

PRELIMINARY ECOLOGICAL APPRAISAL (PEA) AND GREEN INFRASTRUCTURE STATEMENT

Llys Llewelyn,

Garth, Wrexham, Wales

Client: Mr & Mrs Clifton

September 2025

Quality Assurance

The information which the author has prepared and provided is true, and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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CONTENTS

1. INTRODUCTION 7
1.1. Site Description 7
1.2. Proposed Development 8
2. METHODOLOGY 8
2.1. Personnel & Quality Assurance 8
2.2. Scope of the Assessment 8
2.3. Desk Study 8
2.4. Field Survey 9
2.5. Assessment and Evaluation 9
2.6. Zone of Influence 10
3. CONSTRAINTS 11
4. BASELINE ECOLOGICAL CONDITIONS 11
4.1. Designated Sites 11
Statutory Designated Sites 11
Non-statutory sites 11
4.2. Habitats 12
4.3. Species 14
5. PLANNING POLICY AND LEGISLATION 21
5.1. National Planning Policy 21
5.2. Local Planning Policy 22
5.3. Relevant Legislation 23
6. ECOLOGICAL EVALUATION, AND RECOMMENDATIONS FOR MITIGATION, AND FURTHER SURVEY 26
6.1. Designated Sites 26
6.2. Habitats 26
6.3. Species and Species Groups 32
7. GREEN INFRASTUCTURE STATEMENT / BIODIVERITY NET-BENEFIT 35
7.1. Existing Green Infrastructure 35
7.2. Proposed Green Infrastructure 36
7.3. Biodiversity Considerations 38

7.4. Connectivity and Linkages 38
7.5. Maintenance and Management 38
8. COMPLIANCE WITH POLICIES **39**
9. CONCLUSIONS **40**
10. REFERENCES **41**

APPENDICES

APPENDIX 1 SITE LOCATION PLANS
APPENDIX 2: PHASE 1 HABITAT PLAN
APPENDIX 3: SITE PHOTOS
APPENDIX 4: PRELIMINARY BAT ROOST INSPECTIONS OF BUILDINGS
APPENDIX 5: FRAME OF REFERENCE FOR GEOGRAPHICAL VALUE
APPENDIX 6: LOCAL RECORD CENTRE DATA (SUMMARY REPORT).
APPENDIX 7: PROPOSED DEVELOPMENT PLANS

Summary

A Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PRA) and associated Green Infrastructure Statement was commissioned by JMP Northwest on behalf of the client (Mr & Mrs Clifton), in June 2025 of a property named Llys Llewelyn, Blackwood Road, Garth, Wrexham Wales.

The survey was commissioned to support a proposed planning application for demolition of the existing residential property and construction of a single Dwelling House in its place. The development footprint is largely of the existing developed area of the site, and the wider side ownership will remain unaffected but will be enhanced from a nature conservation point of view.

Due to the scale of the proposed development and distance/disconnect from any statutory or non-statutory designated sites, no impacts upon such sites are anticipated because of the proposed development.

In view of the results of the desk and field-based assessment of the site, with the exception of the habitats in the wider site boundary, the development site itself is considered to be of relatively low ecological value in the local context. Further to this, due to the limited nature of the proposals, loss of biodiversity as a result of the proposed development is minimal and can be mitigated for and enhanced (in line with the requirements of local and national planning policy in relation to biodiversity) as part of the proposed development and taking into account and enhancing the relationship of the site with green infrastructure in the wider context.

The areas proposed for re-development contain no significant semi-natural habitat.

The buildings have been surveyed for their potential for supporting bat roosts, with no roosts identified. The small coal-shed has limited hibernation potential for bats, which will be checked prior to any works affecting it if in winter. Bat boxes will be installed to compensate for any lost potential roost features and enhance opportunities overall.

The buildings, trees and shrubs have potential to support nesting birds and mitigation measures have been recommended in relation to avoiding conflict with nesting birds.

Precautionary working measures have also been recommended around the potential for presence of reptiles (common and widespread species) in relation to the redevelopment of the site.

Habitat and species enhancement measures have been recommended included a commitment to use of native tree and shrub species for tree and hedge planting, reduction/removal of

invasive and vigorous non-native species, installation of bat and bird boxes and creation of habitat piles in secluded areas of the site.

For the development to proceed in line with Welsh and UK legislation and Planning Policy relating to biodiversity, the recommendations contained within this report should be considered and adopted as necessary.

Where appropriate measures as recommended in the report are adopted, the development will be able to proceed having considered and addressed the necessary legislation and both local and national policy relating to biodiversity conservation.

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1. INTRODUCTION

A Preliminary Ecological Appraisal (PEA) and Preliminary Bat Roost Assessment (PRA) and associated Green Infrastructure Statement was commissioned by JMP Northwest on behalf of the client (Mr & Mrs Clifton), in June 2025 of a property named Llys Llewelyn, Blackwood Road, Garth, Wrexham Wales.

The survey was commissioned to support a proposed planning application for demolition of the existing residential property (and associated outbuildings) and construction of a single Dwelling House with garage and workshop in its place. The development footprint is largely of the existing developed area of the site, and the wider side ownership will remain unaffected but will be enhanced from a nature conservation point of view.

The purpose of the survey and the report is to provide an ecological baseline and an initial assessment of the potential impacts of any potential development proposals upon the nature conservation of the site, with additional focus on the suitability of buildings to support bat roosts and nesting birds.

1.1. Site Description

The site is a single storey residential dwelling and associated outbuildings and grounds located off Blackwood Road, Garth, Wrexham, Wales (Grid Reference: SJ 25049 43069). The dwelling house is accompanied by three small outbuildings including an outdoor toilet, a small coal-store and a workshop/shed. The site is location on a hillside overlooking the Dee Valley to the south in a rural location. The site is surrounded by grazing pasture, blocks of conifer plantation and areas of upland heathland in the wider context.



Figure 1. Site and surrounding landscape character (Site area in red)

1.2. Proposed Development

The proposals for the site include demolition of the existing buildings and construction of a new single dwelling with associated garage/workshop, access and gardens.

2. METHODOLOGY

2.1. Personnel & Quality Assurance

All field work and assessment was undertaken by Rob Nicholson BSc (Hons) MCIEEM, a suitably experienced and Natural Resources Wales Bat licenced ecologist, in accordance with current best practice guidelines (CIEEM, 2016). The field survey was undertaken on the 6th June 2025 and the desk-based assessment was conducted on the 25th June 2025 (following receipt of data requested from Cofnod, the Local Records Centre for North Wales). The report has been prepared in accordance with guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM 2017) and the British Standard 42020:2013.

2.2. Scope of the Assessment

The following ecological features / resources were considered during the assessment:

- Statutory and Non-Statutory Designated sites;
- Habitats of principal importance for conservation of biodiversity;
- Protected species (including a full Preliminary Bat Roost Assessment of buildings using current professional survey guidelines (Collins, 2023));
- Species of principal importance for conservation of biodiversity;
- Other notable species.

No consultations have taken place in relation to determining the scope of the assessment.

2.3. Desk Study

To inform the survey, a desk study was conducted using available ecological information relating to ecology for the area surrounding the site. Online resources, including Multi-Agency Geographic Information Centre (MAGIC), were consulted in relation to the presence of sites and habitats of importance in the wider context.

A data request to Cofnod, the Local Records Centre (LRC) for the area, was made for full species records and list of non-statutory designated sites (e.g., local wildlife sites) within 2 km of the site (Summary provided at Appendix 6 and full details available upon request).

Other organisations in the county that may hold relevant ecological data were not consulted (the full extent of data can be provided upon request).

It is important to note that most species are greatly under-recorded and therefore a lack of records for a location should not be taken as an absence of the species concerned.

Furthermore, a historical record for a habitat or species does not necessarily confirm its current presence.

2.4. Field Survey

Phase 1 Habitat Survey

A habitat survey was conducted on 6th June 2025 based on the techniques and methodologies described in 'Handbook for Phase 1 habitat survey: A technique for environmental audit' (JNCC, 2010) and using standard nomenclature (Stace 2019). The habitats present were recorded on to a field map (Appendix 2) along with digital photographs (Appendix 4), providing supplementary information on, for example, species composition structure and management where relevant. This was extended to include notes on fauna and habitats which could potentially support protected species.

Preliminary Bat Roost Assessment

The preliminary bat roost assessment comprises of a buildings inspection which was limited to the buildings subject of the planning application. The buildings were inspected using close-focusing binoculars (Pentax Papilio 8.5 x 21) to determine possible access points such as cavities in stone/brick work and the roof structure. An internal inspection of all relevant rooms within the buildings was conducted.

Using ladders, all accessible features were closely inspected using Lenser H14 and X21 cool light torches. Where possible, any cracks, crevices and likely access points or potential roost features were checked for signs of use by bats e.g. droppings, scratch marks and staining. An endoscope was used to inspect cavities that could be accessed safely via ladders (Photos relating to this are provided at Appendix 4).

2.5. Assessment and Evaluation

The importance of the habitat features on site were assessed and defined in a geographical context (see Appendix 5). The frame of reference for the habitat features in terms of their geographical importance is in line with guidance set out in CIEEM, 2018.

The ‘Bat Surveys for Professional Ecologists: Good Practice Guidelines’ (4th edition) (Collins, 2023) are used as a basis to evaluate the value of features for their potential to support bats. In addition, the Bat Mitigation Guidelines (Reason & Wray, 2024) was referred to. The potential impacts on bats, bat habitat or their roosts as a result of the proposals are assessed within this report using the above criteria, together with an ecological judgement by an experienced bat surveyor.

Other species are assessed, where appropriate, against best practice guidelines. As part of the evaluation, further surveys may be recommended based on the suitability of habitats to support protected species, the habitats themselves and potential impacts posed by the proposed development, and the legal protection afforded to both habitats and species.

2.6. Zone of Influence

The assessment conducted for this report has considered the area in which ecological features could be subject to significant effects from the proposed development. The area of the potential effects is often wider than the actual perimeter of the development site and is known as the Zone of Influence.

The Zone of Influence varies for different ecological features and each designated site, habitat and species has been considered in relation to their sensitivity to the proposed development.

- Special Areas of Conservation (SAC), Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) – site level only
- Local Nature Reserves (LNR), Local Wildlife Sites (LWS) - site level only
- Great Crested Newt (GCN) ponds - 250m
- [redacted]
- Other notable species/habitats – site level only

3. CONSTRAINTS

The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. It should not be taken as providing a full and definitive survey of any protected species group.

Even where data for a particular species groups are provided in the desk study, a lack of records of a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may simply be under recorded.

The Phase 1 Habitat Survey does not constitute a full botanical survey or provide full detailed and accurate mapping of invasive plant species where present.

Despite any of the above limitations, it is considered that this report reflects accurately the habitats present, their biodiversity importance, and the potential for the site to support protected and notable species.

