Preliminary Ecological Appraisal

Land adjacent to Haulfryn, Llanarth, Ceredigion, SA47 0NZ

Client: Wales & West Housing Association

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Version Number	Date Issued
1.0	11/03/2025

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SUMMARY

I & G Ecological Consulting Ltd were commissioned by Wales & West Housing Association (the client) to undertake a Preliminary Ecological Appraisal (PEA) of an area of land adjacent to Haulfryn, Llanarth, Ceredigion SA47 0NZ (the site).

The proposed development is for the construction of 17 domestic housing units.

A PEA was undertaken, consisting of a desk study and an extended Phase 1 Habitat Survey conducted in February 2025. The PEA was undertaken in order to determine the ecological baseline of the site, as well as to identify any ecological constraints necessary for informing a future application for Planning Permission in relation to the proposed development at the site.

The site predominantly consists of a large area of semi-improved neutral grassland, dense scrub, scattered scrub, ditch line, pond and hedgerows. The proposed development may negatively affect the following designated sites, habitats, and protected or priority species:

- Dense and scattered scrub
- Semi-improved neutral grassland
- Intact species-rich hedgerow
- Amphibians
- Badger
- Bats (foraging and commuting)
- Birds
- hedgehog
- Invertebrates
- Otter
- Reptiles

The following mitigation will need to be implemented during the construction and operation of the proposed development:

- A method statement & mitigation plan to protect reptiles and amphibians during site clearance operations
- A Sensitive Lighting Scheme during construction and operation to minimise disturbance to nocturnal species that may be using the site and surrounding area, including badger, bats and hedgehog.
- General precautionary working methods during construction.
- Ecological supervision during vegetation clearance and removal of brash piles.
- Hedgerow management and establishment to mitigate for scrub loss and impact upon existing hedgerow
- Pond enhancement and SUDs scheme to manage surface water on site to mitigate for partial loss of ditch line
- Management plan for grassland management in set-aside area to enhance biodiversity value to mitigate for loss of semi-improved grassland on site.
- The installation of artificial habitats within the new build for bat roosting and bird nesting
- Treatment and removal of INNS on site

1. INTRODUCTION

1.1 Background

1.1.1 I & G Ecological Consulting Ltd were commissioned by Wales & West Housing Association (the client) to undertake a Preliminary Ecological Appraisal (PEA) of an area of land adjacent to Haulfryn, Llanarth, Ceredigion SA47 0NZ (the site), centrally located at OS Grid Reference: SN 42170 57673. This report presents the findings of both a Phase 1 Habitat Survey and desk study undertaken in February 2025.

1.1.2 The purpose of this report is to provide sufficient information for the Local Planning Authority to assess the ecological impact of the proposed development in its entirety, and to identify whether further information is required before a full assessment can be formed. The report aims to identify any ecological constraints present in relation to the proposed development, such as the presence of protected species and habitats, whilst providing recommendations for further surveys and mitigation measures where required.

1.1 Site Details

1.1.1 The site, approximately 0.8 hectares in size, lies to the edge of the village of Llanarth on a south facing bank. A minor access road forms the eastern boundary, with large single houses and gardens to all the other boundaries.

Figure 1. Aerial image of the site with the approximate site boundary is shown in red. (from Apple® Maps).

1.2 Proposed Development

1.2.1 The proposed development is for the construction of 17 domestic housing units (Fig. 2)

Figure 2. Site Plans

1.3 Relevant Planning Policy and Legislation

1.3.1 The Environment Wales Act (EWA) Section 6 (Welsh Government, 2016) places a duty on public authorities to 'seek to maintain and enhance biodiversity' and 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 lists both Priority Species and Habitats of Principle Importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

1.3.2 Furthermore, Edition 12 of Planning Policy Wales (PPW) (Welsh Government, 2024) establishes the land use planning policy for Wales, as set forth by the Welsh Government. It provides a structure for the effective formulation of Local Planning Authorities' development plans, supported by twenty-one Technical Advice Notes (TANs) organized around different topics. Specifically, TAN 5 - Nature Conservation and Planning gives guidance on how the land use planning system should support the safeguarding and enhancement of biodiversity and geological conservation.

PPW 12 aims to maintain and establish areas where:

- The role of landscapes, historic environments, habitats, biodiversity, and the unique characteristics of coastal, rural, or urban environments in contributing to natural and distinctive places are recognised, appreciated, protected, and improved.
- Further fragmentation of habitats is avoided wherever possible, and green networks, corridors, and habitat connections within developed areas are protected and improved.
- The features and characteristics of sites designated for their landscape or nature conservation significance are fully evaluated and safeguarded, while the network of sites is acknowledged as the foundation for improving the resilience of ecosystems.
- The opportunity to enhance the resilience of ecosystems is seized in all areas by addressing issues such as building on floodplains, diffuse pollution, soil compaction and sealing, ensuring the protection of peat resources, and improving coastal flood defense strategies in urban areas and coastal margins.

Paragraph 3.36 of PPW outlines the utilization of the Sustainable Management of Natural Resources (SMNR) methodology by the planning system, with the following identified as its primary components:

- Improving the resilience of ecosystems and ecological networks
- Halting and reserving the loss of biodiversity
- Maintaining and enhancing green infrastructure based on seeking multiple ecosystem benefits.

1.4 Relevant Local Planning Policy

1.4.1 Ceredigion Local Development Plan Update - November 2021

Following advice and guidance on the impact of Phosphates on the afon Teifi SAC, Ceredigion County Council agreed to a temporary but as yet unspecified length pause for the replacement LDP to allow essential evidence and data to be gathered and mitigation options to be devised. In the meantime, Ceredigion County Council is working with Natural Resources Wales, Dŵr Cymru Welsh Water, Welsh Government and neighbouring Local Authorities to find both national and local solutions to the issue. Although the current

LDPs plan period ends in 2022, it will continue to be the Development Plan for Ceredigion until a Replacement Plan is adopted.

Ceredigion LDP Policies

The Ceredigion Local Development Plan (2007-2022) (LDP) provides local policies for determining developments within Ceredigion. The whole ethos of the LDP is built around sustainable development which incorporates the LA's proactive approach towards achieving a high-quality natural environment.

