

A Preliminary Ecological Appraisal (PEA)
on behalf of

Callum Tranter
For

Land Adjacent to Six Bells Estate
Heolgerrig
Cyfarthfa
Merthyr Tydfil CBC
CF48 1TU



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Executive Summary

A Preliminary Ecological Appraisal (PEA) was carried out to assess the ecological constraints and opportunities for a proposed residential development at 'Land Adjacent to Six Bells Estate, Heolgerrig, Cyfarthfa, Merthyr Tydfil CBC, CF48 1TU.' The assessment included a desktop study and a field survey to identify habitats, protected species potential, and statutory designated sites.

The site comprises an area of approximately 1.9 acres of mixed character, consisting of a small residential plot to the east (approximately 950 m²) and a larger western portion (approximately 6,750 m²) dominated by a semi-natural broadleaved woodland — established on what appears to be historic industrial spoil (*unconfirmed; specialist review advised*). The level and gently sloping ground within the woodland is largely reduced to bare ground as a result of overgrazing by resident horses.

The desktop study identified one Site of Special Scientific Interest (SSSI) — Cwm Glo A Glyndyrys (387 m) — and eight Sites of Importance for Nature Conservation (SINCs) within the search area, together with Ancient Semi-Natural Woodland and an NRW Priority Area (Heathland and Grassland). Local biological records returned 1,222 species records, including 86 bat records representing 13 taxa, and notable records for Great Crested Newt (*Triturus cristatus*) at 690 m, Otter (*Lutra lutra*), Hedgehog (*Erinaceus europaeus*), and a rich assemblage of birds, invertebrates, and plants. CAT4 invasive plant species are present in the vicinity, including Butterfly-bush (*Buddleja davidii*) at just 30 m and Japanese Knotweed (*Reynoutria japonica*) at 98 m.

Building A (the main residential unit) was assessed as being of Moderate Roosting Potential. Two Potential Roost Features (PRFs) were identified in the form of raised roof tiles on the southern and northern elevations respectively. Building B (a timber stable) offers potential as a night roost for bat species. No evidence of bats was recorded at either structure during the survey. The on-site woodland, which supports several dozen large and mature broadleaved trees including mature oak, requires a dedicated Ground Level Tree Assessment (GLTA) in the event that any of these trees are to be altered/removed. The surrounding landscape, including adjacent woodland to the east and west and two large ponds at approximately 280 m and 570 m, offers High suitability for commuting bats.

Mitigation and enhancement measures are recommended to address potential impacts and deliver biodiversity net gain. These include bat emergence and re-entry surveys, a Ground Level Tree Assessment for all mature trees, a precautionary approach to works affecting Building A during the hibernation period, pre-commencement fingertip searches for amphibians, reptiles, and small mammals, and a sensitive lighting design. Enhancement measures include integrated bat boxes, bird nest boxes including swift bricks, a hedgehog house and hedgehog access holes, an amphibian hibernaculum at the woodland edge, and native hedgerow planting along the southern boundary.

This Executive Summary is intended to provide an overview of the assessment of the proposed development site based on information available to Little Wing Ecology (CYF) at the time of production. This Executive Summary should be read in conjunction with the full report.

1.0 Introduction

1.1 Background

This report details a Preliminary Ecological Appraisal (PEA) undertaken for the Proposed Residential Development at 'Land Adjacent to Six Bells Estate, Heolgerrig, Cyfarthfa, Merthyr Tydfil CBC, CF48 1TU.' The assessment was commissioned by the owner. The purpose of this report is to inform the client of any ecological constraints and associated planning requirements regarding habitats and protected species, in support of a planning application for the construction of four detached residential units, alongside associated landscaping works. For the purposes of this document, the proposed development area will be referred to as 'the site'.

1.2 Site Details

The site is accessed via Six Bells Estate, the main service road. It has an Ordnance Survey National Grid Reference of SO 03440 06420 at its approximate centre and lies at an Ordnance Datum of approximately 236 m. The total site area is approximately 1.9 acres. The field survey was conducted on 16th April 2026 by Nic Aldridge and Richard Farr.

The site is divided into two distinctly different areas. A small residential plot (approximately 950 m²) is situated to the east of the site, comprising a detached residential unit, a maintained lawn area, and a large area of gravel/hardstanding. The western portion (approximately 6,750 m²) is separated from the residential plot by Heras fencing. This larger portion is dominated by a substantial mound or hill, which on initial inspection appears to represent historic industrial spoil. The origin and character of this feature has not been verified as part of this preliminary assessment; it is recommended that a suitably qualified specialist carries out further investigation to confirm its nature and provenance prior to any ground-disturbing works. The hill supports a semi-natural woodland confined principally to the steeper ground; the level and gently sloping sections are dominated by disturbed ground, the majority of which lacks vegetation as a result of overgrazing by resident horses.

1.3 Report Context

This report is identified by the unique reference LT410 and was prepared in April 2026. It should be read in conjunction with the accompanying architectural plans and documents provided by the client.

1.4 Ecological Constraint(s)

The survey was conducted during spring (April 2026). This assessment is not intended to confirm the presence or absence of all plant species on site; this would typically require a more detailed botanical assessment over multiple site visits between April and September. At any given time of year, it is not possible to identify all plant species during a single visit, as different species emerge and flower at different times, and prevailing sward height, management regime, and weather conditions can hinder identification.

Internal access to the attic of Building A and the locked room of Building B was not available during this survey. As Potential Roost Features (PRFs) were identified at both structures, this lack of access will be mitigated by undertaking further survey effort in the form of emergence/re-entry surveys and static detector surveys during the optimal survey season (May–September).

Nevertheless, it is generally possible to classify habitats and identify many dominant species throughout the year in most circumstances. The baseline conditions described in this report were accurate at the time at which the survey was undertaken. While it is acknowledged that some species may not have been recorded due to the single-visit nature of the assessment, this report provides a comprehensive ecological assessment of habitat types and dominant species at the time of the survey and highlights areas where further survey effort would be required.

2.0 Methodology

2.1 Desk Study

A desk study was undertaken in April 2026 to gather existing ecological information pertinent to the site. The South East Wales Biodiversity Records Centre (SEWBReC) was contacted for local environmental records. Additionally, personal records held by the author were consulted. Other relevant resources, including Data Map Wales, were also searched. A 1 km search radius was applied for all records. Only species records occurring within the last ten years were considered relevant for detailed analysis, although earlier records were also given consideration. No previous ecological reports for the site were provided by the client.

2.2 Field Survey

A Preliminary Ecological Assessment was undertaken using standard Phase 1 habitat survey techniques as a guiding

principle. The site was surveyed by walking a zig-zag pattern, with systematic and methodical notes being recorded on the habitat and site conditions. This was followed by a complete circuit of the site boundaries, where additional notes were made as necessary. Photographs were taken to document the site's boundaries, areas of ecological interest, and features characteristic of the on-site habitats.

During the survey, the potential for protected species was assessed, and any signs or evidence of their use were noted. Features such as piles of rubble, banks, or tree roots were assessed for their potential to be used as refugia or hibernacula for reptiles and hedgehogs. Water bodies were evaluated for their potential to provide opportunities for amphibians and reptiles. Furthermore, the presence of physical signs of other relevant species, such as droppings, footprints, or foraging marks, were recorded where observed. Any flora or fauna protected under the Wildlife and Countryside Act 1981 were also noted.

A Daytime Bat Walkover (DBW) was conducted to identify opportunities for bat roosts and potential roosting features (PRFs). As part of this, the habitats both on-site and immediately beyond the site boundary were assessed to identify potential commuting and foraging corridors. This thorough assessment allowed for the determination of the overall suitability of the location for bats and informed the need for any further surveys.

The field survey was conducted by N. S. Aldridge (NRW Licence – S094182/1) who is also the author of this report, and Richard Farr.

Table 2.1: Weather Conditions during Field Survey

Parameter	Start Conditions	End Conditions
Time	09:45	12:30
Temperature (°C)	15.4	18.3
Cloud Cover (Oktas)	7	6
Precipitation	Light drizzle	Nil
Wind (Beaufort Scale)	F1	F1

3.0 Results

3.1 Desk Study Results

The local biological records search (LERC: 0256-878, South East Wales Biodiversity Records Centre) reported 1,222 species records. No records were documented on or directly adjacent to the site (0–20 m); the closest record was *Buddleja davidii* (Butterfly-bush, a CAT4 invasive species) at 30 m. These are briefly summarised in the bullet list below:

- Terrestrial mammals (excluding bats) accounted for 38 species records (i.e., 3.11% of all records). Records span 98–1,454 m and include six species: *Erinaceus europaeus* (Hedgehog, 10 records, 98–1,431 m), *Lutra lutra* (Otter, 16 records, 660–1,454 m), *Meles meles* (Badger, 2 records, 870–954 m), *Arvicola amphibius* (Water Vole, 2 records, 870–970 m), *Micromys minutus* (Harvest Mouse, 1 record, 922 m), and *Sciurus vulgaris* (Red Squirrel, 1 record, 1,512 m). All are CAT1 priority species. An additional four records were returned for the CAT4 invasive *Sciurus carolinensis* (Grey Squirrel) between 649–1,512 m.
- Chiroptera (bats) accounted for 86 species records (i.e., 7.04% of all records). All records are CAT1 priority species, with distances ranging from 553 m to 2,620 m. Thirteen bat species or species groups were recorded overall, including *Rhinolophus hipposideros* (Lesser Horseshoe Bat, 25 records, 565–1,932 m), *Pipistrellus pipistrellus* (Common Pipistrelle, 13 records, 553–1,512 m), *Rhinolophus ferrumequinum* (Greater Horseshoe Bat, 11 records, 565–2,620 m), *Plecotus auritus* (Brown Long-eared Bat, 6 records, 567–1,512 m), *Pipistrellus pygmaeus* (Soprano Pipistrelle, 5 records), *Myotis daubentonii* (Daubenton's Bat, 4 records), *Nyctalus noctula* (Noctule, 3 records), *Eptesicus serotinus* (Serotine, 1 record, 1,174 m), and *Myotis nattereri* (Natterer's Bat, 1 record, 1,170 m). The three nearest records were *Pipistrellus* sp. and *Pipistrellus pipistrellus* at 553 m.