4. BASELINE ECOLOGICAL CONDITIONS

4.1. Designated Sites

Statutory Designated Sites

According to the Cofnod online mapping resource there are the following statutory designated sites within 1 km of the site:

- 482 – Ruabon / Llantysilio Mountains and Minera Site of Special Scientific Interest (SSSI). Located 230m west of the site.
- UK0012926 – Berwyn a Mynyddoed De Clwyd / Berwyn and South Clwyd Special Area of Conservation (SAC). Located 230m west of the site.
- Bryniau Clwyd a Dyffryn Dyfrdwy / Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB). The site is situated within the AONB.

Non-statutory sites

There are no non-statutory sites located within 1km of the site.

4.2. Habitats

The habitats identified during the Phase 1 Habitat Survey are listed and described below. All habitats are marked on the Phase 1 Habitat map in Appendix 2 and each habitat type is illustrated with a photograph in Appendix 3.

Desk Study

According to data supplied by Cofnod there is an area of Bracken (*Pteridium aquilinium*) surrounding the site.

In the wider context (outside of the site boundary) there are areas of broad-leaved and coniferous woodland, semi-improved acid grassland, semi-improved neutral grassland, unimproved and semi-improved calcareous grassland, improved grassland, bracken, dry acid heath, standing water, acid/neutral inland cliff, arable and amenity grassland.

Habitats of Principal importance included inland rock outcrop and scree, lowland calcareous grassland, lowland dry acid grassland. Traditional orchard, upland calcareous grassland and upland heath. Located outside the site boundary were traditional orchards to then north and south and lowland dry acid grassland to the east and west of the site.

There were two ponds located within 500m of the site boundary, the closest being 448m northwest of the site.

The data search returned notable and veteran tree records from the Ancient Tree Inventory however all records were over 800m from the site boundary.

Field Survey

The habitats identified during the field survey are listed and described below. All habitats are marked on the habitat map in Appendix 2.

Buildings

The site comprised of a small residential bungalow with associated small out-buildings. There is an associated driveway (un-sealed bare-ground and a parking area to the north of the dwelling house).

The dwelling house (Building 1) is a small bungalow brick construction which is rendered. The roof is hipped, with a slate covering and terracotta ridge tiles. There is some mortar loss to ridge tiles and naturally occurring gaps between tiles. The roof is unlined and there is a single enclosed roof-void.

To the interior, the building is intact and each room is glazed to the exterior.

Building 2 is a small coal-shed of brick and stone construction and a slate roof. The coal door is open to the ground level (eastern aspect). There is an upper door which is sealed.

Building 3 is a garage/workshop/shed of single skin brick construction and a corrugate roof. There is a timber door to the north and a large window to the south. The building is in a poor state of repair with gaps to the southern section of the roof.

Building 4 is a small toilet block of brick construction and a slate covered roof. This building is engulfed by foliage from nearby shrubs.

Gardens (Ornamental Garden Planting and Amenity Grassland)

The areas immediate to the buildings comprise of lawns and garden planting. The lawn areas are not heavily managed but are species poor and dominated by Annual Meadow grass (*Poa annua*) and Creeping Buttercup (*Ranunculus repens*) with occasional scattered forbs, wildflowers and shrubs such as Self-heal (*Prunella vulgaris*), Common Sorrel (*Rumex acetosa*), Common Hogweed (*Heracleum sphondylium*), Bramble *(Rubus frutiscosus*), Yarrow (*Achillea millefolium*), Cleavers (*Galium aparine)*, Forget me-not (*Myosotis* spp), Red Valerian (*Centranthus ruber*), Lady Fern (*Athyrium filix-femina)*. Wall Cotoneaster (*C.Horizintalis*), Dovesfoot Cranesbill (*Geranium molle*), Rose of Sharon (*Hypericum calycinum*), Commo Knapweed (*Centaurea nigra*), Comfry (*Symphytum officinale*) Red Clover (*Trifolium rubra*) and Ribwort Plantain (*Plantago lanceolata*).

Hedgerows

There is a single, un-managed, species poor native hedgerow immediately to the west of the dwelling house (B1). This hedgerow comprises of Hawthorn (*Crataegus monogyna*), Ash (*Fraxinus excelsior*) and Holly (*Ilex aquifolium*). The base of the hedgerow is disturbed and does not contain any recognisable hedgerow ground flora. The hedge has been allowed to grow out and is >2m in height but of narrow depth.

Semi-Natural Broadleaved Woodland

To the north of the main development area is an area of young woodland comprising of semi-mature Silver Birch (*Betula pendula*), Rowan (*Sorbus aucuparia*), Holly and occasional semi-mature Oak (*Quercus* sp.). The field layer comprises of Bramble and Bracken, which in places has been cut back/cleared as part of ongoing management of Bracken in the area. Other

species present include Cleavers, lawn moss, Common Hogweed, Hedge Garlic (*Alliaria petiolata*), Ivy (*Hedera helix*). The area opens up to the south, with trees thinning out to scattered trees and bare ground where Bracken has been cleared, along with Foxglove (*Digitalis purpurea*) becoming frequent.

Scattered Trees & Shrubs

There are individual trees and small groups of trees present across the wider site. Species present include Fir (*Abies* sp.), Oak, Rowan, Sycamore (*Acer pseudoplatanus*), Silver Birch, Willow (*Salix* sp.), along with Hawthorn, Broom (*Cytisus scoparius*) and Lilac (*Syringa* sp.)

Bracken

The majority of the wider site, outside of the proposed development area, is dominated by dense Bracken, which at the time of survey has been heavily cut back but was showing signs of recovery within the resultant areas of bare-soil. Within these areas where scattered trees (see below).

Tall Ruderal

There are some discreet areas dominated by tall ruderals with Common Nettle (*Urtica dioica*), Creeping Thistle (*Cirseum arvense*), Rosebay Willowherb (*Chamerion angustifolium*), (all indicators of disturbed and ameliorated ground) present along side Red Campion

Ditches

There are two man-made channels located adjacent to the wider western site boundary and from the entrance access track, leading south west. These were recently re-dug at the time of survey and both dry and largely free of vegetation. According to the client, these have been re-instated to help with drainage of the site due to erosion caused by surface water run-off.

Dry-Stone Walls

There are traditional dry-stone walls to the western site boundary. These are generally in good condition and typical of these traditional features.

4.3. Species

Species likely to occur in close proximity to the site according to information provided by the local records centre (Cofnod – records within last 20 years) or with relevance to habitats present within or adjacent to the site are covered below:

Amphibians

Cofnod provided no records of amphibian species within 1km of the site. The Amphibian and Reptile and Conservation (ARC) charity website indicates that Great Crested Newt (*Triturus cristatus*) have historically been recorded in the geographical location of the site but that there may not be any recent records. There is potential for common and widespread amphibian species such as Common Frog (*Rana temporaria*), Common Toad (*Bufo bufo*) and Great Crested Newt to be present in the wider area (within 1km).

There are no waterbodies within the site. In addition, according to OS maps there are no waterbodies within 250m of the site (with terrestrial connectivity to the site).

In view of the absence of waterbodies within the site and within 250m of the site boundary, and absence of records in close proximity to the site, the site is assessed as being unlikely to support Great Crested Newt or notable numbers of more common and widespread species.

Badgers

[redacted]

Bats

There are no records of bats within 1 km of the site the past 10 years. The most recent records were two records of Common Pipistrelle from 1995 and one record of a bat (species unconfirmed) from 1995. Each of these records was remote from the site.

A Preliminary Bat Roost Assessment (PRA) was undertaken of each of the buildings during the survey. The results of the PRA are detailed in Table 1 below with photos illustrated at Appendix 4.

Table 1. Preliminary Bat Roost Assessment – Building Inspection Results.

Building No.	Description	Evidence	Bat Roost Potential
1	Dwelling House. A bungalow of brick construction. It has a hipped roof with a single enclosed void. The roof is slate covered with terracotta ridge tiles. There are gaps to the eaves and beneath ridge tiles, as well as naturally occurring gaps between roof slates. Providing a small number of potential roost features. Windows and frames are all intact. Internally the building is intact and offers no roosting opportunities for bats.	None	Low
2	Outbuilding (coal shed) of brick and stone construction with shallow pitched slate roofing. The interior to base is stone with cavities present. Upper interior is sealed to bats. Inspected using an endoscope with no bats present and no field evidence of use. A small structure located close to the main dwelling.	No evidence of bats to the exterior or interior of building. Limited potential to interior for hibernation.	Negligible – Low potential
3	Outbuilding of single-skin brick construction utilised as a workshop/tool shed and for storage. Corrugate roofing with limited glazing to the south. The interior is brick and roofing is not underlined underlining present.	No evidence of bats to the exterior or interior of building. Thermally unstable with no roof lining.	Negligible potential
4	This building is a small brick toilet block, covered by vegetation. The roof is of slate construction over a timber frame, affixed with lime-mortar with no underlining. Inspected internally using torchlight end endoscope. No evidence of use and limited potential roof features due to coverage by foliage.	No evidence of bats to the exterior or interior of building. No internal PRFs which could conceal such evidence (e.g. crevices in stonework accessible to bats). Thermally unstable with no roof lining and fully open to the eastern aspect.	Negligible potential

Following the scoping survey, no field evidence to suggest the presence of bat roosts was identified in association the buildings.

Building 1 is assessed as being of “low potential” (Collins, 2023) to support bat roosts during the active season (May – late September inclusive) but is unsuited to hibernation. Building two is assessed of ‘negligible – low’ potential with limited hibernation potential due to crevices in internal stonework. Buildings 3 and 4 were both assessed to be of ‘Negligible Potential’ due to a lack of potential roost features and the thermal instability of the buildings rendering them unsuited to supporting bat roosts all year round.

The site is located in a rural area, in close proximity to woodland, therefore the quality of foraging habitat in the vicinity of the site is likely to be very good with minimal artificial light spill in the vicinity of the site. There are a number of trees within the site but none of the trees within the site possessed features suitable for supporting bat roosts, though a number of larger mature trees to the wider site boundary and associated with a septic tank area to the south-east are more likely to be suited to supporting bats, but understood to remain unaffected by the proposals.

The site is overall of high suitability for supporting foraging bats due to the extent of habitat present for foraging and absence of significant levels of artificial lighting across the site.

Birds

There are 302 historical records of notable bird species within 1km of the site. The following species for which suitable habitat is present within the site were recorded:

Table 2. Record of Bird Species (41 species) with relevance to habitat present on site.