This is highlighted within the LDP vision: From the Cambrian Mountains to Cardigan Bay, Ceredigion will remain a scenic and biodiversity rich county, committed to maintaining, enhancing and benefiting from its beautiful coastline, uplands and river valleys. It will be home to a vibrant network of engaged and bilingual communities, both urban and rural, whose residents enjoy good health and wellbeing. These communities will celebrate their cultural heritage, and influence and embrace change to meet 21st Century challenges, including climate change. By supporting and enhancing the County's urban and rural service centres, their inter-relationship will be strengthened, the necessity to travel will be reduced and access to local and sustainable facilities will be enhanced and secured. Through sustainable development and protection of its resources, Ceredigion will also be recognised for its enhanced environment and will provide and ensure appropriate and high-quality housing and a strong, diverse and progressive economy. This is further emphasized in the opening paragraph of the LDP Strategy: "The Strategy is to improve the sustainability of the County including protecting and enhancing the County's environment and resources and to ensure that through change the County is made more resilient economically socially and environmentally…."

1.4.2 There are several policies which make a contribution to protecting the environment but the key policies for nature conservation are:

- DM14: Nature Conservation and Ecological Connectivity
- DM15: Local Biodiversity Conservation
- DM16: Regionally Important Geological Sites

1.4.3 Nature Conservation and Ecological Connectivity Policy DM14:

Development will be permitted where it protects and, where possible, enhances biodiversity, geodiversity and ecological connectivity across Ceredigion, including local sites and local priority species and habitats. Where it is appropriate to the scale and location of the development and opportunities exist, development should incorporate nature conservation education and access, providing the site's ecological or geological integrity can be safeguarded.

It is the aim of Policy DM14 to help achieve Objectives 12, 14 and 15 of the LDP11 and National Guidance, by ensuring that nature conservation sites (both statutory and non-statutory) and species and habitats outside these sites are not only safeguarded from harm but also enhanced. Biodiversity forms the basis of sustainable development and

incorporating wildlife into the design and location of development and promoting this through access and education can result in a net biodiversity gain and can assist with a number of other environmental objectives as well as having many social and economic benefits.

1.4.4 Local Biodiversity Conservation Policy DM15:

Development will be permitted where:

A step-wise approach is adopted to ensure there will be no significant negative effects to biodiversity and ecological connectivity both on-site and off-site;

Appropriate species, habitats and wildlife corridor/stepping stone enhancements have been incorporated into the development through good landscape and building design, or where applicable will be carried out offsite;

With regard to developments affecting LNRs, sites that meet SINC criteria and priority species and habitats, there is an overriding social, economic or environmental need for the development that outweighs the losses to biodiversity (after mitigation), the development could not reasonably be located elsewhere and these losses can be readily and fully compensated within the local area; and

Where necessary, management plans are produced and agreed with the LPA and developments phased to take into account mitigation and compensation measures.

It is the aim of Policy DM15 to meet Objective 12 of the LDP and National Guidance, by ensuring that local sites and priority habitats and species, as well as general biodiversity and ecological connectivity, are protected and enhanced. This policy provides clarity as to how development will be dealt with that affects local biodiversity conservation.

2. METHODOLOGY

2.1 Desk Study

2.1.1 A desk study was conducted on 17/02/2025 with the purpose of determining any existing ecological information pertaining to the site and surrounding environment relevant to the proposed development. The sources utilised and the type of information obtained are summarised in Table 1.

Table 1. Sources of ecological records.

Source	Information and data sets	Search buffer from the site centre/boundary
West Wales Biodiversity Information Centre (WWBIC)	• Protected and priority species. • Non-statutory designated sites.	• 2km • 1km
Multi-Agency Geographic Information for the Countryside (MAGIC)	• International statutory designated sites. • National statutory designated sites. • Standing waterbodies.	• 10km • 5km • 0.25km

2.1.2 The search buffers within Table 1 were chosen to cover the Zone of Influence (ZoI) of the proposed development in relation to protected and priority species, habitats, and designated sites.

2.1.3 The impact the proposed development may have on the biological features of nearby designated protected sites has been fully considered.

2.1.4 An evaluation of previous ecological surveys relevant to the proposed development has been undertaken.

2.1.5 A search for standing waterbodies within 0.25km of the site using aerial imagery has been undertaken to assess the likelihood of potential site use by Great Crested Newt in accordance with the Great Crested Newt Conservation Handbook (Langton et al., 2001).

2.2 Field Survey (Phase 1 Habitat Survey)

2.2.1 A Phase 1 Habitat Survey was conducted by a suitably qualified ecologist on 16/2/2025, using the methodology outlined in the Handbook for Phase 1 habitat survey (JNCC, 2010). Additionally, the habitats present on site were assessed for their potential to support protected species, and visual surveys were used to search for signs that such species are

using the site.

2.2.2 Signs of site use by protected species may relate to the following:

- Evidence of badger – setts, well-worn paths and runs, snagged hair, latrines, sites and foraging.
- Evidence of otter - spraint marking, slides, hovers, resting sites.
- Evidence of dormouse – nests or foraged hazel nuts with characteristic round gnawing holes.
- Evidence of birds – nests.
- Evidence of bats – bat droppings or urine staining adjacent to a Potential Roost Feature (PRF).
- Evidence of reptile – sloughs.
- Evidence of amphibians – spawn.
- Evidence of water vole – droppings, latrines, foraging signs and footprints.

2.2.3 The presence of any invasive non-native plant species listed under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) were also noted and mapped during the site survey. These species include Japanese Knotweed (*Fallopia japonica*) and Himalayan Balsam (*Impatiens glandulifera*). Additionally, species which are not listed under Schedule 9, Section 14, but are known to be invasive to ecosystems in the United Kingdom were also noted and mapped during the site survey, including Butterfly Bush (*Buddleja davidii*) and Ground Elder (*Aegopodium podagraria*).

2.3 Survey Limitations

2.3.1 A species may be perceived to be absent within the surrounding area due to a lack of records returned during the desk study. However, a lack of records does not necessarily indicate a species is absent from the area and may be a result of a combination of multiple factors. These factors include, but are not limited to, a lack of surveying within the search buffer area, recent colonisation of a new area, low population density, and how cryptic the species in question may be.

