed:

- Any external lighting required as part of the development proposals will be focused / directional lighting which is hooded or cowled to prevent light spill. The external lighting will be placed on a timer and motion activated. Sensitive lighting will reduce any negative impacts to nocturnal wildlife which use the area. This is particularly important for foraging bats and invertebrates that are likely to use the site.
- All lighting must meet recommendations in the BCT Guidance Note 08/23 Bats and Artificial Lighting at Night <https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released>
- All excavations within the site will be securely covered over if left unattended. Any excavations that have a depth in excess of 0.5m and that are left open overnight will have a means of escape left 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.
- The trees within the development site have the potential to be used by nesting birds, currently there are no plans to remove any trees on site. If an active nest is identified a buffer zone of at least 5m around the nest must be observed until the chicks have fledged. Greater buffer zones around nests may be required depending on the species and habitat the nest is within.
- Compensatory planting will be proposed within the site plans, these could include planting a range of native pollinator friendly species within the flower beds, additional tree planting of locally sourced native trees and creation of hedgerow planting around plot boundaries. Given the urban nature of the development site, some native species may not be suitable within the growing conditions available. Thus it is advised that species chosen for planting are beneficial to pollinators. **A detailed planting scheme will be required to support any future planning application for 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. It is recommended at least 2 of the below measures are implemented :

- The provision of 1 bird box, such as the 1B Schwegler Hole Nest Box or similar woodcrete design to be located on a pole within the grounds of Hornbeam Close. The bird box will be located at a height of at least 3m above ground level and will avoid a south facing elevations to prevent overheating.
- The provision of 3 bat boxes, such as the 2FN Schwegler Bat Box or a similar woodcrete design to be located on a pole within the grounds of Hornbeam Close. The bat boxes will be located around the circumference of the pole in a group of 3, at a height of at least 3m above ground level. No obstruction will be allowed within 30cm of the base of the bat boxes.
- Gaps can be cut into any fencing proposed around the site to allow the movement of reptiles and small mammals across the area. 13cm x 13cm gaps will be cut every 3m along the fence line which encompass the site.
- 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.

Best Wishes

**Lee Gregory
Ecologist
Ecological Services Ltd**

Signed: Lee Gregory Date: August 2025

Appendix 1 - Aerial Image of Development Site



Appendix 2 - Site Photographs



Northern boundary viewing west along Gurnos Ring Road, showing rock and mortar wall



Northern boundary viewing west along Gurnos Ring Road



Junction of Gurnos Ring Road and Fernhill Close viewing east



Junction of Fernhill Close and Hornbeam Close viewing north



Hornbeam Close viewing east from Fernhill Close



Grass strip between Hornbeam Close (right) and car park viewing east



Eastern boundary grassland slope with nos. 2-8
Hornbeam Close to the east



Entrance to car park at east end of Hornbeam Close



Northern grassland strip viewing west with Gurnos
Ring Road to the right



View west towards Hornbeam Close (left) and car
park



View east across car park



Three Whitebeam sp along northern grassland strip
viewing north west



Whitebeam sp along western grassland strip
viewing south west



Detail of rock and mortar retaining wall along
northern boundary

Appendix 3 - Habitat Map

LAND AT HORNBEAM CLOSE,
MERTHYR TYDFIL

Habitat Map

January 2025