Species	Latin Name
Barn Owl	*Tyto alba*
Brambling	*Fringilla montifringilla*
Bullfinch	*Pyrrhula pyrrhula*
Coal Tit	*Periparus ater*
Collared Dove	*Streptopelia decaocto*
Cuckoo	*Cuculus canorus*
Dunnock	*Prunella modularis*
Fieldfare	*Turdus pilaris*
Garden Warbler	*Sylvia borin*
Goldcrest	*Regulus regulus*
Greenfinch	*Chloris chloris*
Grey Wagtail	*Motacilla cinerea*
House Martin	*Delichon urbicum*
House Sparrow	*Passer domesticus*
Kestrel	*Falco tinnunculus*
Lesser Redpoll	*Acanthis cabaret*
Linnet	*Linaria cannabina*
Long-tailed Tit	*Aegithalos caudatus*
Mistle Thrush	*Turdus viscivorus*
Pied Flycatcher	*Ficedula hypoleuca*
Redstart	*Phoenicurus phoenicurus*
Redwing	*Turdus iliacus*

Rook	*Corvus frugilegus*
Snipe	*Gallinago gallinago*
Song Thrush	*Turdus philomelos*
Sparrowhawk	*Accipiter nisus*
Spotted Flycatcher	*Muscicapa striata*
Starling	*Sturnus vulgaris*
Stock Dove	*Columba oenas*
Swallow	*Hirundo rustica*
Swift	*Apus apus*
Tawny Owl	*Strix aluco*
Tree Pipit	*Anthus trivialis*
Wood Warbler	*Phylloscopus sibilatrix*
Woodpigeon	*Columba palumbus*
Wren	*Troglodytes troglodytes*
Yellowhammer	*Emberiza citrinella*

Woodland, individual trees and hedges within the site have the potential to support nesting birds during the breeding season (March – August inclusive). The site is unsuited to supporting ground nesting bird species. The buildings also have potential to support nesting birds, though no evidence was recorded at the time of survey.

Invertebrates

There are 12 records of notable invertebrate species within 1 km of the site including butterfly, moths, caddisflies and beetles.

The wider site will support invertebrate species including moths and butterfly but this habitat is limited in area within the site and comprised common and widespread species. So, while providing a local resource, is not considered likely to be of any particular note for this group.

Otter

There was one record of Otter (*Lutra lutra*) within 1 km of the site. The record was recorded as a live record within the Llangollen canal located 968m southwest of the site. There are no watercourses within or in close proximity to the site. The likelihood of Otter to use the site is considered to be negligible.

Red Squirrel

There are no records of Red Squirrel (*Sciurus vulgaris*) within 2 km the site but Grey Squirrel (*Scirurus carolinensis*) are recorded in the 1km grid square in which the site is located.

Habitats within the site are of broad suitability for supporting Red Squirrel (woodland and site contains a small number of pine trees, but absence of coniferous woodland typically preferred by this species on or immediate to the site) and no evidence of the presence of this species was recorded during the field survey.

In view of the existing ecological information and field survey, it is considered that Red Squirrel are unlikely to be present within the site and that the site is not of importance for this species.

Reptiles

There are records of Common Lizard (*Zootoca vivipara*), Grass Snake (*Natrix helvetica*) and Slow-worm (*Anguis fragilis*) within 1 km of the site. Habitats within the site including woodland, dense Bracken and boundary dry-stone walls are suitable for supporting reptiles and there is terrestrial connectivity to habitats likely to support these species in the wider context.

Given the above it is considered that there is low potential for the site to support common and widespread reptile species.

Water Vole

There are no records of Water Vole (*Arvicola amphibius*) within 2 km of the site. There are no watercourses within or in close proximity to the site. The likelihood of Water Vole to use the site is considered to be negligible

Hazel Dormouse

There are no records of Hazel Dormouse (*Muscardinus avellanarius*) within 2 km of the site. There is no suitably habitat for this species within or in close proximity to the site. The likelihood of Hazel Dormouse to use the site is considered to be negligible

Other Notable Species

There are records of the following species within 1 km of the site:

- Brown Hare (*Lepus europaeus*)
- Hedgehog (*Erinaceus europaeus*)

Habitats within the site are unsuitable for supporting Brown Hare. The site has habitat suitable for supporting Hedgehog with Bracken providing cover and bare-ground, grassland and young woodland providing foraging opportunities.

Non-native Invasive Species

There are numerous records of non-native invasive weeds (notifiable under Schedule 9 of the Wildlife and Countryside Act 1981) within 2km of the site.

These include the following species:

- Entire leaved cotoneaster (*Cotoneaster intergrifolius*)
- Giant Hogweed (*Heracleum mantegazzianum*)
- Japanese Knotweed (*Fallopia japonica*)
- Rhododendron (*Rhododendron ponticum*)
- Montbretia (Crocosmia pottsii x aurea = C. x crocosmiiflora)

Wall Cotoneaster (*C.Horizontalis*) was identified in the garden on site.

Notable Flora

There are small number of records of notable flora provided by Record within 2 km of the site. Species include Brook-side Feather moss (*Hygroamblystegium fluviatile*), Marsh Forklet Moss (*Dichodontium palustre*) and River Grimmia (*Schistidium rivulare*) which were not recorded (or are likely to occur in association with habitat present) within the site at the time of survey.

No rare or particularly notable plant species were recorded during the field survey. The survey was undertaken during the optimum period for flowering plants but does not constitute a full botanical survey.

Note: Full Local Records Centre Data provided by Cofnod is available upon request.

5. PLANNING POLICY AND LEGISLATION

5.1. National Planning Policy

Planning Policy Wales Overview

Planning Policy Wales (PPW) is the national planning policy framework for Wales. It provides guidance for making planning decisions and aims to promote sustainable development.

Environment and Biodiversity

PPW emphasizes the importance of protecting and enhancing the natural environment. Key points include:

- Net Benefits for Biodiversity: PPW aims to deliver net benefits for biodiversity and ecosystem resilience. This involves creating and enhancing habitats, protecting species, and ensuring the resilience of ecosystems.
- Designated Sites: There is a strong focus on protecting designated sites, such as Sites of Special Scientific Interest (SSSIs), and ensuring that developments do not harm these areas.
- Trees and Woodlands: PPW includes policies to protect and enhance trees and woodlands, recognizing their importance for biodiversity and ecosystem services.
- Green Infrastructure: The policy promotes the use of green infrastructure to connect habitats and provide ecological networks.
- Biodiversity Net Gain: Developers are encouraged to achieve biodiversity net gain, meaning that developments should result in a measurable improvement in biodiversity.

These elements are crucial for ensuring that planning decisions contribute positively to the environment and biodiversity, aligning with broader goals for nature recovery and sustainability.

5.2. Local Planning Policy

Table 4 details the policies within Wrexham Local Development Plan 2 (LDP2) 2013 to 2028 un-adopted which are relevant to the ecological features present on site.

Table 4: Summary of relevant local planning policy

Policy	Description
Policy PS2 – Environmental Protection	Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment. • Emphasises protection of ecological networks and landscape character. • Applies broadly to all development proposals, including minor works.
Policy PS11 – Biodiversity Enhancement	Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves. • Supports proactive biodiversity net gain (BNG) principles. • Promotes habitat creation and ecological connectivity.
Policy EC4 – Landscape & Natural Features	Development proposals should conserve and manage hedgerows, trees, orchards, woodland, wildlife, and water features. Loss of ancient woodland or important hedgerows will not be permitted. • Strong protection for priority habitats and landscape features. • Requires new planting to enhance character and ecological function.
Policy EC6 – Sites of Biodiversity Interest	Development near or within biodiversity-rich sites must demonstrate overriding need and include compensatory measures. Damage must be minimised. • Applies to SSSIs, SINCs, SACs, and other designated sites. • Introduces a mitigation hierarchy: avoid → minimise → compensate.
LPG Note 32 – Biodiversity & Development	This Local Planning Guidance Note 32 expands on LDP2 policies and is treated as a material consideration in planning decisions. Key points include: • Survey requirements for protected species and habitats. • Design principles for integrating biodiversity into development. • Mitigation and enhancement strategies, including green infrastructure. • Legal context: Aligns with the Environment (Wales) Act 2016 and the Biodiversity Duty.

5.3. Relevant Legislation

National Legislation

The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 (as amended) consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain.

Environment (Wales) Act 2016

Section 6 of the Act places a duty on public authorities to 'seek to maintain and enhance biodiversity' so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to 'promote the resilience of ecosystems'. The duty replaces the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty.

Section 7 of the Environment Act requires The Welsh Ministers to publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales. This section replaces the duty in section 42 of the NERC Act 2006.

The Conservation of Habitats and Species (Amendment) Regulations 2017

The Conservation of Habitats and Species Regulations 2017 transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations provide for the designation and protection of 'European sites' (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)), the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European sites.

Species Legislation (species potentially relevant to the proposed development)

Bats

In England, all British bats and their roosts are protected under the Conservation of Habitats and Species Regulations 2017 and the Wildlife & Countryside Act 1981 (as amended).

These pieces of legislation combine to give substantial protection to bats and their roost sites, making it an offence to:

- Deliberately or intentionally kill, injure or take a bat;
- Damage, destroy or intentionally or recklessly obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not);
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection.

Birds

Breeding wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Under the Wildlife and Countryside Act, a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. Game birds however are not included in this definition (except for limited parts of the Act). They are covered by the Game Acts, which fully protect them during the close season. All birds, their nests and eggs are protected and it is thus an offence, with certain exceptions to:

- *intentionally kill, injure or take any wild bird;*
- *intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built;*
- *intentionally take or destroy the egg of any wild bird;*
- *have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954;*

have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954;

- *use traps or similar items to kill, injure or take wild birds; and*
- *have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations.*

Additionally, for some species listed in Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) it is an offence to intentionally or recklessly disturb the adults while they are in and around their nest or intentionally or recklessly disturb their dependent young.

Reptiles

Under the Wildlife and Countryside Act 1981 (as amended) all British reptiles, including Adder, Grass snakes, Slow worm, and Common lizard, are protected from intentional killing, injuring, and sale under Schedule 5 of this Act.

It is an offence to deliberately capture, injure, kill, or disturb these reptiles while they are occupying a place of shelter or protection.

Invasive Non-Native Species

Under Section 14, Schedule 9 of the Wildlife and Countryside Act 1981 – it is an offence to knowingly introduce species listed under the act.

The Invasive Alien Species (Enforcement and Permitting) Order 2019 gives effect to EU regulations on the prevention and management of the spread of invasive alien species. It lists 66 species which are of special concern. 14 of these species are found in Wales.

The regulations apply to live specimens and anything they can reproduce from, such as seeds, spores and fragments of plants. The regulations make it an offence to carry out any of the following activities with listed species, except where a licence, permit or exemption is in place:

- Import
- Keep
- Breed
- Transport (except transporting for eradication)
- Place on the market
- Exchange
- Allow to grow, cultivate or permit to reproduce
- Release into the environment

6. ECOLOGICAL EVALUATION, AND RECOMMENDATIONS FOR MITIGATION, AND FURTHER SURVEY

6.1. Designated Sites

Due to the scale of the proposed development and distance/disconnect from any statutory or non-statutory designated sites, no impacts upon such sites are anticipated because of the proposed development.

6.2. Habitats

Habitats present on site include the following:

- Buildings
- Gardens (comprising amenity lawns and garden planting).
- Hedgerow (species poor native)
- Broadleaved Woodland
- Scattered Trees & Shrubs (Mixed)
- Bracken
- Tall Ruderal
- Ditches
- Drystone Walls

Building & Hardstanding

The buildings proposed for demolition to facilitate the construction of a new single residential property with attached garage/workshop.