2.3.2 The findings presented within this report are valid for an 18-month period following the survey, in line with CIEEM (2019) guidance. Should the proposed development scope change in any way, then an updated Preliminary Ecological Appraisal will be required.

2.3.3 The field survey was undertaken outside of main flowering season for plant species (May to August), and therefore the survey took place during sub-optimal conditions for plant identification, particularly for the identification of grass and herbaceous perennial species.

3. RESULTS

3.1 Desk Study

Connectivity to the surrounding landscape

3.1.1 The site is bordered by mature hedgerows which form part of a network of hedgerows and woodland corridors that provide good connectivity to the wider landscape. This includes connectivity to the afon Llethi and its associated woodland corridor to the north.

Figure 3. Aerial image of the landscape surrounding the site with the approximate site boundary shown in red. (from Apple® Maps).

Previous ecological surveys

3.1.2 The site was previously surveyed by I&G Ecology in November 2020 to inform a PEA.

Designated sites (statutory)

3.1.3 There are three international statutory designation within 10km of the candidate site and three national statutory designations within 5km. Table 2 on the following page summarises information relating to each statutory designated site within the search buffer area.

Designated sites (non-statutory)

3.1.4 There are 0 non-statutory designations within 1km of the candidate site. Table 2 on the following page summarises information relating to each non-statutory designated site within the search buffer area.

Table 2. Summary of designated sites within the search buffer area.

Site name	Designation	Distance and connectivity to site
Cardigan Bay	Special Area of Conservation (SAC)	2.5 km north-west of the development. Low connectivity via a disconnected network of hedgerows, woodland and the afon Llethi.
West Wales Marine	Special Area of Conservation (SAC)	2.5 km north-west of the development. Low connectivity via a disconnected network of hedgerows, woodland and the afon Llethi.
Rhos Llawr Cwrt	Special Area of Conservation (SAC)	8km S of the development. No connectivity
Aberarth - Carreg Wylan	Site of Special Scientific Interest (SSSI)	2.5 km north-west of the development. Low connectivity via a disconnected network of hedgerows and woodland.
Rhos Cwmsaeson	Site of Special Scientific Interest (SSSI)	4km NE of the development. No connectivity
Rhos Esgairwen-fawr a Rhosgoch-fawr	Site of Special Scientific Interest (SSSI)	5km SE of the development. No connectivity

Relevant key findings on designations

3.1.5 The development site is remote from any designated sites within the search buffer. While there is low connectivity to the coastal sites via a network of hedgerows, woodland and the afon Llethi, there is no hydrological connectivity to these sites.

Habitat Regulations Assessment (HRA) Screening Requirement

3.1.6 There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), or Ramsar wetlands of international importance that may be within the Zone of Influence (ZoI) of the proposed development.

Light pollution

3.1.7 The site is located within a semi-rural area and has a low level of light pollution (see Figure 3 below for site radiance level).

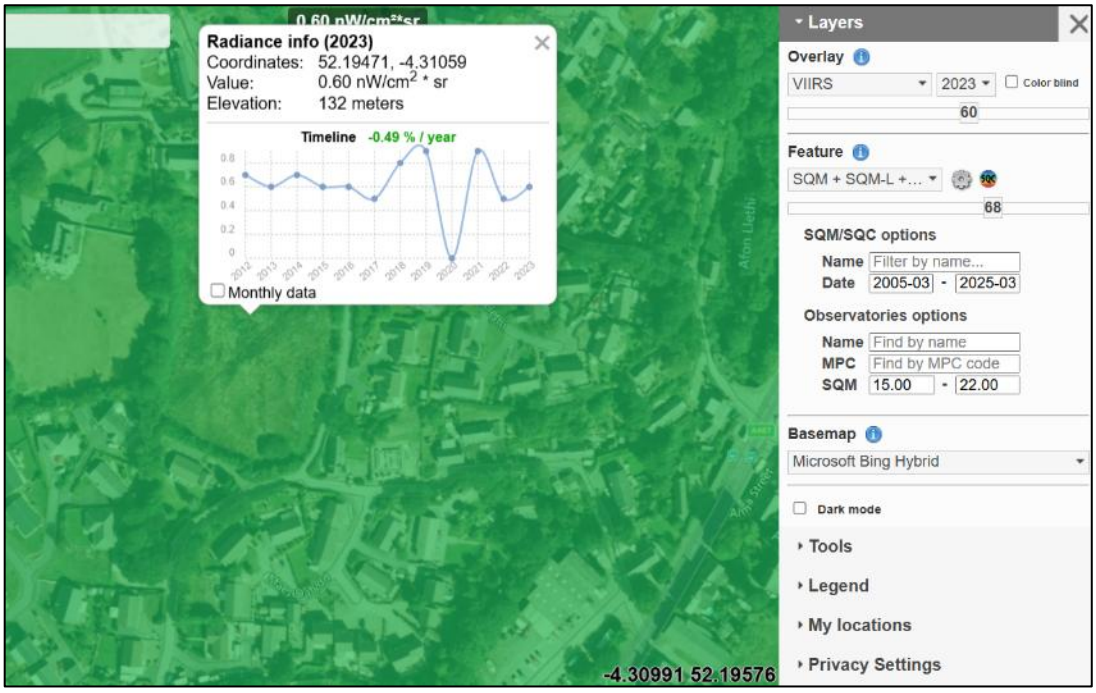

Figure 4. Radiance level at the site (VIIRS Data Base (2023), accessed 18/2/2025, available at https://www.lightpollutionmap.info).

Priority and protected species

3.1.8 A summary of priority and protected species records found within 2km of the candidate site can be found in Table 3 on page 17.

Key records

3.1.9 There are a number of bat record associated with the Vicarage immediately to the north of the development site. These include roost records for brown long-eared, common & soprano pipistrelle and daubentons.

3.1.10 Common toad, frog, smooth newt and slow worm are recorded within 100m of the site boundary and adder & palmate newt within 300m.

3.1.11 Badger and hedgehog are recorded within 100m of the site boundary.

3.1.12 Japanese knotweed is recorded within 500m of the site and Himalayan balsam within 1km

Table 3. Priority and Protected species records within 2km of the site.