- Reptiles and amphibians accounted for 30 species records (i.e., 2.45%). Six species were recorded between 601 m and 1,512 m. The three nearest records were *Natrix helvetica* (Grass Snake) at 601 m, *Triturus cristatus* (Great Crested Newt) at 690 m, and *Rana temporaria* (Common Frog) at 745 m. *Triturus cristatus* accounted for the majority with 20 records (690–1,468 m), followed by *Rana temporaria* (4 records), *Bufo bufo* (Common Toad, 2 records), *Lissotriton helveticus* (Palmate Newt, 2 records), *Natrix helvetica* (1 record), and *Zootoca vivipara* (Common Lizard, 1 record). All are CAT1 priority species.
- Birds accounted for 399 species records (i.e., 32.65%), 44.86% of which were for CAT1 species. The three nearest records were *Sturnus vulgaris* (Starling), *Falco peregrinus* (Peregrine), *Passer domesticus* (House Sparrow), *Milvus milvus* (Red Kite), and *Prunella modularis* (Dunnock), all at 98 m, followed by *Hirundo rustica* (Swallow) at 291 m and *Ardea cinerea* (Grey Heron) at 379 m. Notable CAT1 species include *Tyto alba* (Barn Owl), *Falco tinnunculus* (Kestrel), *Alcedo atthis* (Kingfisher), *Turdus philomelos* (Song Thrush), and *Cinclus cinclus* (Dipper). CAT4 invasive *Branta canadensis* (Canada Goose) contributed nine bird records between 727–1,663 m.
- Flowering plants accounted for 252 species records (i.e., 20.62%), including 15 CAT1 records. CAT1 plant species include *Hyacinthoides non-scripta* (Bluebell, 8 records, 98–1,080 m — the nearest CAT1 plant at 98 m), *Euphrasia officinalis* subsp. *anglica* (English Sticky Eyebright, 1 record, 577 m), *Platanthera bifolia* (Lesser Butterfly-orchid, 1 record, 750 m), and *Lycopodium clavatum* (Stag's-horn Clubmoss, 1 record, 1,316 m). Fifty-eight records were returned for CAT4 invasive species; the nearest was *Buddleja davidii* at 30 m, followed by *Reynoutria japonica* (Japanese Knotweed) and a further *Buddleja davidii* record at 98 m.

Other species included:

- Insects — butterflies (74 records, including *Cupido minimus* (Small Blue) at 98 m, *Coenonympha pamphilus* (Small Heath) at 451 m, and *Euphydryas aurinia* (Marsh Fritillary) recorded between 570–1,990 m).
- Insects — moths (78 records, predominantly from the Glamorgan Moth Records dataset; all CAT1 priority species).
- Insects — other invertebrates (approximately 54 records of CAT2 and CAT3 beetles, flies, hymenoptera, and Odonata, including *Stratiomys potamida* (Banded General) at 727 m).
- Fish (13 records, including *Salmo trutta* (Brown/Sea Trout) at 854 m and *Salmo salar* (Atlantic Salmon) at 867 m).
- Fungi and Slime Moulds (approximately 134 records, including CAT1 *Entoloma bloxamii* s. lat. (Big Blue Pinkgill) and *Microglossum atropurpureum* (Dark-Purple Earthtongue) at 584 m, and locally important waxcap assemblages between 546–1,403 m).
- Bryophytes (27 records, including *Tortella inclinata* (Bent Crisp-moss) and *Riccia beyrichiana* (Purple Crystalwort)).
- Lichens (3 records, including CAT1 *Placynthium nigrum* at 836 m and *Peltigera canina* at 808 m).

3.2 Statutory Sites

No part of the site falls within a statutory site of nature conservation interest. The search area identified one Site of Special Scientific Interest — Cwm Glo A Glyndyrys (SSSI, 387 m) — and eight Sites of Importance for Nature Conservation (SINCs), the nearest of which is Cwm Taf Fields & Cefn Coed Tip (448 m). Ancient Semi-Natural Woodland intersects approximately 0.33% of the search buffer, and an NRW Priority Area (Heathland and Grassland) covers 18.91% of the search area. B-Lines habitat connectivity networks cover 79.55% of the search buffer.

4.0 Phase 1 Habitat Survey Results

4.1 Habitat Descriptions

Semi-natural Broadleaved Woodland (A1.1.1)

The larger western portion of the site is dominated by a semi-natural mixed woodland. Oak (*Quercus* spp.) is the dominant species and is principally confined to the steeper sections of the hill. The oldest trees are of a broadly uniform age and are estimated to be in excess of 50 years. Successional epiphytes — including *Ulotia crispa*, veilwort (*Marchantia polymorpha*), and common polypody (*Polypodium vulgare*) — are prominent, reflecting the humid character of the location. A mixed understorey of bramble scrub (*Rubus fruticosus*), heather (*Calluna vulgaris*), bilberry (*Vaccinium myrtillus*), and *Dryopteris* spp. was recorded. Steeper slopes expose the underlying substrate, which on initial inspection appears to be of industrial origin (unconfirmed).

Scattered Scrub (A2.2)

Whilst a bramble understorey was recorded within several sections of the semi-natural woodland, this extends beyond the woodland edge at the western boundary of the site, forming a small area of scattered scrub interspersed with areas of disturbed ground.

Amenity Grassland (J1.2)

A small lawn was recorded adjacent to the existing residential unit, maintained as a short sward. Whilst generally species-poor, this area supports common sorrel (*Rumex acetosa*) and common vetch (*Vicia sativa*). The presence of *Rumex acetosa* is indicative of acidic soil conditions (pH 4.5–6), compaction, and impeded drainage.

Introduced Shrub (J1.4)

The residential plot is bordered on two sides by *Buddleja davidii* (Butterfly-bush) and Leyland cypress ($\times$ *Cuprocyparis leylandii* 'Castlewellan Gold'), forming a dense and species-poor boundary.

Target Note Number: TN1. Within the Leyland cypress 'Castlewellan Gold' hedge which marks the northern boundary are two mature oak trees (*Quercus* spp.) estimated to be approximately 25 years old.

Defunct Hedge — Species Poor (J2.2.2.2)

The southern boundary of the larger woodland plot is marked by a broken hedge interspersed with various fences and walls. This hedge contains a mixture of introduced shrubs, including Wilson's honeysuckle (*Lonicera nitida*), and native species including hawthorn (*Crataegus monogyna*). This variation reflects the fact that this boundary marks the perimeter of several linked urban gardens to the south of the site.

Fence (J2.4)

The majority of the proposed development site is demarcated by a variety of fence types. The most significant is a pressed-steel fence which demarcates the northern boundary with the adjacent Trago Mills retail unit.

Wall (J2.5)

Several sections of concrete block wall are present at the boundaries of the residential plot and along the southern boundary of the woodland, where they demarcate the boundaries of adjacent gardens. None of these boundary features carry any significant ecological value.

Building (J3.6)

Building A has been recorded as a well-maintained, 20th century, two-storey, block-built detached residential unit with a pitched, concrete-tiled roof. The roof incorporates cement-based ridge tiles, with uPVC bargeboards, soffits, and rainwater goods. All soffits and bargeboards were found to be sealed. A wrap-around porch and garage feature is topped with a sealed, rubberised roof. Access to the main roof space was not available; however, taking a cautionary approach and considering the age and condition of the building, the presence of a bitumen-based membrane will be presumed. No bat droppings were recorded. Two significant Potential Roost Features (PRFs) were identified on the

roof (see Section 5.0). Building B was recorded as a small, modern, single-storey timber stable block comprising a locked room (presumed storage) and an open-fronted shelter.

The roof is covered with a damp-proof membrane. The open-fronted shelter offers potential for use as a night roost by bat species recorded in local records.