Demolition of the buildings is not anticipated to have any significant ecological constraints due to a bat survey (SRN Consulting, 2025) not identifying any bat roosts as being present. Building 2 (Coal-shed) has limited potential for hibernating bats. As such it is recommended that a pre-works check is undertaken by a suitably licenced ecologist where demolition of this building takes place during the winter months.

With regards to nesting birds, no remnant nests were identified at the time of survey but it is recommended that demolition takes place outside of the nesting bird season (March-August inclusive). Where this is not possible, a check for nesting birds must be undertaken prior to

works commencing. Where an active nest is present then works must not commence until the young have fledged and left the nest.

The areas of bare ground that form the parking area and driveway are of negligible ecological value.

Gardens (comprising amenity lawn and garden planting).

These areas small in area and comprise of small range of common and widespread ornamental shrub and plant species and amenity grassland (lawn areas). The vast majority of garden areas will be lost as a result of the proposals though this is not considered significant in terms of ecological impact.

Within the garden areas there are instances of Wall Cotoneaster. During any site clearance this must be retained in situ on site. Ideally buried to a depth of 2m or burned on site. Soil potentially contaminated with seeds of this plant should be retained on site or otherwise treated as contaminated waste.

Loss of biodiversity value as a result of the above is considered to be minimal. However, there is opportunity to enhance the wider site in terms of biodiversity to mitigate for this loss and likely provide an overall enhancement. Mitigation in relation to this would include ensuring that planting associated with the development comprises of native species. For example, it is proposed that areas of shrub planting are created to the margins of the car parking area. Species that could be incorporated could include the following:

- Hawthorn
- Blackthorn (*Prunus spinosa*)
- Guelder Rose
- Hazel
- Holly
- Dog Rose (*Rose canina*)

Use of ornamental cultivars should be avoided where possible, and avoiding all species listed in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

Creation of the above habitat, albeit small in area, will offer cover and nesting habitat for birds and Hedgehogs and site level value for invertebrates.

Hedgerows

There is one hedgerow on site and this is likely to be removed to facilitate the development.

It is recommended that new hedgerow planting is incorporated into the proposals for the development. Planting of hedgerows should be on a minimum of a two for one basis. This could include hedgerow planting to the development site boundaries, wider site boundaries and / or along the access route into the site from Blackwood Road to the north.

Where this is incorporated into site landscaping plans, and where traditional native hedgerow species are used in place of non-native species, there will be a biodiversity enhancement with respect to loss of a single species poor hedge.

Semi-natural Broadleaved Woodland

The small, young, woodland area to the north of the existing property is outside of the areas proposed for development, and as such should remain unaffected.

However, there is potential to enhance the woodland and associated habitats via removal or reduction of vigorous or invasive non-native species (Bracken) and installation of nest boxes and habitat piles for small mammals, reptiles and invertebrates.

Scattered Trees and Shrubs (Mixed)

The proposed development will result in the loss of a small number of scattered trees including those immediately to the north-east of the existing dwelling (B1) and toilet block (B4). There are no significant or notable trees in this group and no specific protected species interest associated with them, beyond potential to support nesting birds in the breeding season (March – August inclusive).

It is recommended that loss of trees is avoided wherever possible.

Where this is not possible, trees should be removed outside of the nesting bird season or checked for nests prior to removal.

Any trees removed should be replaced of a two for one basis with locally native tree planting within the site. Species such as Oak (*Quercus robur*) and Silver Birch ideal species to select. Planted trees should then be protected and managed to ensure establishment and where failure occurs, replaced accordingly.

Bracken

The development area and, more so, the wider site is dominated by areas of continuous Bracken. This had been cut back at the time of survey and management was ongoing, though regeneration was already evident across the site.

In order to enhance the biodiversity of the site as part of the development, Bracken coverage should be discouraged in favour of a more diverse habitat.

It may be possible in areas of Bracken, to encourage dwarf shrub such as Common Heather (depending on soil type and acidity) and other associated species. However, ongoing management/treatment of Bracken would be required due to the highly vigorous nature of this species. Where Bracken cannot be fully eradicated, maintaining paths and clearings throughout the area of Bracken will at least provide structural diversity and a range of microclimates and cover for a variety of fauna.

The following methods may be deployed in the management of Bracken:

- Cutting & Rolling: Repeated cutting or rolling during the growing season weakens the plant by depleting its energy reserves. Best done at least twice a year for several years.
- Hand-Pulling: Effective in small areas or sensitive habitats, especially where machinery access is limited.
- Crushing: Using heavy machinery to crush bracken can be useful on rough terrain but may damage other vegetation.
- Spot Treatment: Targeted herbicide application helps minimise environmental impact and is often used in combination with mechanical methods.
- Grazing Management:
- Livestock Grazing: Increasing cattle numbers in upland areas can help suppress bracken through trampling and grazing. Sheep grazing may help in grassland but is less effective overall.
- Vegetation Recovery: Post-control management is crucial—replacing bracken with desirable vegetation prevents re-invasion.
- Aftercare: Long-term monitoring and follow-up treatments are essential to prevent regrowth and maintain habitat quality

Tall Ruderal

The area of tall ruderal habitat is outside of the development area but within the wider site. A small area of this habitat may be beneficial for a variety of invertebrates as food plants and egg-laying plants. In view of this, retention of the existing area of tall ruderal is beneficial and encouragement of small areas of this habitat in discreet areas of the site will provide additional habitat for invertebrates but management to ensure vigorous species such as Common Nettle and Creeping Thistle do not spread throughout the site, would be beneficial.

Ditches

The man-made ditches on site have been historically present and recently cleared of debris to allow drainage of water and prevent surface water run-off causing erosion and damage to the ground in some areas of the site.

At the time of survey, the ditches were dry and void of any significant vegetation. It is recommended that the ditches are maintained to ensure that they function for drainage. Seeding or planting of grasses and native wildflower seed mixes may help prevent further soil erosion and help maintain the ditches and associated areas of bare ground.

This might include the following:

Site Preparation

- **Reduce soil fertility:** Avoid fertilisers; consider removing topsoil or repeated mowing and removal of clippings.
- **Initial sward thinning:** Scarify or lightly harrow to expose 40–50% bare ground.
- **Weed control:** Spot-treat or manually remove pernicious species (e.g. docks, thistles, nettles).

Seed Introduction

- **Timing:** Late summer to early autumn (August–September) favours germination and reduces drought risk.

Method

- **Oversowing:** Broadcast native wildflower and grass seed mix onto prepared ground.
- **Green hay:** Spread freshly cut hay from a local species-rich donor site.
- **Slot seeding:** Use specialist equipment for direct seeding into the sward (optional).
- **Seed mix**: Use UK-native, locally sourced species appropriate to soil type and hydrology.

Establishment Phase (Year 1–2)

- **Cut regularly:** Every 6–8 weeks to ~5 cm height; remove arisings to reduce nutrient build-up.
- **Monitor growth:** Control vigorous grasses and annual weeds early.
- **Optional grazing:** Short-duration, high-density grazing can help suppress dominance and encourage tillering.

Long-Term Management

- **Annual cut:** Mid–late July, followed by aftermath grazing or autumn cut.
- No fertiliser or reseeding unless targeting specific enhancement.
- **Monitor species composition:** Adjust cutting/grazing regime to maintain diversity.

Drystone Wall

The drystone wall to the western site boundary is outside of the main development area and will remain unaffected. Drystone walls are man-made but create excellent habitat for fauna to seek shelter within due to their construction which creates numerous small crevices suited to small mammals, reptiles and invertebrates.

Where possible, drystone walling (or a similar equivalent) should be incorporated into the landscape design of the new development area, ideally with a southern facing aspect. This would retain similar features that exist on site currently and create new crevice type shelter for small fauna and invertebrates.

6.3. Species and Species Groups

Results of the desk study and field survey are used to determine protected species that may be of relevance to the site and the proposed development. Those that are not considered relevant to the site following the above assessment are not discussed specifically any further.

Bats

Demolition of the buildings is not anticipated to have any significant impact upon bats due to a bat survey (SRN Consulting, 2025) not identifying any bat roosts as being present.

Building 2 (Coal-shed) has limited potential for hibernating bats. As such it is recommended that a pre-works check is undertaken by a suitably licenced ecologist where demolition of this building takes place during the winter months.

In view of the results of the survey and absence of any evidence of a bat roost, no further survey or mitigation is recommended at this stage (beyond the above), however, should at any stage of works a bat roost be found or suspected, then works should cease and an ecologist should be consulted.

Any proposed lighting scheme associated with the site must be designed to ensure that it is sensitive to the presence of wildlife, including bats foraging and commuting through the site. This would include low-level lighting or similar solutions to prevent artificial light levels from deterring bats from the site. Light emitted from within the building must also be considered and kept to an absolute minimum (please see Bats and Artificial Lighting at Night' ILP Guidance Note (2023) for further information).

It is recommended that bat boxes are installed in suitably mature trees within the wider site boundary to compensate for loss of potential roost features and to further enhance the site for bats in the long term.

To this end, it is recommended that 5 x Harlech Woodstone Bat boxes are installed in suitably mature trees within the wider site boundary as pat of the development proposals. See appendix for details. Where it is possible to integrate boxes into the new building, Habibat 001 boxes should be considered and these can be faced to suit most natural finishes on new buildings.

Birds

The site contains habitat that is likely to support nesting birds and each of the buildings has potential to support birds' nests during the breeding season. The site is not of any value to ground nesting species. The site is highly likely to support nesting birds during the breeding season (March – August).

It is recommended that any works (including maintenance or enhancement) likely to affect the individual trees, shrubs, hedgerow and buildings are scheduled for outside of the breeding period (ideally September – February) to avoid any potential conflicts with nesting birds (which are protected under the Wildlife and Countryside Act 1981).

Where this is not possible, these features should be subject to a check for nesting birds by a suitably experienced ecologist prior to works commencing (note: where an active nest is identified this may result in a delay to works in proximity to the nest).

It is recommended that bird nest boxes are incorporated into the site. In particular, nest boxes / bricks designed to accommodate House Sparrow, House Martin, Swallow and Swift (*Apus apus*) would be particularly beneficial in association with the buildings. Other nest boxes suited to woodland and garden dwelling species should be installed on trees within the woodland area to the north of the site.

Reptiles

Due to there being records common and widespread reptiles within 2km of the site and suitable habitat within the development area and wider site boundary, a precautionary approach to works is recommended.

Site clearance of any debris or ground level works relating to tree and shrub/hedge removal should be removed carefully in case common and widespread reptiles or amphibians are found within the habitat.

Any individuals found during works should be allowed to move away undisturbed and unharmed. Where there is any doubt then a suitably experienced ecologist should be consulted.

In the unlikely event of the presence/suspected presence of Adder (*Vipera berus*), it is advised to leave the area and allow the individual to move away of its own accord (as these are a venomous species) before recommencing works.

As mentioned in previous sections, it is recommended that habitat piles are created within the site in appropriate secluded areas, away from areas of human activity. These will create shelter for reptiles at site level in the long-term.