Priority and protected		Number of records (number of species)
Groups	Species	
Bats	Brown long-eared	7
	Common pipistrelle	8
	Soprano pipistrelle	3
	Pipistrelle	7
	Noctule	2
	Whiskered/Brandts	4
	Daubentons	1
	Natterers	1
	Myotis	3
	Unidentified bat	6
Other Mammals	Hare	1
	Badger	8
	Hedgehog	10
	Otter	2
	Polecat	1
Reptiles	Adder	1
	Common lizard	0
	Slow-worm	5
Amphibians	Great crested newt	0
	Other amphibians	11 (4)
Birds	Schedule 1	45 (20)
Fish	Category 1	0
Invertebrates	Marsh fritillary	0
	Other invertebrates (Category 1)	73 (48)
Plants	Category 1	3 (1)

3.2 Field Survey

Timing and weather

3.2.1 The timing of the field survey and the prevailing weather conditions are summarised in Table 4.

Table 4. A summary of weather conditions during the field survey.

Date	Prevailing weather conditions			
	Temperature	Wind speed	Cloud cover	Weather
16/2/2025	8°C	15mph	80%	Overcast, dry

Habitats on site

3.2.2 The following Phase 1 habitat types were present at the site:

- **A2.1** Dense scrub
- **A2.2** Scattered scrub
- **B2.2** Semi-improved neutral grassland
- **G1** Standing water
- **G2** Running water
- **J2.2** Species poor hedgerow
- **J3.1** Native species rich hedgerow

3.2.3 Descriptions of the habitats present on site using Phase 1 survey habitat classification can be found in Table 5.

3.2.4 The extended Phase 1 habitat plan in Appendix I illustrates the distribution and extent of the habitats present on site, in addition to the location of each Target Note. Furthermore, a full species list (including scientific names) can be found in Appendix III.

Table 5. Habitats and linear features on site.

Habitat / Linear feature	Species present
A2.1 Dense scrub Location and extent: Scrub is invading from the edges. To the north and west this is predominantly bramble, with small areas of grey willow. To the south east there is a thick band of dense gorse fronting the hedgerow.	Species: European gorse, bramble, grey willow
A2.2 Scattered scrub Location and extent: scattered scrub is establishing across the site in the absence of grazing.	Species: bramble, grey willow
B2.2 Semi-improved neutral grassland Location and extent: the most dominant habitat type on site, a large area of semi-improved grassland comprises a majority of the site interior.	Grassland species: Yorkshire fog, common bent, cock's foot, red fescue, pendulous sedge, soft rush, sharp flowered rush, compact rush, ribwort plantain, common knapweed, creeping buttercup, dock, spear thistle, marsh thistle, greater birds foot trefoil, sorrel, lesser celandine, red clover, broad leaved dock, clustered dock, bramble, nettle, marsh ragwort, common ragwort, broad leaved willowherb, wild strawberry, common male fern, European gorse, grey willow
G1 Open Standing Water Location and extent: Small pond at bottom of slope in SW corner	The pond is heavily shaded and lacks macrophytes
G2 Running Water Location and extent: A small ditch bisects the site from the NE to the SW, discharging into the pond. A second ditch flows from a pipe in the NW corner of the site along the hedge-bank boundary.	Glaucous sedge and bank haircap occur along the field ditch line

J2.1.2 Intact species-poor hedgerow Location and extent: the northern boundary and the majority of the southern boundary.	Hedgerow species: Leylandii
J2.3.1 Native species rich hedgerow Location and extent: native hedgebanks form the E, SE and W	Hedgerow species: Oak, ash, blackthorn, hawthorn, holly, hazel, alder, sycamore, grey willow, yew, Berberis sp. Japanese barberry, leylandii Ground layer: bramble, gorse, snowberry, false oat grass, pendulous sedge, cleavers, hedgerow cranesbill, dandelion, wood sage, herb Robert, ivy, nettle, navelwort, broad buckler fern, hart's tongue fern, common male fern, polypodium, bank hair cap.

Habitat descriptions

3.2.5 Scrub is invading from the edges. To the north and west this is predominantly bramble, with small areas of grey willow. To the south east there is a thick band of dense gorse fronting the hedgerow which is becoming colonised along the outer edge by bramble and grey willow. A windrow of cut woody material from previous hedge management along the eastern hedge-bank to the north of the access gateway has become colonised by willow and bramble scrub. The extent of the scrub is greater than the 2020 survey.

3.2.6 The area of scattered scrub is predominantly comprised of open bramble and grey willow scrub with a ground layer representative of the surrounding grassland. This habitat has developed post the 2020 survey in the absence of grazing or cutting.

3.2.7 The site is situated on an open sunny south facing slope, the majority of the area is well drained. Semi-improved neutral grassland is the main component, and is becoming rank and tussocky in the absence of grazing. Yorkshire fog and red fescue dominate but the coarser grasses such as cocksfoot and tufted hair grass are more prevalent across the site, having been confined to the edges in the 2020 survey. Soft and sharp-flowered rush occur in wetter areas, and there are small patches of glaucous sedge associated with the ditch line that runs diagonally across the site. Herbs include common knapweed, willowherb, birds-foot trefoil, sorrel, selfheal and dandelion. Distribution is however patchy, with broad leaved dock dominating large areas. A number of species present in 2020 were not noted, partly due to the time of year, but this also may represent a decline in diversity due to lack of management and the dominance of coarser grasses.

3.2.8 The partial hedgerow to the north and the hedgerow to the south are composed of leylandii conifers. This habitat contains notably low species diversity but may provide cover habitat to wildlife using the site.

3.2.9 Grey willow dominates the lane-side hedgerow with occasional oak, blackthorn, hawthorn hazel and bramble. There is a single specimen of yew in the upper section. Coarse grasses including false oat grass occupy the base/field edge. Forbs include herb Robert, wood sage and a variety of ferns with *Polypody* abundant. The western boundary bank and ditch is dominated by mature oak. Access to survey was hampered by dense bramble scrub. Nettle, ivy, pendulous sedge and male fern were visible along the hedge-bank.

3.3 Protected and priority species on site

3.3.1 The confirmed presence, or likelihood of presence, of each protected, priority, and notable species that are considered relevant to the site is discussed below. Species that are not considered relevant to the proposed development at the site have been omitted.