Bare Ground (J4)

Within the woodland, all level and gently sloping areas accessible to the resident horses were largely reduced to bare ground, with only isolated patches of grass attempting to recover. The lower section of this bare ground was observed to be waterlogged at the time of survey, although no free-standing water bodies were recorded on site.

Target Note Number: TN2. Several sections of stored wood and timber were recorded on the site. These provide a limited potential as refugia for small mammals, reptiles, and amphibians.

Other — Hardstanding (J5)

A large area of gravel was recorded adjacent to the residential areas, together with areas of concrete paving.

Target Note Number: TN2. Several sections of stored wood and timber were recorded on the site. These provide a limited potential as refugia for small mammals, reptiles, and amphibians.

Target Note Number: TN3. A large stone pile was recorded at this location. This provides limited potential as refugia for small mammals, reptiles, and amphibians. Whilst a potential basking opportunity also exists, the high level of human disturbance at this location negates this benefit.

Additional Information: No water bodies were recorded on or adjacent to the site. Two large ponds were identified at approximately 280 m and 570 m to the south-west and west of the site boundary respectively.

5.0 Preliminary Roost Assessment (PRA) / Daytime Bat Walkover (DBW)

5.1 Structures

Two structures were present on the site at the time of the survey: Building A (the main residential property) and Building B (a timber stable block).

Building A

Building A is a two-storey, block-built property with a pitched concrete-tiled roof. The roof incorporates cement-based ridge and tiles, with uPVC bargeboards, soffits, and rainwater goods, all of which were found to be well sealed and in good condition. Two Potential Roost Features (PRFs) were identified: a small group of raised tiles on the southern elevation of the roof adjacent to the western gable near the ridge, and a row of raised tiles along the northern elevation extending for several metres just above the gutter-line. Both features proffer potential access to the attic space and/or the cavity between the tiles and the internal roofing membrane. Access to the attic space was not available; taking into account the age and condition of the structure and adopting a precautionary approach, a bitumen-based membrane will be presumed. No bat droppings or other evidence of bat occupation were recorded during the survey.

Building B

Building B is a single-storey timber structure comprising a locked storage room and an open-sided shelter. The roof is covered with a damp-proof membrane. It was observed that the open-sided shelter offers potential for use as a night

roost by bat species recorded in local records. The structure is in daily use by horses, and the presence of fresh manure and the movement of animals hindered the search for evidence of bat occupation. This is particularly noteworthy given the time of survey (end of the hibernation period), when bats may not yet have been regularly active.

Roost Potential Categorisation

Overall, both structures are assessed as being of Moderate Roosting Potential. Breeding bats are not identified as a concern at this stage; however, the presence of PRFs and the potential for occupancy during the active season requires further investigation.

Hibernation Potential

No classic hibernation sites were identified on site. No cellars or underground spaces were recorded. As pipistrelle species are known to hibernate in buildings, a precautionary approach will be recommended for any works during the hibernation period (October to April inclusive).

Mature Trees

The mixed woodland supports several dozen large and mature broadleaved trees, including a substantial number of large and mature oak trees. Whilst relatively young (for oak) and in generally good condition, a more specialised inspection will be required to adequately assess these trees for potential roosting features. Initially, this should take the form of a dedicated Ground Level Tree Assessment (GLTA). Should potential roosting features be identified, further assessment will be required to establish presence or likely absence of bats.

Summary of PRA

Collectively, the features identified during the PRA present opportunities for a diverse range of bat species, including crevice-dwelling species such as pipistrelles, and those requiring a night roost such as Lesser Horseshoe Bat (*Rhinolophus hipposideros*) and Brown Long-eared Bat (*Plecotus auritus*). Given the potential for indirect impacts and the presence of mature trees whose suitability for roosting bats has not yet been established, a Ground Level Tree Assessment is required for all on-site trees. In addition, static detector surveys should be undertaken within the woodland to establish the extent of bat use and inform the assessment of potential indirect impacts.

5.2 Habitat Suitability for Commuting and Foraging Bats

Flight Paths: The on-site woodland forms part of a linear habitat feature providing connectivity to the east and west. To the west, this feature provides direct access to extensive pasture, scattered woodlands, hedgerows, and two large ponds at approximately 280 m and 570 m. Further afield, this habitat connects directly to an upland landscape extending for several kilometres to the north and south. The on-site woodland, together with adjacent linked gardens, is assessed as offering High suitability for commuting bats.

Foraging Habitat: The scattered mature trees on site offer Moderate suitability for generalist foraging bat species. The amenity grassland associated with the residential plot is considered to offer Low suitability for foraging bats.

5.3 Other Protected Species Results

No other specific protected species surveys were undertaken as part of this Preliminary Ecological Appraisal. No badger setts or signs of badger activity (e.g., snuffle holes, latrines) were identified within the site boundary. One inactive wren's nest was recorded within Building B. Suitable and varied nesting habitat was present within the mature trees and shrubs on site.

6.0 Survey Constraints and Limitations

6.1 Constraints Encountered

Type of Constraint: Seasonal Survey Limitations.

Description of Constraint: The survey was conducted during spring (April 2026). A single-visit assessment cannot confirm the presence or absence of all plant species on site, as different species emerge and flower at different times of the year. Sward height, management regime, and prevailing weather conditions can also hinder the identification of specimens.

Implications and Mitigation: The baseline conditions described in this report were accurate at the time of the survey. Habitats and dominant species were broadly identified with confidence. Further specialist botanical survey would be required if needed to confirm species composition.

Type of Constraint: Internal Access to Buildings.

Description of Constraint: Internal access to the attic of Building A and the locked room of Building B was not available during this survey. Potential Roost Features (PRFs) were identified at both structures.

Implications and Mitigation: This limitation will be mitigated by undertaking further survey effort in the form of emergence/re-entry surveys and static detector surveys for bats during the optimal survey season (May–September), no less than two visits at least 21 days apart.

7.0 Discussion

7.1 Ecological Value and Significance

The site's ecological value is considered to be Moderate. The eastern residential plot, characterised by amenity grassland and dense introduced shrub boundaries, is of low intrinsic ecological value. However, the western woodland portion introduces significant complexity, supporting a semi-natural broadleaved woodland of considerable habitat value. The woodland contains several dozen large and mature broadleaved trees — principally oak — which provide a range of niches for nesting birds, invertebrates, and potentially roosting bats, pending assessment by a Ground Level Tree Assessment.

The site is embedded within a wider matrix of ecologically important habitats. The adjacent residential gardens, hedgerows, and linear scrub features provide commuting and foraging opportunities for bats and other mammals. The surrounding valley slopes support semi-improved grassland and broadleaved woodland fragments, which collectively form part of a broader ecological network extending through the Taff Valley corridor. Two large ponds within 570 m, together with records for Great Crested Newt at 690 m, indicate that the wider landscape supports important populations of European Protected Species.

The stored wood, stone pile, and areas of disturbed ground provide limited potential as refugia for small mammals, reptiles, and amphibians. The presence of CAT4 invasive plant species in the immediate vicinity — particularly *Buddleja davidii* at 30 m and *Reynoutria japonica* at 98 m — represents an ecological risk that requires proactive management to prevent spread onto the site during development.

Whilst no protected or priority species were confirmed during the survey, their presence on or adjacent to the site cannot be excluded given the habitat types present and the inherent limitations of a preliminary assessment.

7.2 Potential Ecological Impacts (in absence of mitigation)

Without the implementation of appropriate mitigation, the following potential ecological impacts could arise from the proposed development:

Bats: If Building A or Building B is altered/demolished without prior emergence surveys, there is a risk of direct disturbance to or destruction of bat roosts, potentially constituting an offence under the Conservation of Habitats and Species Regulations 2017 (as amended). Construction activities, including noise, vibration, and artificial lighting, could also disturb foraging and commuting bats in the vicinity. If any mature trees are to be removed without prior assessment, potential roost features would be lost without mitigation.

Nesting Birds: Works carried out during the bird breeding season (typically March to August inclusive) risk disturbance to or destruction of active nests, constituting an offence under the Wildlife and Countryside Act 1981 (as amended).

Reptiles, Amphibians, and Small Mammals: Site clearance activities, particularly in areas identified by target notes (stored timber — TN2; stone pile — TN3), risk accidental injury or mortality of amphibians, reptiles, and small mammals. The proximity of Great Crested Newt records at 690 m represents a material risk that requires a precautionary approach during groundworks.

Hedgehogs: The installation of new boundary fencing without hedgehog access holes risks local habitat fragmentation and reduced connectivity for this priority species.

Invasive Species: Without proactive management, development works risk spreading *Buddleja davidii* and *Reynoutria japonica* onto the site and beyond, which would constitute an offence under the Wildlife and Countryside Act 1981 (Schedule 9).

8.0 Recommendations

8.1 Further Survey Requirements

Presence/Likely Absence Bat Surveys (Buildings): Buildings A and B were categorised as being of Moderate Roosting Potential and require presence/likely absence surveys on a minimum of two occasions, no less than 21 days apart. Surveys are required during the optimal survey season (May to September inclusive) to adequately characterise bat activity and determine the precise nature and significance of any roost present. Should higher than expected bat activity be recorded, additional survey effort may be required.