Other Species

The site contains habitat suitable for supporting Hedgehogs (primarily woodland and shrub planting). In view of this, care should be taken when any required vegetation clearance is undertaken to ensure hedgehogs are not harmed and nests are not disturbed. Installation Hedgehog nest boxes should be considered within the site, specifically the woodland areas.

To further enhance the site, bee and invertebrate hotels (x 4) should also be incorporated into the gardens or woodland areas or alternatively larger habitat piles can be created in discreet areas of the site, ideally that receive full sun during the day.

7. GREEN INFRASTUCTURE STATEMENT / BIODIVERITY NET-BENEFIT

A Green Infrastructure Statement is required on all developments following PPW12, and the Environment (Wales) Act 2016 Section 6 duty to show that development has a net benefit to biodiversity and green infrastructure. This information is not appropriate to seek 'retrospectively' by way of a condition and must be provided as part of the planning application process.

A Green Infrastructure Statement is to be proportionate to the scale and nature of the development, and in the case of minor development such as householder applications, PPW12 states that this should not be an onerous requirement for applicants.

The Stepwise approach, prioritising avoidance has been applied to minimise any loss of habitat and enhance habitats and green infrastructure that is present. The Step-wise approach is detailed in Figure 2 below:

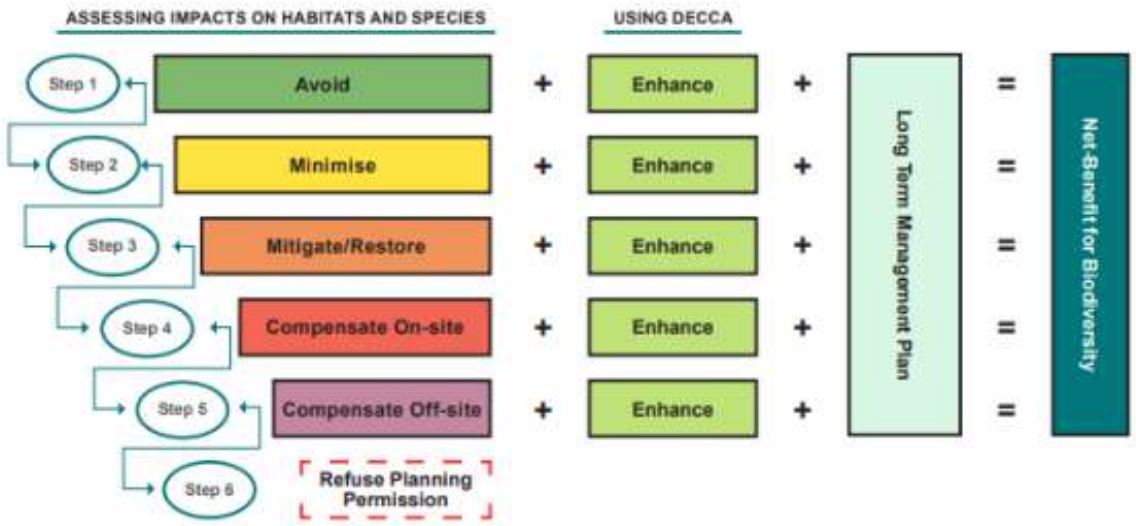


Figure 2: Stepwise approach to achieving net-biodiversity gain (in Wales)

7.1. Existing Green Infrastructure

Existing Green Infrastructure within wider the site boundary includes a mixture of dense, continuous bracken, scattered trees, woodland, hedgerow, dry ditches, dry-stone wall and garden areas associated with the existing dwelling house within the area proposed for development (as described in above sections). Table 5 presents the existing green infrastructure on site.

Table 5. Details of all existing green infrastructure on site

Woodland	There is a small area of young woodland outside of the main development area but to the north within the wide site boundary.
Scattered Trees and Shrubs	There are scattered trees and shrubs within the main development area and within the wider site boundary.
Hedgerow	There is a single species poor hedgerow (unmanaged) within the site boundary (immediately to the east of the existing dwelling).
Bracken (Continuous)	The majority of the wider site and some areas within the development area are dominated by continuous Bracken (much of this had been cut back a the time of survey but was already regenerating)
Amenity/Garden area	The area immediate to the dwelling house is primarily amenity grassland with some garden planting and self-seeded flora.
Dry ditch	There are two dry man-made ditches running through the wider site, though these lie outside of the main proposed development area.
Drystone Wall	The western boundary of the wider site is demarcated by a drystone wall.

Table 6. What green infrastructure features require removal to facilitate the development?

Amenity/Garden Areas	The development requires demolition and clearance of existing buildings on site. This will necessitate the loss of the associated garden areas as part of the development.
Scattered Trees and Shrubs	A small number of scattered trees located immediately north-east of the existing dwelling will require removal to facilitate the development.
Bracken	Areas that are dominated by bracken will required clearance to facilitate the development.
Hedgerow	The single unmanaged hedgerow immediately to the west of the existing dwelling house will require removal to facilitate the development.

Table 7. How are the retained features being protected during development (i.e. BS5837:2012)?

Woodland	The woodland area is located outside of the main development area and will not be directly affected. The woodland will be appropriately buffered from development proposals through use of heras fencing or similar.
Scattered Trees and Shrubs	The retained scattered trees and shrubs are located outside of the main development area and will not be directly affected. The woodland will be appropriately buffered from development proposals through use of heras fencing or similar.
Hedgerow	n/a – to be removed.
Bracken (Continuous)	n/a – small areas to be removed to facilitate the development. The remainder within the wider site to undergo management to eradicate/reduce presence in favour of more desirable habitat and less invasive species.
Amenity/Garden area	n/a – to be lost to development
Dry ditch	The ditches are located outside of the main development area and will not be directly affected. The ditches will be appropriately buffered from development proposals through use of heras fencing or similar.
Drystone Wall	The drystone wall is located outside of the main development area and will not be directly affected. The drystone wall will be appropriately buffered from development proposals through use of heras fencing or similar.

7.2. Proposed Green Infrastructure

Should recommendations detailed within this assessment be taken forward, the loss of habitat and green infrastructure as a result of the proposed development is considered to be negligible with small areas of amenity grassland/garden planting, along with a single species poor hedgerow. a small number of scattered trees/shrubs affected and existing developed land being redeveloped within the broad existing footprint.

It is recommended that areas of retained habitat in the wider site ownership are managed for biodiversity and native trees are planted in appropriate locations to mitigate the small loss of this habitat from within the proposed development area. Likewise, it is recommended that hedgerows are planted either within the proposed development or wider site ownership on a minimum of a two for one basis, to compensate for the loss of the single hedgerow to the west of the existing dwelling. Bare ground associated with drainage ditches could be sown with appropriate wildflower and grass-seed mix to help combat growth of Bracken and or vigorous, undesirable species.

Table 8. What green infrastructure is being planted as mitigation for losses?

Amenity planting	Amenity planting will be created in direct association with the proposed residential property. This will utilise native species and other species of benefit to wildlife (e.g. nectar bearing plants).
Scattered Trees and Shrubs	In order to compensate for the loss of a small group of scattered trees to the north east of the existing dwelling, trees will be planted withing the wider site on minimum of a two for one basis. Only native species will be planted and will include Silver Birch and Oak.
Hedgerow	In order to compensate for the loss of a single species poor unmanaged hedgerow located to the west of the existing dwelling, hedgerows will be planted withing the wider site on minimum of a two for one basis. Only native species will be planted and will include Hawthorn, Blackthorn, Guelder Rose, Hazel, Holly and Field Maple (or similar traditional native hedgerow species).

Table 9. What Landscaping is being planted to enhance Green Infrastructure?

Bracken	Areas currently dominated by continuous Brackn will be managed to reduce coverage of this single vigorous species and promote a more diverse habitat. Followin clearance of Bracken (and continued management) the sowing of wildflower rich grass seed mix will aim to enhance the Green Infrastructure on site as there is limited existing grassland present and this is limited to amenity grassland. Areas of species-rich grassland would enhance the site for birds, small mammals and invertebrates. This habitat would also act as 'stepping stones' for wildlife when moving through the landscape. In addition to the above, eradication of the small stand of Wall Cotoneaster from within the garden area and reduction of Bracken would contribute to enhancing biodiversity on site. In addition to the above, within areas of cleared Bracken, depending on soil type, it may be possible to establish areas of dwarf shrub such as Common Heather (*Calluna vulgaris*) and other associated dwarf shrub species such as Bilberry (Vaccinium myrtillus) within the wider site as enhancement of this habitat. This will be contingent on soil type and clearance and ongoing management of Bracken,
Shrub and Hedgerow Planting	Planting of a native species-rich hedgerow within the proposed site layout and within the wider site ownership (e.g. access route into the site and northern and western site boundaries will improve connectivity through the site and provide habitat provision for small mammals, birds and invertebrates.
Woodland	Within the existing woodland, outside of the main development area, there is the potential to enhance the habitat by underplanting of the woodland with appropriate understory and field layer species, whilst maintaining management of more invasive species such as bracken and bramble. Species that could be planted or encouraged might include native English Bluebell (Hyacinthoides non-scripta), Wild Garlic (*Allium ursinum*), Wood Avens (*Geum urbanum*), Snowdrop (*Galanthus nivalis*), Creeping cinquefoil (*Potentilla reptans*) and underplanting the woodland with Hazel (*Corylus avellana*).

7.3. Biodiversity Considerations

The proposed habitat creation and enhancement recommendations will benefit biodiversity via improving connectivity across the landscape and providing better habitat provision for a range of species including birds, invertebrates and small mammals during foraging, dispersal and resting.

It is also recommended that the development includes the provision of 2 x further bat boxes (additional to those proposed in section 6.3 of this report) and bird nest boxes installed on retained trees or buildings, as well as invertebrate boxes and habitat piles.

Table 10. The following biodiversity enhancements are proposed:

Type	Location	Info
Beaumaris Midi Woodstone Bat boxes*	2 x on retained or proposed buildings	https://www.wildcare.co.uk/vivara-pro-chillon-woodstone-11245.html
Swift, Sparrow or House Martin Boxes General Purpose nest box	2 x boxes on new building. 4 x boxes in woodland area or scattered trees within the wider site boundary.	https://www.birdfood.co.uk/swift-nest-box-woodstoner https://www.nhbs.com/sparrow-nest-box-system https://www.arkwildlife.co.uk/collections/house-martin-nest-boxes https://www.wildcare.co.uk/woodstone-seville-nest-box-32mm.html
Bee or Insect Box / habitat piles	2 x boxes / 2 x habitat piles in retained woodland.	https://www.wildcare.co.uk/insect-block.html

*Note: * or similar*

7.4. Connectivity and Linkages

The proposed development will not sever any existing connectivity, but the proposed planting will maintain and enhance the existing habitat through use of native species and secure this and established connections and linkages with habitat in the wider area in the long-term.

7.5. Maintenance and Management

There will be site maintenance personnel employed to be on site periodically who will be responsible for the implementation of the above measures and the long-term management and maintenance of habitats within the site.