Amphibians

3.3.2 No incidental evidence of amphibians was identified during the site survey.

3.3.3 The dense scrub, scattered scrub, semi-improved neutral grassland, and hedgerow habitats on site provide suitable foraging and commuting habitat for terrestrial phase amphibians.

3.3.4 The ditch line and pond will provide suitable breeding habitat for amphibians.

3.3.5 The brash pile (target note 1) on site may provide suitable hibernation sites for terrestrial phase amphibians.

Badger

3.3.6 No evidence of badger (including setts, well-worn paths, latrines, or tracks) was found on site.

3.3.7 The site is well connected to multiple large areas of woodland located within 1km of the site by a network of mature hedgerows.

3.3.8 The scrub habitats, semi-improved grassland, mature hedgerow, and large brash pile (target note 1) on site may be suitable for badger foraging and commuting, however these habitats are unlikely to be suitable for sett creation. A large number of mammal runs were observed across the site, but appeared to be too small for badger. The smell of fox was present at a number of locations.

Bats

3.3.8 No incidental evidence of bats (including droppings, staining, or smells) was found on site.

3.3.9 The oak trees within the western boundary may provide opportunities for roosting bats, but the dense layer of bramble scrub precluded close examination. The hedgerows and tree lines are likely to provide flight lines and foraging opportunities.

3.3.10 The site has a low level of light pollution.

3.3.11 The grassland and scrub habitats on site, as well as the brash pile feature (target note 1), provide habitat for a variety of invertebrate species, which in turn provide foraging opportunities for local bat populations.

Birds

3.3.12 No incidental evidence of birds was identified during the site survey, though red kite were flying in the vicinity.

3.3.13 The mature hedgerow, scrub habitats, and large brash pile (target note 1) on site provide nesting opportunity to arboreal nesting species, and the grassland habitat on site provides nesting opportunity to ground nesting species.

3.3.14 There are a number of fruiting species located on site, including bramble, blackthorn and hawthorn, within the scrub and hedgerow habitats which are likely to provide foraging resources to a variety of bird species.

3.3.15 The grassland, scrub, hedgerow and brash piles at the site provide habitat for a variety of invertebrate species, which in turn provides foraging opportunities for insectivorous bird species.

European Hare

3.3.16 No incidental evidence of hare was identified during the site survey. However, there are records within 2km of the site.

3.3.17 The grassland on site is suitable for foraging hare, but is of limited size and surrounded by unsuitable habitat so their presence is unlikely.

Hazel Dormouse

3.3.18 No incidental evidence of hazel dormouse was identified during the site survey and there are no records of dormouse within 2km of the site.

Hedgehog

3.3.19 There are 10 records within 2km of the site.

3.3.20 The mature hedgerow, semi-improved grassland, and scrub on site may provide suitable foraging and commuting habitats for hedgehog. Furthermore, the brash pile (target note 1) may provide suitable cover habitat. In addition, there is a range of suitable habitat in the surrounding landscape.

Invertebrates

3.3.21 No incidental evidence of invertebrates was identified during the site survey. However, the habitats on site are suitable, and therefore it is assumed that invertebrates are using the site.

3.3.22 There are no records of marsh fritillary within 2km of the site, and the grassland habitat is unsuitable, with scabious absent.

3.3.23 The grassland on site is likely to provide habitat and foraging opportunity for a range of invertebrate species, including pollinating insects. Furthermore, foodplants such as birds-foot trefoil, common nettle and bramble are present which provide further foraging opportunities to a range of Category 1 invertebrate species retuned in the data search.

3.3.24 The dense and scattered scrub habitats on site contain a high proportion of native flowering species and therefore provides foraging opportunity to pollinating insects. Furthermore, foodplants such as birds-foot trefoil, common nettle and bramble are present which provide further foraging opportunities to a range of Category 1 invertebrate species retuned in the data search.

3.3.25 The native hedgerows on site are likely to provide habitat and foraging opportunity to a range of invertebrate species.

3.3.26 The brash pile (target note 1) on site is likely to provide habitat and hibernation opportunity to a range of invertebrate species. Furthermore, the brash pile may provide habitat for deadwood dependant species.

Otter

3.3.1 No incidental evidence of otter was identified during the site survey. However, there are 2 records within 2km.

3.3.2 The site has suitable habitat to provide cover for otter, and the pond and ditch-lines will hold amphibian prey opportunities over the spring months. The site is however remote and disconnected from suitable riparian habitat.

Reptiles

3.3.3 No incidental evidence of reptiles was identified during the site survey.

3.3.4 The site is south facing with a sunny aspect. The grassland, scrub, hedgerow, and brash piles on site offer a beneficial mix of open basking areas and sheltered foraging habitat for reptile species.

3.3.5 The brash pile (target note 1) present on site may provide suitable hibernation sites for reptile species.

4. SITE ASSESSMENT

4.1 Ecological Value and Impact Level Criteria

4.1.1 The value of habitats and ecological features at the site is assigned according to their level of importance using the following terminology:

- International value
- National value
- Regional value
- County value
- District value
- Local value
- Site value
- Negligible value

4.1.2 The criteria used to assess the predicted impact level of the development to each ecological receptor relevant to the proposed development is found in Table 6 below.

Table 6. Impact level criteria

Severity of Impact	Impacts to Ecological Feature
Severe	Extensive irreversible damage or permanent loss of feature.
Major	Extensive loss of feature and/or quality and integrity of key characteristics; major long-term disruption and/or permanent damage to key ecological processes.
Moderate	Partial but significant loss of feature, but does not adversely affect the integrity and ecological function of the feature; significant and noticeable changes to the attributes, quality, or vulnerability of the feature.
Minor	Minor measurable changes in attributes, quality or vulnerability; minor loss of, or alteration to one (or more) key characteristics, features or elements.
Negligible	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
Neutral	No detectable impacts.

4.2 Overview of Development Impacts

4.2.1 The proposed development will result in the removal and/or disturbance to habitat features and their associated species. An overview of the potential effects resulting from the proposed development are as follows:

- Disturbance and loss of semi-improved grassland on site.
- Disturbance and loss of dense and scattered scrub habitats on site.
- Disturbance and loss of drainage ditch on site
- Disturbance to mature hedgerow on site.
- Loss of herpetofauna hibernation features (target note 1) on site.
- The potential for an increase in light pollution both during and post development.