Ground Level Tree Assessment (GLTA): A GLTA is required for mature trees on site to identify and evaluate potential roost entry points and features of suitability, prior to any works affecting these trees (if any is proposed). Should PRFs be identified, further survey effort (e.g., emergence/re-entry surveys/or direct roost inspection) will be required.

Static Detector Surveys: Static bat detector surveys should be undertaken within the woodland to establish the extent of bat use of the site and inform the assessment of potential indirect impacts arising from the proposed development.

Hibernating Bats: As pipistrelle species are known to hibernate in buildings, a precautionary approach will be followed. Any works affecting Building A during the winter months (October to April inclusive) are to be supervised by a suitably qualified and experienced bat ecologist under the direction of a method statement.

Amphibians, Reptiles, and Small Mammals: To mitigate the risk of encountering amphibians, reptiles, and small mammals — particularly within the areas identified by target notes — a fingertip search must be conducted by a suitably experienced and licensed ecologist prior to any further site clearance, under the instruction of a precautionary method statement for Great Crested Newts. Should any protected species be identified during the search, all work must cease and a European Protected Species (EPS) licence from Natural Resources Wales will be

required before work can recommence.

Tree Replacement: Should any mature trees be removed as part of the proposed development, replacement planting shall be carried out at a ratio of 3:1 in accordance with Planning Policy Wales Edition 12 (Welsh Government, 2024). Replacement trees shall comprise standard Sessile Oak (*Quercus petraea*), native to Wales and of recognised biodiversity value, and shall be managed in perpetuity. A detailed Arboricultural Impact Assessment (AIA) in accordance with BS 5837:2012 would inform the final tree retention and replacement strategy, to be agreed with the Local Planning Authority prior to the determination of any planning application.

8.2 Avoidance, Mitigation, and Enhancement Measures

General Mitigation: Detailed avoidance and mitigation measures for bats, amphibians, reptiles, small mammals, and nesting birds should be incorporated into the development plan.

Amphibians, Reptiles, and Small Mammals: A fingertip search must be conducted by a suitably experienced and licensed ecologist prior to any site clearance, with particular attention to the areas identified by target notes, under the instruction of a precautionary method statement for Great Crested Newts. Should any protected species be encountered, all works must cease immediately and a European Protected Species licence from Natural Resources Wales obtained before resumption.

Bats (Lighting): To prevent adverse impacts on commuting and foraging habitats for bats, any permanent lighting on site will require a sensitive lighting scheme. Lighting must be functional and directional only, kept to a minimum, and utilise LED luminaires with a warm white spectrum (ideally <2,700 Kelvin) and peak wavelengths of 550 nm. Baffles and screens must be used to prevent light spill onto retained or planted vegetation. No external lighting is to be installed along the northern or western boundary of the site. Between March and September inclusive, external lighting during the development period is to be limited to that which is necessary for safety and security, and works restricted to daylight hours where possible. The scheme must follow advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023) (Appendix J).

Hedgehogs: To prevent local habitat fragmentation and maintain connectivity for hedgehogs, access holes of an appropriate size to allow passage (approximately 13 cm × 13 cm) are to be incorporated into the base of each new garden fence, and a hedgehog house is to be incorporated at the woodland edge (centrally along the northern boundary).

Nesting Birds: If an active nest is discovered during works, it must be left undisturbed until all chicks have fledged. If features associated with nesting birds require alteration during the breeding season, a further inspection by a suitably qualified ecologist is required no more than 24 hours before works commence. An exclusion zone must be established around any active nest until the chicks have fledged. To compensate for the potential loss of nesting bird habitat, an appropriate number of woodcrete nest boxes must be installed on nearby trees or structures prior to the completion of site operations.

Enhancement: See Section 10.0 for full details of biodiversity enhancement measures.

Biodiversity Net Gain: Implementation of the biodiversity enhancement features, as outlined in Section 10.0, is required to achieve a net gain for the site.

9.0 Report Validity

This report is valid for a period of 24 months from the date of the field survey (16th April 2026). Should planning permission not be sought within this period, or should conditions on the site change materially, a reassessment may be required.

10.0 Biodiversity Net Gain

In accordance with the provisions of Chapter 6 of 'Planning Policy Wales' Edition 12 (Welsh Government, 2024) (Distinctive and Natural Places) and Local Planning Policy, biodiversity enhancement measures will be incorporated into the landscaping scheme of the proposed works to maximise the ecological value of the site.

10.1 Specific Enhancement Measures

Enhancement for Bats (Integrated Roost Features): In line with national planning policy, one integrated bat roost (e.g., an Integrated Eco Bat Box, or similar) shall be installed on the southern or western aspect of each new residential unit to provide roosting habitat for crevice-dwelling species such as Common Pipistrelle (*Pipistrellus pipistrellus*). Boxes should be positioned at least 3 m above ground (ideally 6 m), in a sunny orientation to maximise thermal suitability.

Enhancement for Bats (External Roost Features): Three external bat roost features (e.g., 2FN Schwegler Bat Box, or similar) shall additionally be installed on the southern or western aspect of appropriate structures or on mature trees within the site curtilage, providing a range of climatic conditions through varied orientations.

Enhancement for Birds (Swift Bricks): In line with Section 7 of the Environment (Wales) Act 2016, and having regard to the revised list of species and habitats of principal importance published by the Welsh Government (April 2026), which includes Swifts (*Apus apus*) as a species of principal importance in Wales, one integrated swift brick shall be installed on each new residential unit and one shall be fixed to the exterior of the existing residential unit. All swift bricks shall be positioned on the northern or eastern elevation, installed as high as possible. Integrated swift bricks are preferred over external box units to ensure longevity. Details of the swift brick type and positioning shall be submitted to and approved in writing by the Local Planning Authority prior to installation.

Enhancement for Hedgehogs: To maintain and enhance connectivity for hedgehogs, one hedgehog access hole (approximately 13 cm × 13 cm) will be incorporated at the base of each new boundary fence. One Vivara Pro WoodStone Hedgehog House (or similar) shall be installed at the woodland edge (centrally along the northern boundary).

Enhancement for Amphibians: Given the local presence of Great Crested Newt (*Triturus cristatus*), a European Protected Species and Section 7 species of principal importance under the Environment (Wales) Act 2016, an amphibian hibernaculum shall be constructed at the woodland edge near the northern or western corner of the site. The hibernaculum shall be designed and constructed in accordance with the guidance set out in Langton, Beckett & Foster (2001) and positioned in a suitable location away from areas of disturbance, ideally within or adjacent to retained vegetation. Details of the design, materials, and proposed location shall be submitted to and approved in writing by the Local Planning Authority prior to installation.

Enhancements for Birds and Invertebrates (Planting and Landscaping): To mitigate for the potential loss of botanicals, maintain connectivity, and increase biodiversity, a native hedgerow shall be planted along the southern boundary between the woodland and the adjacent linked gardens. A double-row planting is recommended, with rows at least 40 cm apart and 4–6 plants per metre. Native trees and shrubs including birch (*Betula* spp.), rowan (*Sorbus aucuparia*), and hazel (*Corylus avellana*) shall be included in landscaped areas. To provide foraging habitat for bats, planting of species that attract night-flying insects is encouraged, including evening primrose (*Oenothera biennis*), goldenrod (*Solidago virgaurea*), honeysuckle (*Lonicera periclymenum*), and fleabane (*Pulicaria dysenterica*). A species-rich under-canopy seed mix shall be used with all tree or hedgerow planting, and a species-rich seed mix shall be used for all new green spaces and lawns.

Invasive Plant Species: Vigilance shall be maintained throughout the works to prevent invasive plant species from spreading. A management plan for *Buddleja davidii* and *Reynoutria japonica* shall be developed and implemented prior to or during development works, in accordance with relevant legislation and best-practice guidelines.

10.2 Conclusion of Biodiversity Net Gain

The proposed measures will maintain connectivity, increase local biodiversity, and provide additional nesting and foraging opportunities, thereby achieving biodiversity net gain for the site.

Implementation and Maintenance: The owners will be responsible for the implementation of these enhancements and the ongoing maintenance of the enhancement features in perpetuity. Should any feature fail or become damaged, it will be promptly replaced.