8. COMPLIANCE WITH POLICIES

To comply with Section 6 of the Environment (Wales) Act 2016 and Policy PS2 and PS11 of the Wrexham Local Development Plan 2 (LDP2), the proposed development includes provision of biodiversity enhancement measures as well as Green Infrastructure enhancements proportionate to the scale of the development.

The Stepwise approach, prioritising avoidance, has been applied to minimise any loss of semi-natural or natural habitat and when small areas of habitat (in this case scattered trees and hedgerow) are to be affected, efforts have been made to retain the majority of the specimens within the site and then incorporate areas of new planting (equal to or greater in area to that lost) using native species.

The addition of habitat creation and enhancement measures and species habitat provision within the site will assist in addressing the above legislative and policy requirements.

Based on the information provided above, it is considered that the development proposals are relatively small scale and the impacts upon semi-natural habitat and connectivity / linkage of green infrastructure is negligible.

With the implementation of the recommended proposed planting and enhancements this development will result in a Green Infrastructure and Biodiversity Net Benefit upon completion.

9. CONCLUSIONS

In view of the results of the desk and field-based assessment of the site, with the exception of the habitats in the wider site boundary, the development site itself is considered to be of relatively low ecological value in the local context. Further to this, due to the limited nature of the proposals, loss of biodiversity as a result of the proposed development is minimal and can be mitigated for and enhanced (in line with the requirements of local and national planning policy in relation to biodiversity) as part of the proposed development and taking into account and enhancing the relationship of the site with green infrastructure in the wider context.

The areas proposed for re-development contain no significant semi-natural habitat.

The buildings have been surveyed for their potential for supporting bat roosts, with no roosts identified. The small coal-shed has limited hibernation potential for bats, which will be checked prior to any works affecting it if in winter. Bat boxes will be installed to compensate for any lost potential roost features and enhance opportunities overall.

The buildings, trees and shrubs have potential to support nesting birds and mitigation measures have been recommended in relation to avoiding conflict with nesting birds.

Precautionary working measures have also been recommended around the potential for presence of reptiles (common and widespread species) in relation to the redevelopment of the site.

Habitat and species enhancement measures have been recommended included a commitment to use of native tree and shrub species for tree and hedge planting, reduction/removal of invasive and vigorous non-native species, installation of bat and bird boxes and creation of habitat piles in secluded areas of the site.

For the development to proceed in line with Welsh and UK legislation and Planning Policy relating to biodiversity, the recommendations contained within this report should be considered and adopted as necessary.

Where appropriate measures as recommended in the report are adopted, the development will be able to proceed having considered and addressed the necessary legislation and both local and national policy relating to biodiversity conservation.

10. REFERENCES

BS 42020:2013 Biodiversity - Code of Practice for Planning and Development.

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APPENDIX 1 SITE LOCATION PLANS

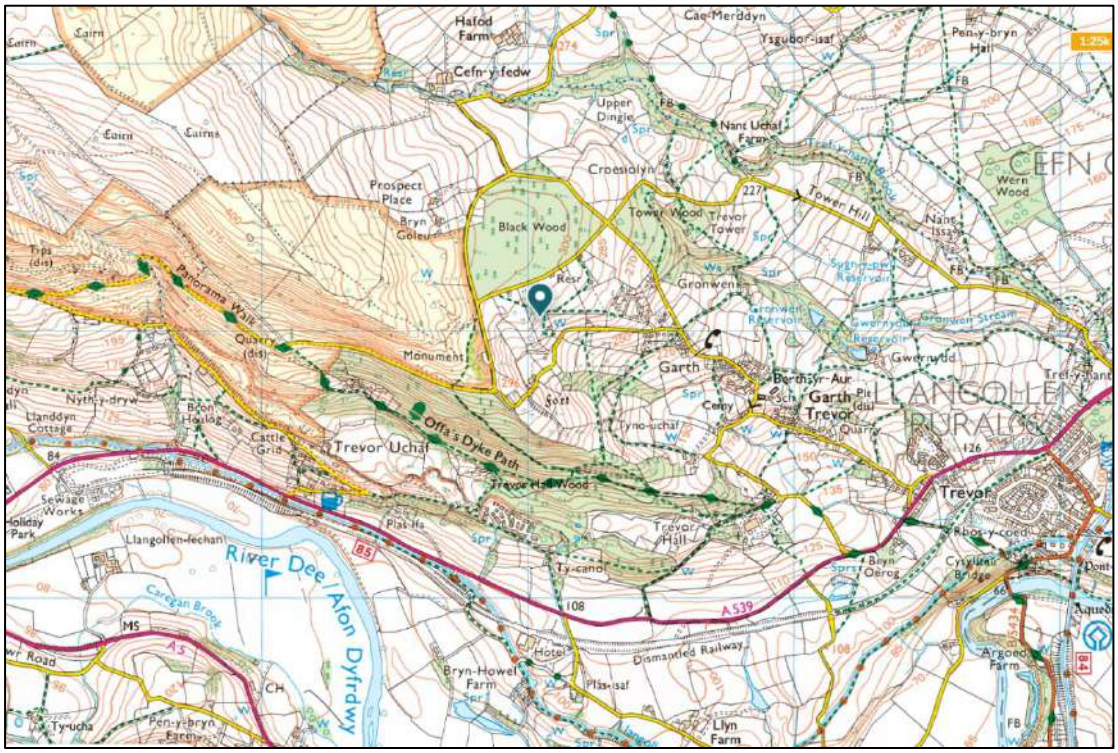


Image courtesy of Ordnance Survey accessed via Bing Maps ©Microsoft 2025

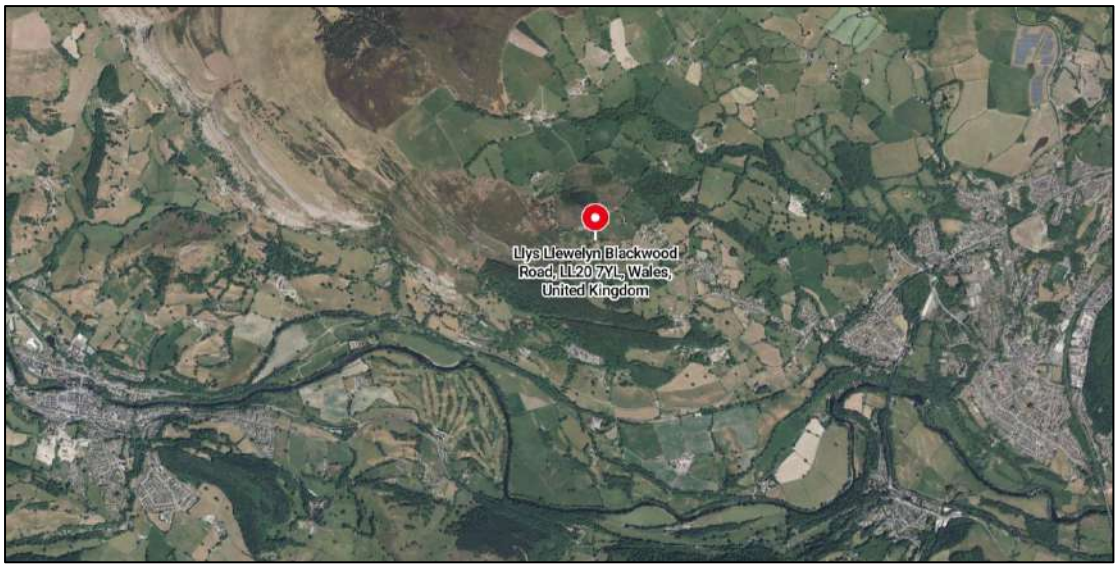
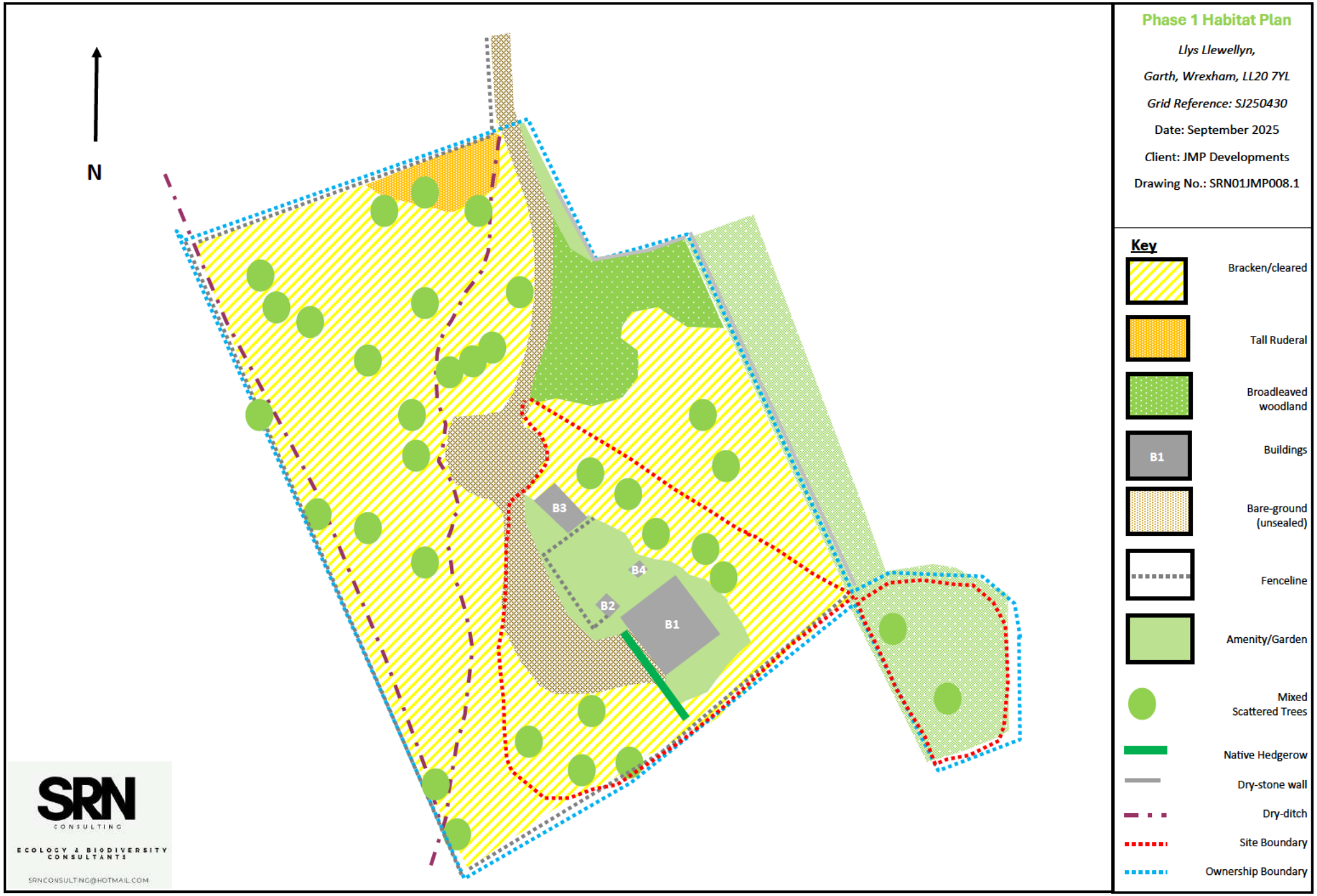