4.3 Impacts to Designated Sites

4.3.1 There are 6 statutory designated sites located within the search buffer area of the desk study but none within 2km of the development site.

4.3.2 There is no hydrological connectivity between the development site and any of the designated sites.

4.4 Impacts to Habitats and Features

4.4.1 The following habitat/features were identified on site and the impact of the proposed development to these habitats/features is discussed below:

- Dense scrub
- Scattered scrub
- Semi-improved neutral grassland
- Native species rich hedgerow
- Pond
- Ditch-line
- Brash pile

Dense scrub

4.4.1 The dense scrub on site displays low species diversity but provides foraging opportunities to invertebrates, particularly pollinator species. In addition, the dense scrub may provide foraging and nesting habitat for bird species, foraging and commuting habitat for badger and hedgehog, commuting and covered foraging habitat for reptile and amphibian species, and flightlines and foraging opportunity for bat species. This habitat has been

assessed to have **site value** as it possesses low species richness and is widespread in the surrounding landscape.

4.4.2 Under the current proposed design, loss or damage to this habitat may be **severe** without mitigation.

Semi-improved neutral grassland

4.4.3 In the absence of grazing or cutting the semi-improved grassland is becoming rank, and colonised by bramble, gorse and willow from the hedge-lines. Floral interest is still relatively high but patchy and has declined since the 2020 survey.
The grassland on site provides foraging opportunities to invertebrates, particularly pollinator species. In addition, the grassland may be used as a 'stepping-stone' for pollinator species between more species-rich grassland in the surrounding landscape. Furthermore, the grassland may offer suitable foraging and basking habitat for reptiles, commuting habitat for amphibians, nesting and foraging habitat for birds, and foraging habitat for badger and hedgehog. Bats may forage on invertebrate populations which reside within this habitat. This habitat has been assessed to have **local value.**

4.4.4 Under the current proposed design, loss or damage to this habitat will be **severe** without mitigation.

Intact species-rich hedgerow

4.4.5 The native boundary hedgerows/tree-lines were considered to be of high ecological interest. They will have value as habitat cover and as food sources for a range of birds, mammals, reptiles, amphibians and invertebrate species, and some of the oak in the western hedgerow have the potential to provide bat roosting opportunities. Their connectivity to other similar habitats will be of value to local wildlife.
This habitat has been assessed to have **county value.**

4.4.6 Under the current proposed design, no loss of hedgerow is indicated with the exception of a small length of the eastern boundary for access purposes. On this basis, loss or damage to this habitat will be **moderate** without mitigation.

Pond

4.4.7 The pond is heavily shaded and lacks macrophytes, but will provide breeding opportunities for amphibians and invertebrates such as odonata. These in turn will be available to a range of predators. The habitat has been assessed to have **local value.**

4.4.8 Under the current proposed design, this area is outside the development footprint, and on this basis loss or damage to this habitat will be **negligible**.

Ditch-lines

4.4.9 The ditch lines convey surface water away from the adjacent land, but also provide habitat for a range of species including amphibians, reptiles and invertebrates. This habitat has been assessed to have **site value** due to its potential to provide habitat to reptile and amphibian species.

4.4.10 Under the current proposed design, the western hedgerow ditch line will not be impacted by the proposals. Approximately half the field ditch will be lost to the development and therefore the impact will be **severe** without mitigation.

Brash pile

4.4.11 The brash pile (target note 1) may provide hibernation opportunities to terrestrial phase amphibians and reptile species, nesting opportunities to birds, and cover and foraging habitat to badger, fox, hedgehog and small mammals. Furthermore, these features are likely to support a range of invertebrate species, which in turn provide foraging opportunity to a variety of protected species groups including bats, birds, reptiles, and amphibians. This feature has been assessed to have **local value** as it has the potential to support a range of protected species and brash piles of this size are unlikely to be present in the surrounding area.

4.4.12 Under the current proposed design, loss or damage to this habitat may be **severe** without mitigation as the current plan for the proposed development is unknown.

4.5 Impacts to Species

4.5.1 The following protected or priority species were identified as present, likely present, or unconfirmed at or within the vicinity of the site:

- Amphibians
- Badger
- Bats
- Birds
- Hedgehog
- Invertebrates
- Reptiles

4.5.2 The predicted impact of the proposed development without mitigation to protected or priority species relevant to the site is summarised in Table 7 below.

Table 7. Impacts of the proposed development to relevant priority and protected species.

Protected or priority species	Impacts of proposed development without mitigation
Amphibians	Loss or reduction of grassland, scrub, and hedgerow habitat, along with loss of suitable hibernation features, may result in adverse impacts to common amphibian species.
Badger	Insensitive artificial lighting schemes both during and after construction, as well as noise pollution during construction, and loss or reduction of grassland, scrub and hedgerow habitats at the site may result in adverse impacts to foraging and commuting badger.
Bats	Loss or reduction of grassland, scrub, brash and hedgerow habitats may result in adverse impacts to foraging bats. Furthermore, should the site and surrounding area be subject to increased light pollution, there may be a reduction in habitat connectivity for light adverse species and therefore in foraging and commuting habitat. The proposed development without mitigation is therefore likely to result in adverse impacts to bats using the site.
Birds	Loss or reduction of grassland, hedgerow, scrub, and large brash pile habitats may result in adverse impacts to nesting and foraging birds. Furthermore, a permanent increase in human activity on site may discourage more timid bird species from using the site.
Hedgehog	Loss or reduction of scrub, hedgerow, grassland, and brash pile habitats at the site, insensitive artificial lighting schemes both during and after construction, and noise pollution during construction, may result in adverse impacts to hedgehog using the site and adjacent habitats.
Invertebrates	Loss or reduction of scrub, hedgerow, grassland and brash pile habitat area is likely to result in adverse impacts to invertebrate populations at the site.
Reptiles	Loss or reduction of grassland, scrub, and hedgerow habitat, along with loss of suitable hibernation features, may result in adverse impacts to common reptile species.