11.0 References

- Bat Conservation Trust (BCT) and Institution of Lighting Professionals (ILP). (2023). Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23. Bat Conservation Trust, London.
- Collins, J. (Ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London. [Minor amendments published March 2024.]
- Hedgelink. (n.d.). Hedgerow Biodiversity. Available at: <https://hedgelink.org.uk/hedgerows/hedgerow-biodiversity/> (Accessed April 2026).
- HM Government. (2017). The Conservation of Habitats and Species Regulations 2017 (as amended). The Stationery Office, London.
- Joint Nature Conservation Committee (JNCC). (2010). Handbook for Phase 1 Habitat Survey — a Technique for Environmental Audit. JNCC, Peterborough.
- Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001). Great Crested Newt Conservation Handbook. Froglife, Halesworth.
- Natural Resources Wales. (2015). Great Crested Newt Species Management Statement. Natural Resources Wales, Cardiff.
- Nestbox. (n.d.). Integrated Eco Bat Box. Available at: <https://www.nestbox.co.uk/products/integrated-eco-bat-box> (Accessed April 2026).
- Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.
- Stanbury, A. et al. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man. British Birds 114: 723–747.
- Welsh Government. (2024). Planning Policy Wales Edition 12 (updated July 2024). Welsh Government, Cardiff.
- Welsh Government. (2026). Section 7 List of Species and Habitats of Principal Importance in Wales (revised April 2026). Welsh Government, Cardiff.
- Wildlife and Countryside Act 1981 (as amended). The Stationery Office, London.
- Wildcare. (2025). Schwegler 2M Nest Box 32 mm. Available at: <https://www.wildcare.co.uk/schwegler-2m-nest-box-32mm-red.html> (Accessed April 2026).
- Woodland Trust. (n.d.). How to Plant a Tree. Available at: <https://www.woodlandtrust.org.uk/plant-trees/advice/how-to-plant/> (Accessed April 2026).

Appendix A: Site Location

Date: April 2026

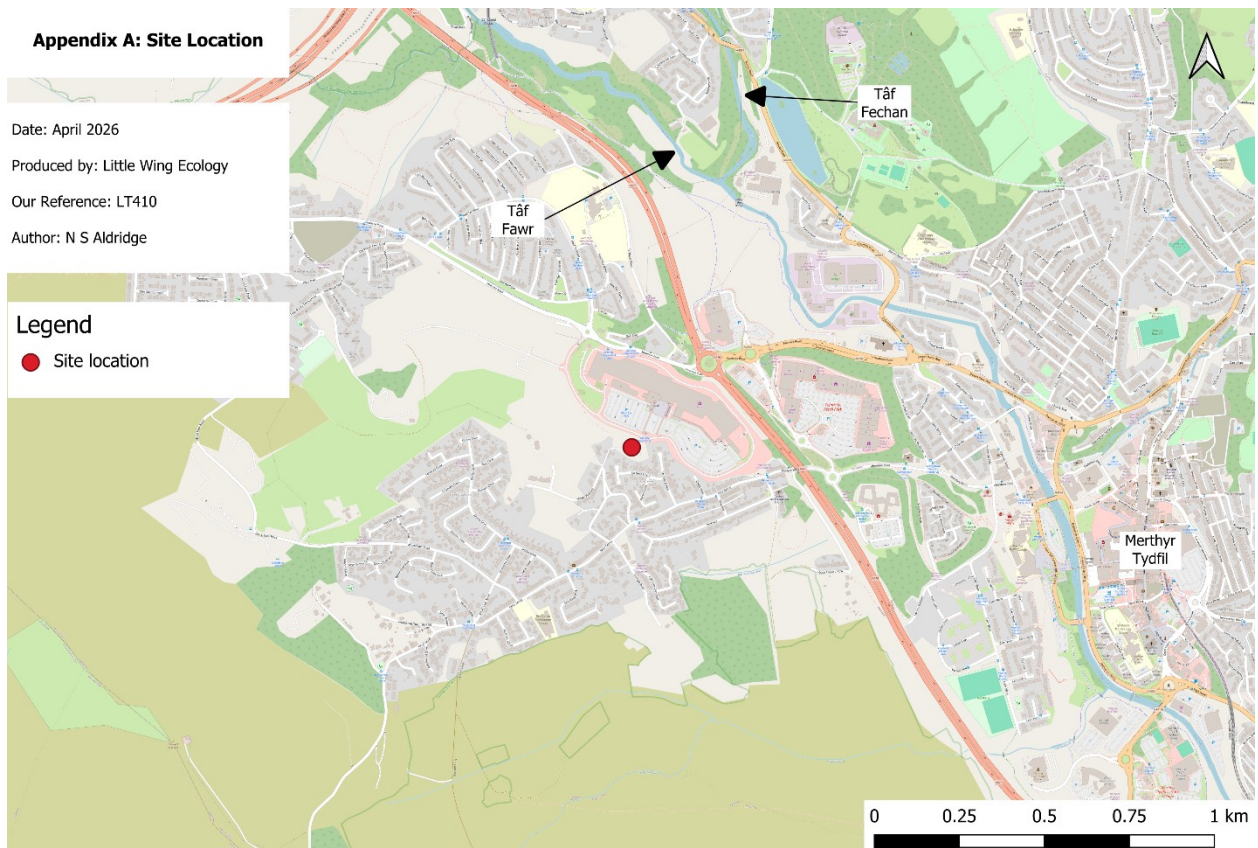
Produced by: Little Wing Ecology

Our Reference: LT410

Author: N S Aldridge

Legend

● Site location



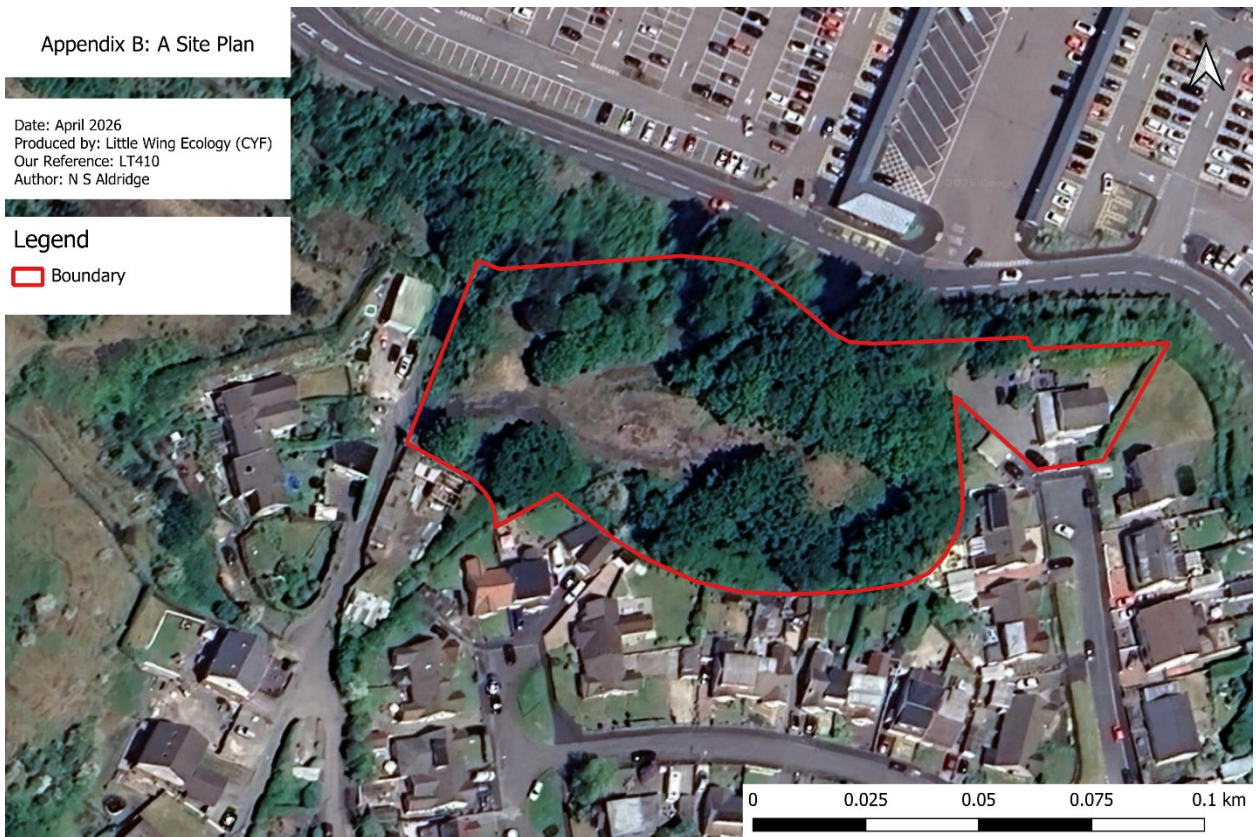
QGIS Development Team, <2026>. QGIS Geographic Information System. Open-Source Geospatial Foundation Project.

Appendix B: A Site Plan

Date: April 2026
Produced by: Little Wing Ecology (CYF)
Our Reference: LT410
Author: N S Aldridge

Legend

 Boundary



QGIS Development Team, <2026>. QGIS Geographic System. Open-Source eospacial Foundation Project.

Appendix C: Phase 1 Map

Date: April 2026
 Produced by: Little Wing Ecology (CYF)
 Our Reference: LT410
 Author: N S Aldridge

Legend

- A1.1.1 - Semi-natural woodland
- A2.2 - Scrub - scattered
- J1.2 - Amenity grassland
- J1.4 - Introduced shrub
- J2.2.1 - Defunct hedge
- J2.5 - Wall
- J3.6 - Buildings
- J4 - Bare ground
- J5 - Other habitat
- J2.4 - Fence
- Target Notes
 - 1 - Mature trees
 - 2. Wood pile
 - 3. Stone pile
- Boundary



QGIS Development Team, <2026>. QGIS Geographic System. Open-Source eospacial Foundation Project.