Image courtesy of Bing Maps ©Microsoft 2025

APPENDIX 2: PHASE 1 HABITAT PLAN

SEE NEXT PAGE



Phase 1 Habitat Plan

Llys Llewellyn,

Garth, Wrexham, LL20 7YL

Grid Reference: SJ250430

Date: September 2025

Client: JMP Developments

Drawing No.: SRN01JMP008.1

Key

- Bracken/cleared
- Tall Ruderal
- Broadleaved woodland
- B1 — Buildings
- Bare-ground (unsealed)
- Fenceline
- Amenity/Garden
- Mixed Scattered Trees
- Native Hedgerow
- Dry-stone wall
- Dry-ditch
- Site Boundary
- Ownership Boundary

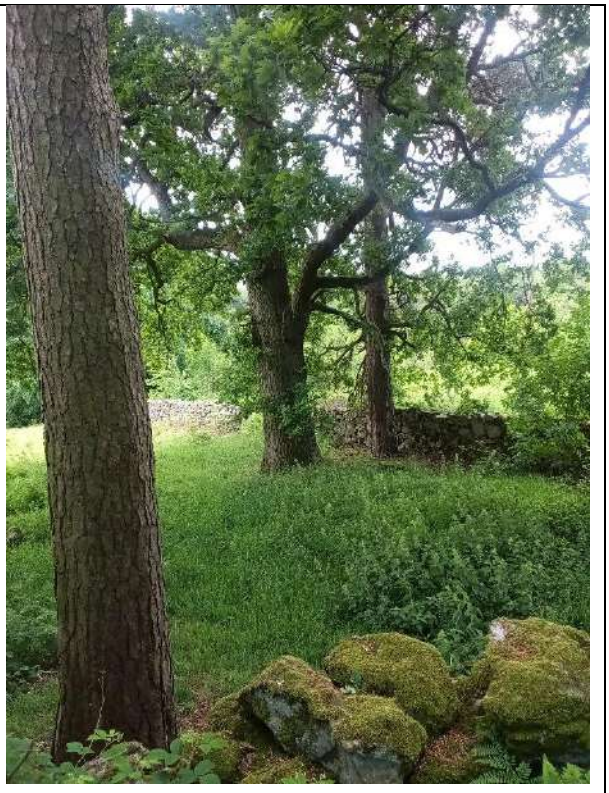
SRN CONSULTING
ECOLOGY & BIODIVERSITY CONSULTANTS
SRNCONSULTING@HOTMAIL.COM

APPENDIX 3: SITE PHOTOS

<table>
<tr><td></td><td></td></tr>
<tr><td>Building 1 and associated lawn/garden area.</td><td>Building 2 – Coal Shed and associated garden area.</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Building 3 – Workshop and associated garden area and cleared Bracken</td><td>Building 4 – Toilet block covered with vegetation including Wall Cotoneaster.</td></tr>
</table>

	
Eastern site boundary with drystone wall and cleared Bracken	Southern site boundary
	
Cleared Bracken to the wider areas of the site – largely outside of the main proposed development area. One dry ditch runs through this area.	Dry ditch to the western site boundary

	
Scattered trees to the northern edge of the wider site boundary.	Unmanaged hedgerow adjacent to B1
	
Scattered trees (to right hand side) adjacent to existing dwelling, to be removed. Area of cleared Bracken to foreground.	Stand of tall ruderal vegetation to the northern boundary of wider site ownership.

	
Group of young Silver Birch in developing woodland area to the north eastern end of wider site boundary (outside of proposed development area).	Scattered mixed mature trees in septic tank area to south east of main development (outside of proposed development area).

APPENDIX 4: PRELIMINARY BAT ROOST INSPECTIONS OF BUILDINGS

	
Building 1 – Northern aspect of main dwelling house	Building 1 – Southern aspect of main dwelling house.
	
Building 1 – Interior of main dwelling house. No potential roost features.	Building 1 – Roof void of main dwelling house. Slates/tiles not underlined. Lime torching present and degrading. No evidence of bats
	
Building 2 – Coal Shed. No evidence of bats	Building 2 – Bottom level of coal shed. Small area with limited hibernation potential. No evidence of bats.

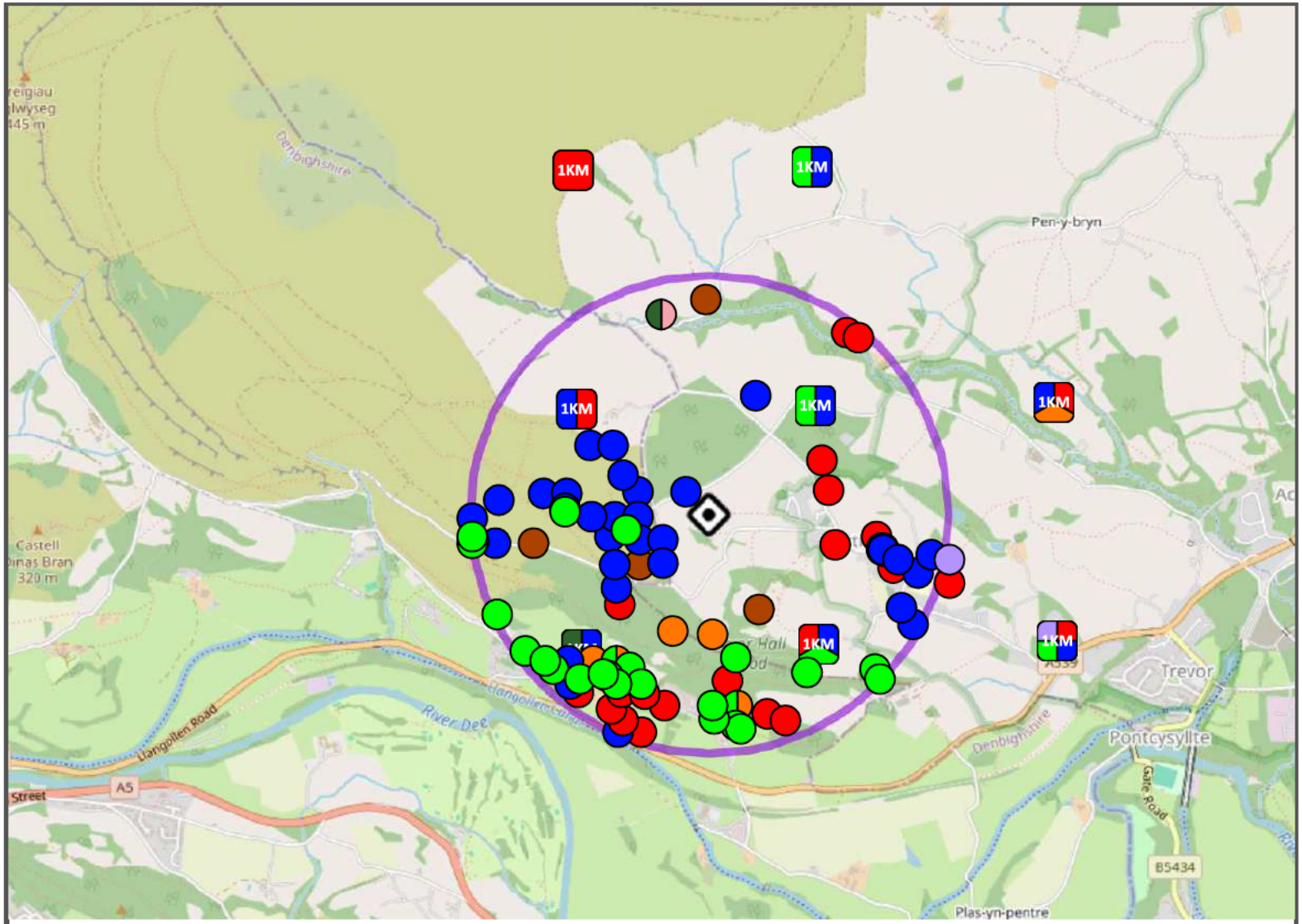
	
Building 3 – South-western aspect of workshop.	Building 3 – Interior of workshop. No potential roost features.
	
Building 4 – Toilet block covered by vegetation.	Building 4 – Interior of toilet block Roof not underlined.

APPENDIX 5: FRAME OF REFERENCE FOR GEOGRAPHICAL VALUE

International and European value	Ramsar Sites, Special Protection Areas, Biosphere Reserves, Special Areas of Conservation. Sites supporting populations of internationally important species. Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. i.e. it is a UK Red Data Book species or listed as occurring in 15 or fewer 10km squares in the UK (categories 1 and 2 in the UK BAP) or of uncertain conservation status or of global conservation concern in the UK BAP. A regularly occurring, nationally significant population/number of any internationally important species.
National value	SSSIs or non-designated Sites meeting SSSI selection criteria, NNRs, Marine Nature Reserves, NCR Grade 1 Sites. Sites containing viable areas of key habitats identified in the UK Biodiversity Action Plan. Any regularly occurring population of a nationally important species which is threatened or rare in the region or county (see local BAP). A regularly occurring, regionally or county significant population/number of any nationally important species.
Regional value	Sites containing viable areas of threatened habitats listed in a Regional BAP (or some Natural Areas), comfortably exceeding SINC criteria, but not exceeding SSSI criteria. Any regularly occurring, locally significant population of a species listed as being nationally scarce which occurs in 16-100 10km squares in the UK or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation; A regularly occurring, locally significant number of a regionally important species.
County / Metropolitan	Sites meeting the criteria for county or metropolitan designation (SINC, CWS, etc.). Ancient semi-natural woodland, LNRs or viable areas of key habitat types listed in county BAPs/Natural Areas. Any regularly occurring, locally significant population of a species which is listed in a County/Metropolitan "red data book" or BAP on account of its regional rarity or localisation; A regularly occurring, locally significant number of a County/Metropolitan important species.
Local	Undesignated Sites or features considered to appreciably enrich the habitat resource in the District or Borough or within a zone of influence. A population of a species that is listed in a District/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation; A regularly occurring, locally significant number of a District / Borough important species during a critical phase of its life cycle.

APPENDIX 6: LOCAL RECORD CENTRE DATA (SUMMARY REPORT).