4.6 Impacts to Ecosystem Resilience

4.6.1 Area loss can cause populations of organisms to decline due to a decrease in habitat size. Despite this, the habitats present on site are relatively widespread in the surrounding landscape, and therefore, if the proposed development is to be undertaken without any mitigation, the impact on ecosystem resilience is anticipated to be **minor**. Should the results of any further surveys listed in Section 6 confirm the likely presence of any protected species, this assessment may require updating by a suitably qualified ecologist.

5. CONCLUSIONS AND RECCOMENDATIONS

5.1 Site Overview

5.1.1 The combination of desk and field surveys undertaken at the proposed development site identified that the site has a **local value** ecologically. The native hedgerows are of **county value**.

5.1.2 Recommendations necessary for the informing of the design process are provided below, as well as recommendations for biodiversity mitigation and enhancement in order to fulfil the Biodiversity and Resilience of the Ecosystems Duty (Section 6 Duty) of the Environment Act (Wales) 2016.

5.2 Designated Sites

5.2.1 There are no potential mechanism for the development to impact upon any of the designated sites within the search buffer.

5.3 Mitigation Measures During Development Construction

5.3.1 All works are to be undertaken during the day and any artificial lighting will be kept to a minimum during construction to minimise disturbance to nocturnal species which may be foraging in the surrounding area, including bats, badger and hedgehog.

5.3.2 Precautionary working methods are recommended during construction to minimise the risk of harm to badger, reptiles, amphibians, and hedgehog. These may enter the site for a variety of reasons, such as foraging in new territory and fleeing predation, and may therefore be at risk during construction. Precautionary working methods include:

- Preventing and protecting mammals from accessing materials through the use of spoil-proof fencing.
- Fencing off and covering of open excavations, in order to prevent animals becoming trapped or injured. Ramp-like structures should be installed to allow any animals that may become trapped to leave the groundworks.
- If possible, access routes and machines should be chosen with the minimisation of sediment run-off as a priority.
- Removal of the brash pile by hand to ensure no harm is caused to wildlife using the features at the time for the works.

5.3.3 All vegetation clearance required to fulfil the proposed design should be undertaken from September to February to avoid bird nesting season. If these works are to be undertaken during nesting season (March to August), a nesting bird check by a suitably qualified ecologist will be required within 24 hours of the commencement of the works. If any nests are identified, a 5m buffer zone will be measured around the nest, all work will stop in that area, and it will be left undisturbed until the nest is complete.

5.3.4 In terms of the site's ecological potential, the western hedge-bank, ditch and trees were considered to have the highest habitat value. They should be retained in their entirety with an appropriate offset from the development boundary. Protection of trees and hedgerows through the use of Root Protection Zones and appropriate working methodology as well as proximity of development boundary must be considered.

5.3.5 The boundary hedgerow to the east has become very gappy and outgrown, with willow as the dominant species. It will provide connectivity to adjacent habitats, and so should be retained within the development plan. The loss of a short section to provide an access point and visibility splay could be adequately mitigated for by instigating appropriate hedgerow management such as laying, and gapping up to the eastern boundary with species of local provenance. Planting should be predominantly of hawthorn, blackthorn and hazel, with occasional holly and berry bearing bushes such as alder buckthorn and guilder rose. A 2m offset from the hedge centre will retain and allow for the development of a scrubby edge.

5.3.6 The Leylandii in the northern and southern hedges should be removed, and a new hedgerow be planted with local species as detailed above. If practical an earth and stone hedge-bank should be formed for the northern hedgerow. This should utilise material derived from the site where possible.

5.3.7 Loss of scrub habitat and trees should be mitigated for by suitable new planting, detailed in the landscape scheme and approved by the LA ecologist. Any new planting should be with trees and shrubs of local provenance and should seek to replicate the species mix present in the existing hedgerow. Landscaping should include berry bearing species such as guelder rose, rowan and purging/alder buckthorn, which will also attract brimstone butterfly.

5.3.8 The hedge-line ditch and pond should be retained and incorporated into a SUDS scheme for the site. The field ditch is of less interest. Willow vegetation around the pond should be cleared back and treated. It is recommended that the pond is widened to provide shallow edges to the east and west to allow for the development of wetland plant communities.

Larger stone uncovered during site clearance could be used adjacent to the pond to provide suitable hibernacula for reptiles and amphibians.

5.3.9 A method statement and mitigation plan should be prepared in order to protect reptiles and amphibians during site clearance and construction.

5.3.10 New dwellings should include artificial habitats such as bat bricks/boxes, bird boxes/bricks or Swift/Swallow cups; the details of which should be agreed with the LA ecologist.

5.3.11 The *Berberris* and buddleja within the eastern hedgerow should be removed and disposed of appropriately. Materials brought into the site should be clean and free from INNS.

5.4 Mitigation Measures During Development Operation

5.4.1 The grassland plant diversity is declining in the absence of suitable management. Tussocky grasses and dock dominate, and flowers are becoming patchy. The site is also isolated from other similar habitats by domestic dwellings.

The site sits within a B-line, and the loss of pollinator plants within the development should be mitigated by suitable planting detailed in the landscape scheme and approved by the LA ecologist.

5.4.2 An area has been set aside within the plan at the south of the plot. This should be managed to establish a species rich native wildflower meadow.

5.4.3 The current lighting scheme for the development in its future operation is currently unknown. However, any exterior lighting on site should be kept to a minimum and be subject to a sensitive lighting strategy with input from a suitably qualified ecologist. This will reduce disturbance to nocturnal species using the surrounding area, including bats, badger and hedgehog. The details of the sensitive lighting strategy will be dependant on the scope of the proposed development.

5.5 Further Surveys

5.5.1 Not required unless any mature trees require management, when a bat assessment will be required. A number of trees have features suitable for supporting roosting bats. Any mature trees which require felling or management in order to accommodate the

development will be subject to inspection and assessment for suitability for use by bats, by a licenced bat surveyor following current guidelines (Bat Conservation Trust).

6. WILDLIFE LEGISLATION

6.1 Otters and the Law

6.1.1 The otter is a European Protected Species (EPS). It is against the law to damage or destroy an otter breeding site or resting place, or deliberately to capture, kill, injure or disturb an otter.