Appendix D: Habitat - Site Photography



Semi-natural broadleaved woodland (A1.1.1)



Scattered Scrub (A2.2)



Amenity grassland (J1.2)



Introduced Shrub (J1.4)



Defunct hedge- species poor (J2.2.2.2)



Fence (J2.4)



Wall (J2.5)



Building (J3.6)



Bare ground (J4)



Other [Hard-standing] (J5)

Appendix E: Target Notes - Site Photography



Target note 1 – Waterlogged ground



Target note 2 – Waterlogged ground



Target note 3 – Stone pile

Appendix F: PRA & Daytime Bat Walkover - Site Photography



Building A – Southern elevation



Building A – Northern elevation



Building A – Eastern elevation



Building A – Western elevation



Building A – Southern elevation – PFF – Raised tiles



Building A – Southern elevation – PFF – Row of raised tiles



Building B – Eastern elevation



Building B – Western elevation – PRF – Potential night roost. Arrow shows location of inactive nest.



Woodland: Several very large and mature oak trees requiring a ground level roost assessment



Woodland: Several very large and mature oak trees requiring a ground level roost assessment

Appendix G – Species List

Common name	Scientific name	A.1.1.1	A.2.2	J.1.2	J.1.4	J.2.2.2	J.2.4	J.2.5	J.3.6	J.4	J5
		Semi-natural broadleaved woodland	Scattered scrub	Amenity grassland	Introduced shrub	Defunct hedge - species-poor	Fence	Wall	Buildings	Bare ground	Other habitat
Bird - Blackbird	<i>Turdus merula</i>	x									
Bird - Chaffinch	<i>Fringilla coelebs</i>	x									
Bird - European robin	<i>Erithacus rubecula</i>	x									
Bird - Great tit	<i>Parus major</i>	x									
Bird - House sparrow	<i>Passer domesticus</i>	x									
Bird - robin	<i>Larus argentatus</i>	x									
Bird - Wren	<i>Troglodytes troglodytes</i>	x									
Bird's foot trefoil	<i>Lotus corniculatus</i>			x							
Bittercress	<i>Cardamine flexuosa</i>	x		x						x	x
Bluebell (Spanish - Horticultural)	<i>Hyacinthoides hispanica</i>			x							
Bramble (European blackberry)	<i>Rubus fruticosus</i>	x	x			x				x	
Buddleia	<i>Buddleja davidii</i>										x
Buttercup (Creeping)	<i>Ranunculus repens</i>			x						x	
Buttercup (Meadow)	<i>Ranunculus acris</i>	x									
Celendine (Lesser)	<i>Ficaria verna</i>	x									
Cleavers (Common)	<i>Galium aparine</i>	x								x	
Colt's foot	<i>Tussilago farfara</i>										x
Cotoneaster	<i>Cotoneaster spp.</i>	x	x							x	
Cranesbill (Cut-leaved)	<i>Geranium dissectum</i>			x						x	
Cranesbill (Dove's foot)	<i>Geranium molle</i>									x	
Cranesbill (Shining)	<i>Geranium lucidum</i>		x								x
Dandelion (common)	<i>Taraxacum officinale</i>			x						x	
Dock (Broad-leaved)	<i>Rumex obtusifolius</i>									x	
Fern - Broad buckler	<i>Dryopteris dilatata</i>	x									
Fern - Lady fern	<i>Athyrium filix-femina</i>	x									
Fern (Common polypody)	<i>Polypodium vulgare</i>	x	x								
Forget-me-not (wood)	<i>Myosotis sylvatica</i>			x							
Forget-me-not spp.,	<i>Myosotis spp.</i>	x									
Foxglove (common)	<i>Digitalis purpurea</i>	x	x								x
Fungi - Hairy curtain crust	<i>Stereum hirsutum</i>	x		x							
Fungi - St. George's mushroom	<i>Calocybe gambosa</i>			x							
Fungus - Piziza spp.,	<i>Piziza spp.</i>										x
Grasses - Annual meadow grass	<i>Poa annua</i>	x		x							
Grasses - Cock's-foot	<i>Dactylis glomerata</i>			x							x
Grasses - Yorkshire fog	<i>Holcus lanatus</i>			x							x
Hawkweed (Mouse-eared)	<i>Pilosella officinarum</i>										x
Heather (Ling)	<i>Calluna vulgaris</i>		x								
Herb Robert	<i>Geranium robertianum</i>		x								x
Honeysuckle (Common)	<i>Lonicera periclymenum</i>	x				x	x				
Honeysuckle (Himalayan)	<i>Leycesteria formosa</i>										
Honeysuckle (Wilson's)	<i>Lonicera nitida</i>					x					
Horsetail (Common)	<i>Equisetum arvense</i>										x
Hydrangea	<i>Hydrangea macrophylla</i>										x
Invertebrate - Hawthorn fly	<i>Bibio marci</i>	x									
Ivy (Common)	<i>Hedera helix</i>	x								x	

APPENDICES

Knapweed	<i>Centaurea nigra</i>			x							
Leyland cypress 'Castlewellan Gold'	(× Cuprocyparis leylandii 'Castlewellan Gold')				x						
Lichen (Oakmoss)	<i>Evernia spp.</i> ,	x									
Lilac (common)	<i>Syringa vulgaris</i>										x
Moss - Fire moss	<i>Ceratodon purpureus</i>								x		
Moss - Pincushion	<i>Ulota spp.</i> ,	x									
Moss - Screw wall	<i>Tortula muralis</i>										
Moss - Silky wall feather moss	<i>Homalothecium sericeum</i>	x									x
Moss - Star moss	<i>Polytrichum juniperinum</i>										
Moss - velvet moss	<i>Pleurozium schreberi</i>										
Moss (Bank haircap)	<i>Polytrichum formosum</i>	x									
Moss (Cypress-leaved plaitmoss)	<i>Hypnum cupressiforme</i>	x									
Moss (Feather)	<i>Hypnales spp.</i> ,										
Moss (Springy turf moss)	<i>Rhytidiadelphus squarrosus</i>			x							
Moss (Wall screw moss)	<i>Tortula muralis</i>							x			
Mosses (Common haircap moss)	<i>Polytrichum commune</i>										
Nettle (Common)	<i>Urtica dioica</i>	x								x	x
Newzealand Cabbage Tree	<i>Cordyline australis</i>										x
Nipplewort	<i>Lapsana communis</i>			x							x
Orange Montbretia spp.,	<i>Crococsmia spp.</i> ,		x							x	x
Plantain (Broad leaved)	<i>Plantago major</i>			x							
Plantain (Ribwort)	<i>Plantago lanceolata</i>			x							
Primrose	<i>Primula vulgaris</i>			x							
Primrose (Horticultural)	<i>Primula spp.</i> ,										x
Ragwort (Common)	<i>Jacobaea vulgaris</i>	x	x							x	
Rosehip (dog rose)	<i>Rosa canina</i>	x									
Sorrel (Common)	<i>Rumex acetosa</i>			x							
Speedwell (Germander)	<i>Veronica chamaedrys</i>									x	
Speedwell spp.,	<i>Veronica spp.</i> ,			x							
Strawberry (Horticultural)	<i>Fragaria spp.</i> ,										x
Thistle (Bull)	<i>Cirsium vulgare</i>										x
Tree - Apple (Horticultural)	<i>Malus spp.</i> ,										x
Tree - Ash (European)	<i>Fraxinus excelsior</i>	x									
Tree - Birch (Downy)	<i>Betula pubescens</i>	x									
Tree - Blackthorn (Common)	<i>Prunus spinosa</i>	x									
Tree - Hazel (common)	<i>Corylus avellana</i>	x									
Tree - Holly (Common)	<i>Ilex aquifolium</i>	x									
Tree - Layland spp.,	<i>Laylandii spp.</i> ,	x			x						
Tree - Mountain ash	<i>Sorbus aucuparia</i>	x									
Tree - Oak	<i>Oak spp.</i> ,	x			x						
Tree - Oak (Sessile)	<i>Quercus petraea</i>	x			x						
Tree - Scots pine	<i>Pinus sylvestris</i>	x									
Tree - Sycamore	<i>Acer pseudoplatanus</i>	x									
Tree - Wild cherry	<i>Prunus avium</i>	x									
Tree - Willow (Goat)	<i>Salix caprea</i>	x									
Tree - Yew	<i>Taxus baccata</i>	x									
Tree/shrub - Hawthorn (Common)	<i>Crataegus monogyna</i>	x				x					
Vetch (Common)	<i>Vicia sativa</i>			x							
Vetch spp.,	<i>Vicia spp.</i> ,		x								
Willowherb (Broad-leaved)	<i>Epilobium montanum</i>	x									
Willowherb (Rosebay)	<i>Chamaenerion angustifolium</i>	x								x	x
Wimberry	<i>Vaccinium myrtillus</i>	x									
Wood avens	<i>Geum urbanum</i>	x									x
Woodrush spp.,	<i>Luzula spp.</i> ,		x	x							
Woundwort (Marsh)	<i>Stachys palustris</i>										

Appendix H: Meet the Team

Nic Aldridge (NA) is an ecologist with Little Wing Ecology and the author of this report. He is a licensed bat worker (S094182/1) with over 20 years' experience in education and conservation and over eight years' experience surveying built-structures, open habitats, and woodlands for bats. Following a degree in Botany and Zoology, Nic completed an MSc in Wildlife Management, Conservation and Control at the University of Reading. He has practical experience in field-based research with a focus on invertebrate and vegetation diversity and producing phase 1 habitat surveys and habitat management plans. He is experienced in hand netting common pipistrelle and soprano pipistrelle from maternity roosts, has carried out the ringing of Daubenton's bats as part of a multi-year project on the species and has undertaken monitoring work on several important lesser horseshoe bat roosts. Nic writes EPS licence applications, ecological reports and provides Ecological Clerk of Works services. He has attended courses with the Bat Conservation Trust to improve his knowledge and skills and has led voluntary projects to develop habitats and collect species data. Nic founded Little Wing Ecology in 2021 as a not-for-profit, to use the skills and expertise of an ecological consultancy to work with the local community, support local conservation projects and provide training and education for the next generation of ecologists.