SEE NEXT PAGE



Cofnod

Cartref data bywyd gwyllt ar gyfer Gogledd Cymru

The home of wildlife data for North Wales

Printed from eMapper for Cofnod on 08/09/2025

CO/E13987 | Llys Llewelyn | SRN0JMP008

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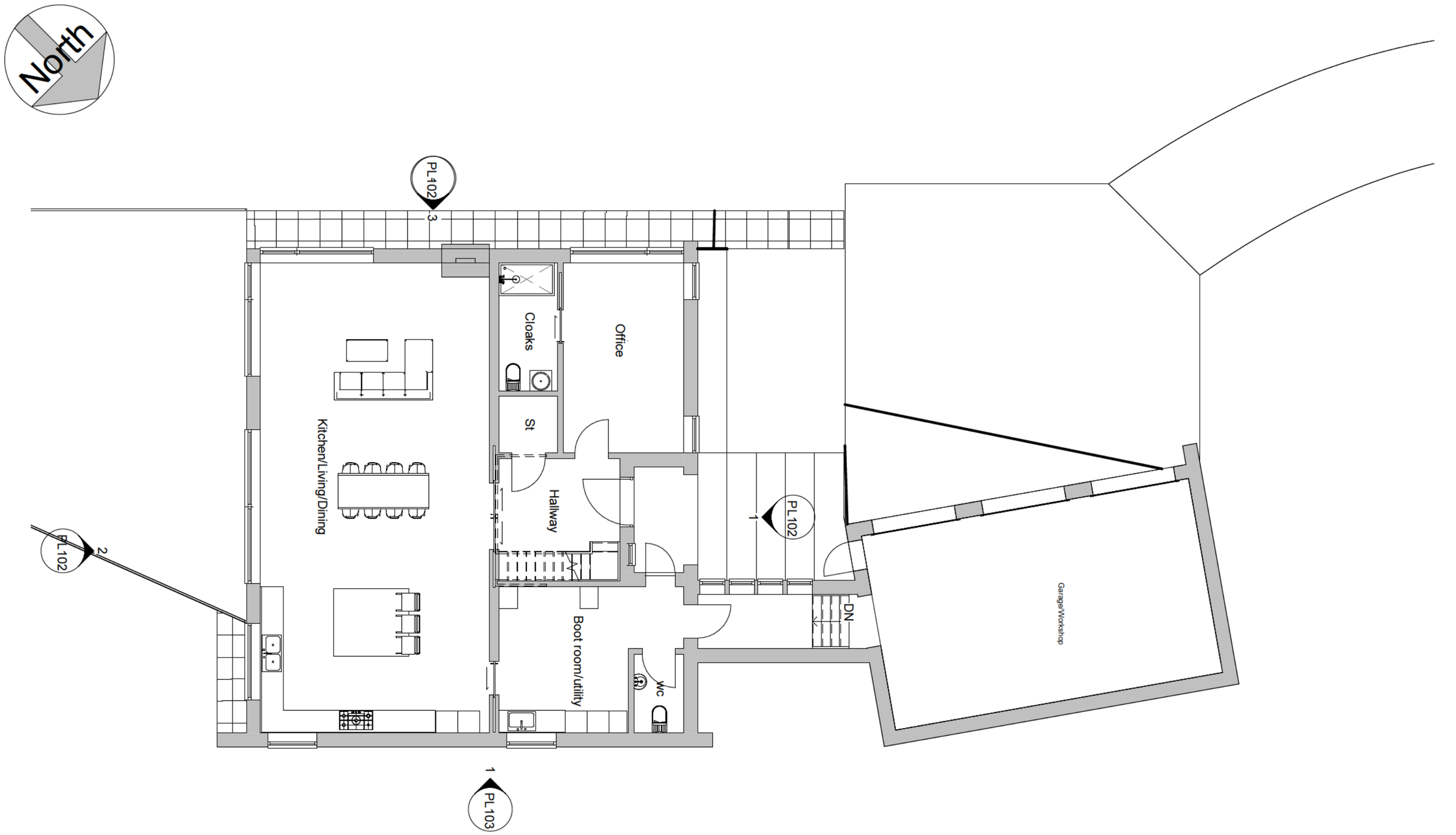
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Search Buffer (1000m)

- **Birds**
- **Butterflies & Moths**
- **Fungi, Lichens & Algae**
- **Higher Plants**
- **Lower Plants**
- **Mammals**
- **Other Invertebrates**
- **Reptiles & Amphibians**

APPENDIX 7: PROPOSED DEVELOPMENT PLANS

SEE FOLLOWING PAGES



0 1 2 3 4 5 10

GRAPHIC SCALE: 1:100

No.	Description	Date

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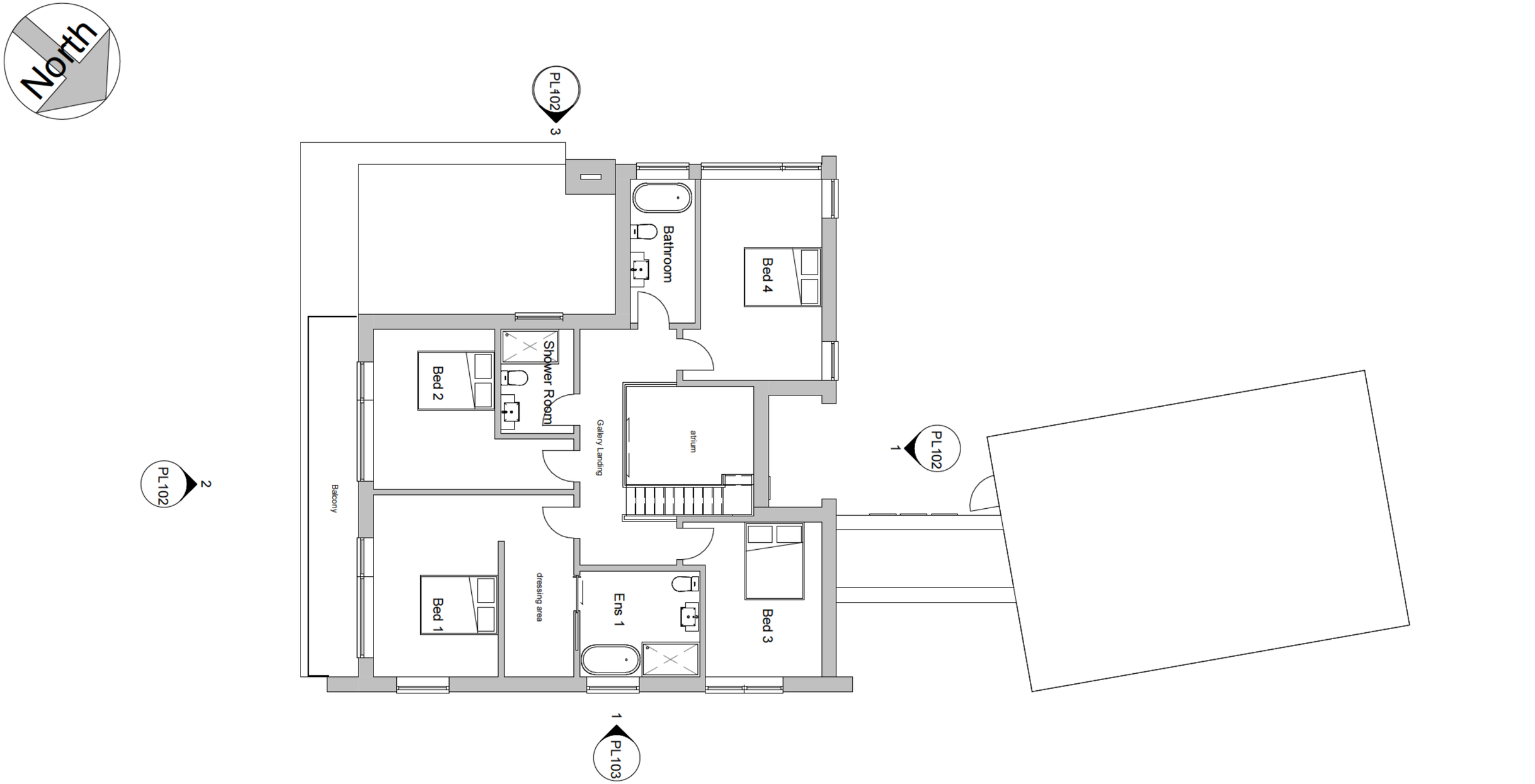
PROJECT
Llys Llewelyn

SHEET
Proposed Ground Floor Plans

CLIENT
Mr & Mrs Clifton

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Llys Llewelyn

SHEET
Proposed First Floor Plans

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Mr & Mrs Clifton

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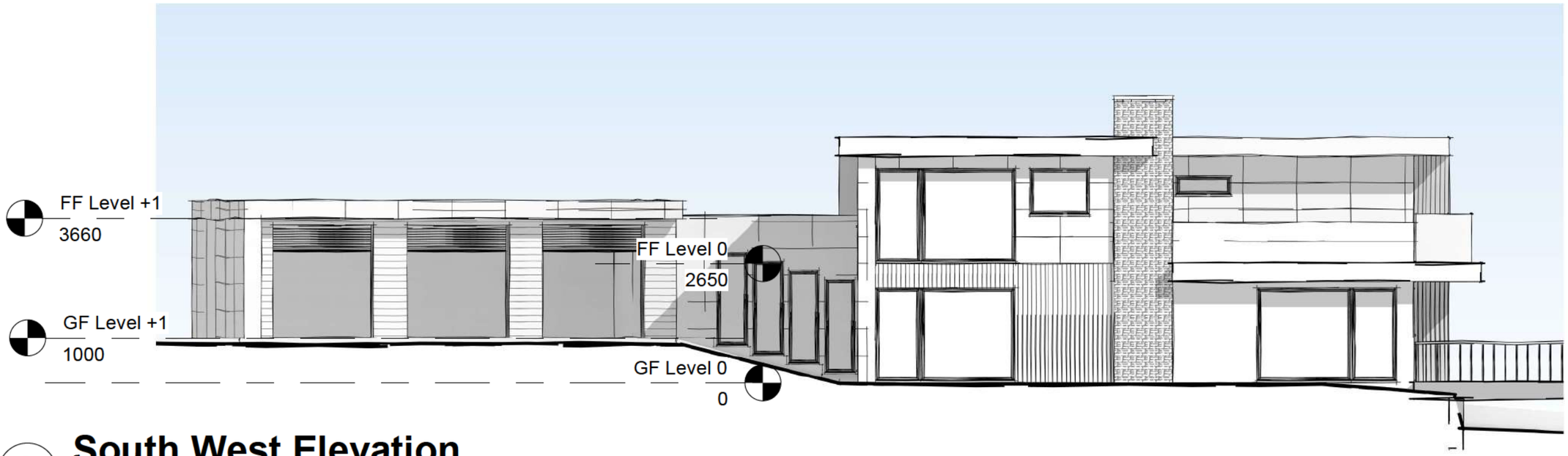
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1 North West Elevation
1 : 100



2 South East Elevation
1 : 100



3 South West Elevation
1 : 100

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GRAPHIC SCALE: 1:100

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SHEET
Proposed Elevations

CLIENT
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07.02.2025

Project number
2441

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Drawn by: GC

DRAWING NUMBER
PL102

REV

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1 North East Elevation

1 : 100

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GRAPHIC SCALE: 1:100

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PROJECT
Llys Llewelyn

SHEET
Proposed Elevations

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Mr & Mrs Clifton

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