Elizabeth Winstanley (LW) is a Nature Recovery Officer with a large Conservation Organisation, and a wildlife surveyor with Little Wing Ecology. She has over ten years' experience working in practical conservation. Following a degree in Outdoor Education, Liz volunteered with The Wildlife Trust before taking on her current responsibilities. She has held her current position since 2015. During this time, Liz has undertaken numerous surveys and monitoring projects, including work on butterfly transects, phase 1 habitat surveys, reptile and amphibian surveys, upland monitoring, BTO bird box round, intermediate tree survey and inspection, dormouse training and recording, bumblebee conservation – bee walks and many more. Currently Liz is responsible for the management of seven Nature Reserves including four SSSIs. Liz has also attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.

Tracey Cotterell (TC) is employed by the NHS as a Porter and a wildlife surveyor with Little Wing Ecology. Tracey has a lifelong love of nature and enjoys spending her spare time volunteering with organisations such as The Welsh Wildlife Trusts, Blaenavon Heritage and the TRF (Trail Riders Fellowship). She enjoys being outdoors, whether in a working capacity or for personal interest such as running, riding, or surfing. She has volunteered throughout her life in roles as varied as an NHS First Responder, to working for the Wildlife Trust. During this time, she has gained skills in volunteering with environmental conservation matters, and through being a signaller in a search and rescue team. Tracey enjoys the responsibility of conserving the surrounding environment, learning, and helping to regulate human activities to minimise direct and indirect negative impacts on both flora and fauna. Tracey has also attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.

Yvette Amos (YA) is a wildlife surveyor with Little Wing Ecology. She has a lifelong love of nature and enjoys spending her spare time and vacations centred around nature and wildlife focused destinations. Yvette enjoys being outdoors, where she expresses her love of photography along with her interest in the natural world. She is experienced in data collection at a high level, having formerly worked for Cardiff University, School of Social Sciences and Computer Science. Yvette has attended several training sessions to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology and is dedicated to gaining experience in nature conservation, wildlife management and ecology.

Richard Farr (RF) is a wildlife surveyor with Little Wing Ecology. Richard has a life-long love of nature and has previously worked with the Gwent Wildlife Trust, where he gained a wide set of practical skills and experiences which have developed his knowledge and understanding of ecology and conservation at a range of the Trust's Local Nature Reserves. He has recently completed his bachelor's degree in ecology and conservation science at the University of the West of England (UWE), which has allowed him to develop knowledge and skills in numerous areas including field/survey techniques, geographical information systems, consultancy, habitat management/identification, data collection, data analysis using software such as RStudio. He has attended multiple training sessions to further develop skills and knowledge in bat monitoring, bat ecology, conducting surveys and associated reports.

Libby Cotterell (LC) is a full-time student and a wildlife surveyor with Little Wing Ecology. She has a lifelong love of nature and the outdoors and enjoys learning new skills and engaging in practical work, in order to have a positive impact on local conservation issues. Libby has attended several training sessions with Little Wing Ecology to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.

Elise Winstanley (ELW) is a full-time student and a wildlife surveyor with Little Wing Ecology. She previously ran a college newspaper and is committed to community engagement - both in her academic life and in the local community, as shown by her willingness to integrate herself into the towns of both Ebbw Vale and Lampeter. Elise is currently studying creative writing and has a keen interest in nature and habitat preservation. She has attended several training sessions with Little Wing Ecology to develop her knowledge, understanding and practical skills in bat monitoring and bat ecology.

Sam Haycock (SH) is a founding director of Little Wing Ecology and a commercial assurance executive with a national company. Sam has over 20 years' experience in the education sector and four years' experience managing two rural enterprise companies, of which she was a director for three years. She brings a broad range of interdisciplinary skills to her role at Little Wing Ecology where she has responsibility for editing, reviewing, data management and finances. In 2021, Sam became a founding director of Little Wing Ecology, as a social enterprise, that aims to use the skills and expertise of an ecological consultancy, to work with the local community, support local conservation projects and provide training and education for the next generation of ecologists and conservationists.

Appendix I: Additional Information (Species Potential)

Confirmed Presence	Species recorded to be present during the survey. Evidence of species is recorded during the survey.
High	Buildings, trees or other structures with features of interest for use by protected species are recorded e.g. nesting habitat, roosting opportunities and/or ponds. Habitat with high quality foraging opportunities e.g. broadleaved woodland, tree-lined watercourses and grazed grassland. The site is connected to the wider landscape by strong linear features that have the potential to be used by commuting species e.g. a river, stream and/or hedgerows. The site is close to known locations of recorded protected species.
Medium	Several potential habitat opportunities in buildings, trees or other structures recorded during the survey. Habitat could be used for foraging e.g. trees, shrubs, grassland and/or water. The site is connected to the wider landscape by linear features that could be used by commuting species e.g. lines of trees, scrubs or linked back gardens.
Low	A small number of less significant features are recorded. Isolated habitat suitable for foraging e.g. a lone tree or patch of scrub. An isolated site which is not connected by significant linear features in the landscape.
Negligible	No suitable habitats observed.

Appendix J: Additional Information (Bat Friendly Lighting Scheme)

To prevent any adverse impact upon the potential roosting, commuting and foraging habitats for bats adjacent to the Site (post development), specifically on the nearby mature trees, a lighting plan is required. Lighting for the site must be functional and directional only and kept to a minimum, servicing the public areas of the proposed development (as required for safety and security). It must be achieved using baffles and screens if necessary, to ensure no light spill on any retained or planted vegetation (including off-site vegetation - e.g., if there is potential to impact animals using the nearby habitat features).

- A sensitive lighting scheme is recommended and must be created. The sensitive lighting scheme must follow advice detailed in 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023) and comprise of:
- Light fixtures, filaments, light spill and artificial light must be directed away from bat roost entrances, both existing and those to be created as part of the mitigation.
- Luminaries are to be LED only, due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. Luminaires must have a warm white spectrum (ideally <2700 Kelvins), reducing the blue light component and increasing the red-light component.
- Luminaries must feature peak wavelengths of 550nm to avoid the component of light most disturbing to bats.
- Heights of fixtures must be carefully considered to minimise light spill. Only luminaries with an upward light ratio of 0% and with good optical control must be used.
- Luminaries must always be mounted on the horizontal, i.e., no upward tilt.
- Any external security lighting must be set on motion sensors and short (15 second) timers.
- As a last resort, accessories such as baffles, hoods or louvres must also be used, and directed away from any natural features and must not encroach outside the Site boundaries, particularly the surrounding trees, hedgerows, and other vegetation in the landscape.

A copy of 'Bats and Artificial Lighting in the UK: Technical Guidance Note 08/23' (2023) can be found here:

<https://www.bats.org.uk/news/2023/08/bats-and-artificial-lighting-at-night-ilp-guidance-note-update-released>

Appendix K: Biodiversity Enhancement Features

Category	Product / Feature / Information	Availability
Bats	Integrated Eco Bat Box	https://www.nestbox.co.uk/products/integrated-eco-bat-box
Bats	Beaumaris Bat Box	https://www.wildcare.co.uk/beaumaris-bat-box.html?gad_source=1&gclid=CjwKCAjw65-zBhBkEiwAjrQmLWbftTavFlgGTV2ry0OGQEWnqN0eVseleG460NUFFHmj6NAF2TcGZhQCsKEQAvD_BwE
Bats	Bat Access Tiles: Slate	https://beddoesproducts.com/
Bats	Bat Access Tiles: Terracotta	https://spicertiles.co.uk/product/bat-access-tiles/
Bats	F2 Schwegler Bat Box	https://www.wildcare.co.uk/bat-box-45.html
Bats	2FN Schwegler Bat Box	https://www.wildcare.co.uk/bat-box-55.html
Bats	Eco Rocket Bat Box (Pole mounted)	https://www.nestbox.co.uk/products/eco-rocket-bat-box
Bats	Eco Kent Bat Box	https://www.nhbs.com/eco-kent-bat-box
Birds	1SP Schwegler Sparrow Terrace	https://www.nhbs.com/1sp-schwegler-sparrow-terrace
Birds	No10 Schwegler Swallow Nest	https://www.nhbs.com/no-10-schwegler-swallow-nest?bkfno=174809&ca_id=1495&adlocale=uk&gad_source=1&gclid=Cj0KCQjw8MG1BhCoARIsAHxSiQn8rz11Yabuq80zjBuXHmQn9XgWOqdwqh6TCQeJk6cZwCXiN-ezAaAnb9EALw_wcB
Birds	Schwegler 2m nest box 32mm red	https://www.wildcare.co.uk/schwegler-2m-nest-box-32mm-red.html
Birds	Vivara Pro Seville 32mm WoodStone Nest Box	https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box?bkfno=234956&ca_id=1495&adlocale=uk&gad_source=1&gclid=CjwKCAjw1emzBhB8EiwAHwZZxQ3ycKKX1WfX_vPwy4H0tmxOd8U47PSFg_oRKWOuj01vGrNPv2budhoC43AQAvD_BwE
Birds	B1 Schwegler Nest Box	www.nhbs.com
Birds	2H Schwegler Open-fronted Boxes	https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes/open-front-bird-box.html?gad_source=1&gclid=Cj0KCQjw8MG1BhCoARIsAHxSiQn8rz11Yabuq80zjBuXHmQn9XgWOqdwqh6TCQeJk6cZwCXiN-ezAaAnb9EALw_wcB
Birds	Bilbao Nest Box	www.wildcare.co.uk
Botany: Seeds	Species-rich Neutral Grassland (Lawn)	https://www.cumbriawildflowers.co.uk/habitats/neutralhaymeadowmix
Botany: Seeds	Native Woodland Under-canopy Mix: Wildflowers and Native Woodland Under-canopy Mix: Grasses	https://www.pitchcare.com/products/shade-hedgerow-woodland-wildflower?gad_source=1&gclid=CjwKCAIA3jCvBhA8EiwA4kuJZoagG-WP6tDAjs71P4QXzKHYHzOnsDjaD0cfr0j9fwOW1kwRX0LDLxocQp8QAvD_BwE
Botany: Seeds	Seed Mix: Pond Edge	https://britishpondplants.co.uk/products/pond-edge-seed-mix#:~:text=Pond%20Edge%20Seed%20Mix&text=The%20first%20consists%20of%2030,the%20wildflowers%20at%20only%201g.
Botany: Saplings	Traditional hedgerow mix	https://hedgelink.org.uk/hedgerows/hedgerow-biodiversity/
Botany: Trees	Standard Downy Birch Tree	https://www.tree-shop.co.uk/product/downy-birch-betula-pubeszens/
Botany: Trees	Standard Rowan	https://www.ashridgetrees.co.uk/p/garden-trees/sorbus/sorbus-mountain-ash-rowan
Botany: Trees	Standard Hazel	https://shop.woodlandtrust.org.uk/hazel
Botany: Trees	Standard Sessile Oak	https://www.ashridgetrees.co.uk/p/garden-trees/oak-quercus/petrae-sessile?utm_campaign=20731047289&utm_medium=cpc&utm_source=google&utm_content=&utm_term=&utm_marketing_tactic=20731047289&utm_creative_format=&utm_source_platform=g_x&gad_source=1&gclid=CjwKCAIAu28hA8EiwAq16bwyGfDm5rQacflRTVAgPmP9yL1Vwpr0ZDm8OCNv0f8gq8ocX18QAvD_BwE
Ponds	Froglife: Just Add Water: How to Build a Wildlife Pond	https://www.froglife.org/wp-content/uploads/2013/07/JAW2014-for-printing-HLF1.pdf
Invertebrates	RSPB: Wildlife Friendly Compost Heap	https://www.rspb.org.uk/get-involved/activities/nature-on-your-doorstep/garden-activities/how-to-start-composting/?channel=paidsearch&gclid=Cj0KCQjw8MG1BhCoARIsAHxSiQn8rz11Yabuq80zjBuXHmQn9XgWOqdwqh6TCQeJk6cZwCXiN-ezAaAnb9EALw_wcB&gclidsrc=aw_ds
Invertebrates	Bee Bricks	https://www.wildcare.co.uk/wildlife-nest-boxes/insect-habitat/solitary-insects/greenblue-bee-brick.html?gad_source=1&gclid=CjwKCAjw1emzBhB8EiwAHwZZxQhTPlq1vLIUmTcv0q5w_jD941gKKcX5Nsnlh4NVwije7wxAnkazhoCggUQAvD_BwE
Invertebrates	Schwegler Clay and Reed Insect Nest	www.nhbs.com
Habitat management	Plantlife: Managing a Small Meadow for Wildlife	https://meadows.plantlife.org.uk/3-maintaining-meadows/managing-meadows-of-all-sizes-with-mowing/
Habitat management	Woodland Trust: How to Plant a Tree	https://www.woodlandtrust.org.uk/plant-trees/advice/how-to-plant/
Hedgehogs	Vivara Pro WoodStone Hedgehog House	https://www.wildcare.co.uk/wildlife-nest-boxes/other-mammal-nest-boxes/hedgehogs/woodstone-hedgehog-house-10506.html?gad_source=1&gclid=CjwKCAIA9bq6BhAKEiwAH6bqoG61jaD7qZxLkHiCns8zdc5xCwnaFe-yOFvsp_pt2WZgavkUqzfthoCjdMQAvD_BwE
Hedgehogs	Eco Hedgehog Hole Plate	https://www.nestbox.co.uk/products/eco-hedgehog-hole-plate?_pos=2&_sid=cfc475fd2&_ss=r
Amphibians	An Amphibian Hibernacula: English Nature: Great Crested Newt Mitigation Guidelines.	https://www.froglife.org/



CYFYNGIADAU

Mae Little Wing Ecology (CYF) wedi paratoi'r Adroddiad hwn at ddefnydd y Cleient neu ei Asiantau uchod yn unig yn unol â'n telerau busnes, y cyflawnwyd ein gwasanaethau oddi tanynt. Ni roddir unrhyw warant arall, wedi'i mynegi neu ei hawgrymu, ynghylch y cyngor proffesiynol sydd wedi'i gynnwys yn yr Adroddiad hwn nac unrhyw wasanaethau eraill a ddarperir gennym ni. Ni all unrhyw barti arall ddibynnu ar yr Adroddiad hwn heb gytundeb ysgrifenedig penodol ymlaen llaw gan Little Wing Ecology (CYF).

Mae'r asesiadau a wnaed yn rhagdybio y bydd y safle(oedd) a'r cyfleusterau yn parhau i gael eu defnyddio i'w pwrpas presennol heb newid sylweddol. Mae'r casgliadau a'r argymhellion yn yr Adroddiad hwn yn seiliedig ar wybodaeth a ddarparwyd gan eraill ac ar y dybiaeth bod yr holl wybodaeth berthnasol wedi'i darparu gan y partïon hynny y gofynnwyd amdani. Nid yw gwybodaeth a gafwyd gan drydydd partïon wedi'i dilysu'n annibynnol gan Little Wing Ecology (CYF).

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About Us

Little Wing Ecology is a not-for-profit ecological consultancy serving the South Wales Valleys and beyond. We combine professional expertise with community impact, delivering high-quality ecological services while reinvesting in local nature and people.

We are a small ecological consultancy dedicated to providing accessible and pragmatic services that uphold the highest standards of conservation.

Our Services

Survey and Assessment Services:

- Preliminary Ecological Appraisals and Roost Assessments
- Comprehensive bat, reptile, and eDNA surveys
- European Protected Species License Applications

Planning and Implementation Support:

- Mitigation planning and Green Infrastructure Statements
- On-site development support services

Our Mission

As a Consultancy, we use our experience, expertise, and commitment to conservation to provide an accessible and pragmatic service that upholds the highest standards of environmental protection.

As a Not-for-Profit Social Enterprise, we reinvest our profits to create lasting positive change. We collaborate with valleys communities, conservation groups, local authorities, and partners to advance our three core commitments:

A. Helping Nature

We champion biodiversity recovery and resilience through:

- Habitat restoration and enhancement initiatives
- Designing built environments that work with wildlife
- Supporting long-term conservation monitoring that informs future protection efforts

B. Working with People

We believe in empowering communities through meaningful engagement with nature:

- Creating employment, training and volunteer pathways that build ecological skills and confidence
- Fostering the next generation of conservation champions
- Strengthening the connection between people and their natural environment

C. Supporting Communities

We invest in the places and people we serve:

- Reinvesting locally in nature-positive projects and community development
- Promoting environmental education that builds understanding and stewardship
- Providing expertise to support worthwhile causes and community-led initiatives

Our Vision: A thriving South Wales Valleys where nature and communities flourish together, supported by practical conservation action and shared environmental stewardship.

Adroddiad Arolwg gan



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