6.1.2 Otters are fully protected by the following pieces of legislation:

- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects otters, making it **an offence to**: -
    - *Intentionally or deliberately capture, injure or kill an Otter.*
    - *Damage or destroy a breeding or resting place of an Otter, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
    - *Intentionally or recklessly disturb an Otter in a place used for shelter or protection, or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance.*
    - *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
    - *Possess an Otter (alive or dead), or any part of an Otter*

- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects otters, making it **an offence to: -**
    - *Intentionally or recklessly disturb any otter while it is occupying a structure or place which it uses for shelter or protection*
    - *Intentionally or recklessly obstructs access to any structure or place used by an otter for shelter or protection*
    - *Sell, offer or expose for sale any otter*

6.1.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that:

i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.

ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.

iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.1.4 Otters are also protected by:

- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

6.2 Bats and the Law

6.2.1 Bats are protected by the following pieces of legislation:

- Schedule 5 and 6 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000)
- The Environmental Damage (Prevention & Remediation) Regulations 2009 – A protected species and its habitat is protected under this legislation as well as others.
- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects all bats and their roosts, making it **an offence** *to deliberately kill*, *injure or capture* (take) bats; *to* deliberately *disturb bats; damage or destroy bat roosts* or resting places (this is considered an "Absolute Offence" as damage and destruction may detrimentally effect the Continuous Ecological Functionality of that roost / resting place); possess or transport a bat or any part of a bat; sell (or offer for sale) or exchange bats or parts of bats.
- For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that:

    i. the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.

    ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.

    iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.2.2 Bats are also protected by:

- Appendix III of the Bern Convention
- Appendix II of the Bonn Convention (including the Convention's Agreement on the conservation of Bats in Europe)
- Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- All bats are listed in Annex IV of the EC Habitats Directive and the British species listed in Schedule 2 of the Habitats Regulations 1994 (as amended) and are therefore designated as *European Protected Species*. These *protected* species are afforded enhanced

protection and more stringent licensing provisions than those protected by the Wildlife and Countryside Act (WACA) alone.

6.3 Hazel Dormouse and the Law

6.3.1 The hazel dormouse is a European Protected Species (EPS). It is against the law to damage or destroy a dormouse breeding site or resting place (summer or hibernation nest), or deliberately to capture, kill, injure or disturb a dormouse.

6.3.2 Dormice are fully protected by the following pieces of legislation:

- The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects dormice, making it **an offence to**:
    - *Intentionally or deliberately capture, injure or kill a dormouse.*
    - *Damage or destroy a breeding or resting place of a dormouse, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
    - *Intentionally or recklessly disturb a dormouse in a place used for shelter or protection, or deliberately disturb dormouse in such a way as to be likely significantly to affect (i) the ability to survive, breed, rear or nurture their young, and includes in the case of animals of a hibernating or migratory species, to hibernate or migrate or (ii) the local distribution or abundance.*
    - *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
    - *Possess a dormouse (alive or dead), or any part of a dormouse*

- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects dormice, making it **an offence to:**
    - *Intentionally or recklessly disturb any dormouse while it is occupying a structure or place which it uses for shelter or protection*
    - *Intentionally or recklessly obstructs access to any structure or place used by a dormouse for shelter or protection*
    - *Sell, offer or expose for sale any dormouse*

6.3.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that:

i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.

iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

6.3.4 Dormice are also protected by:

- Natural Environment and Rural Communities Act 2006 (England) and the Environment (Wales) Act 2016.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

6.4 Reptiles and the Law

6.4.1 All of the UK native reptiles are protected by law. The common species of reptiles found in this locality are common lizard, slow-worm, adder and grass snake. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

6.4.2 All native UK reptiles are considered of 'principal importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

6.4.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes all reptiles species) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

6.5 Amphibians and the Law

6.5.1 All of the UK native amphibians are protected by law. The common species of amphibians in this locality are common frog, common toad, smooth newt and palmate newt. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

6.5.2 The common toad is considered of 'principal importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

6.5.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species) which includes the Common Toad) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

6.6 Birds and the Law

6.6.1 All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Protection was extended by the Countryside and Rights of Way (CRoW) Act 2000. Under the above legislation it is an offence to intentionally:

- kill, injure or take any wild bird:
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

6.6.2 Certain species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5). The protection was extended by the Countryside and Rights of Way (CRoW) Act 2000. There are special penalties where the offences listed above are committed for any Schedule 1 species and it is also an offence to intentionally or recklessly:

- disturb any such bird when it is building its nest or while it is in or near a nest containing dependant young; or
- disturb the dependant young of any such bird.

6.7 Badgers and the Law

6.7.1 The protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger, or interfere with a sett. In addition, they are listed on Schedule 6 of the Wildlife & Countryside Act 1981, which prohibits certain methods of killing and capture.

6.8 Water Voles and the Law

6.8.1 Water voles are listed under Schedule 5 of the Wildlife & Countryside Act 1981, receiving full protection since 2008. The Wildlife & Countryside Act 1981 (as amended), lists the following offences:

- Intentionally kill, injure or take water voles (Section 9 (1)).
- Possess or control live or dead water voles or derivatives (Section 9 (2)).
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection (Section 9 (4) (a & c)).
- Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose (Section 9 (4) (b)).
- Sell water voles or offer or expose for sale or transport for sale (Section 9 (5)).

- Publish or cause to be published any advertisement which conveys the buying or selling of water voles (Section 9 (5)).

6.9 Environment Act (Wales) 2016

6.9.1 This act has replaced 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. It came into force in May 2016.

6.9.2 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 doing so, public authorities must also seek to 'promote the resilience of ecosystems'. Under Section 6, public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.

6.9.3 Section 7 of the Act places a duty on public authorities to take steps to maintain and enhance biodiversity. This section replaces the duty in section 42 of the NERC Act 2006. The Section 7 Priority Species under this act is a list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. The Section 7 Priority Habitats is a list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

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We confirm that in preparing this Report we have exercised reasonable skill and care, taking into account the project objectives, the agreed scope of the work and prevailing site conditions.

Advice in this report is based on the judgement of I&G Ecological Consulting and the interpretation of data gathered during the course of their survey on the property named in this document.

The findings and advice given during the course of this survey is provided by employees of I&G Ecological Consulting acting only on behalf of I&G Ecological Consulting.

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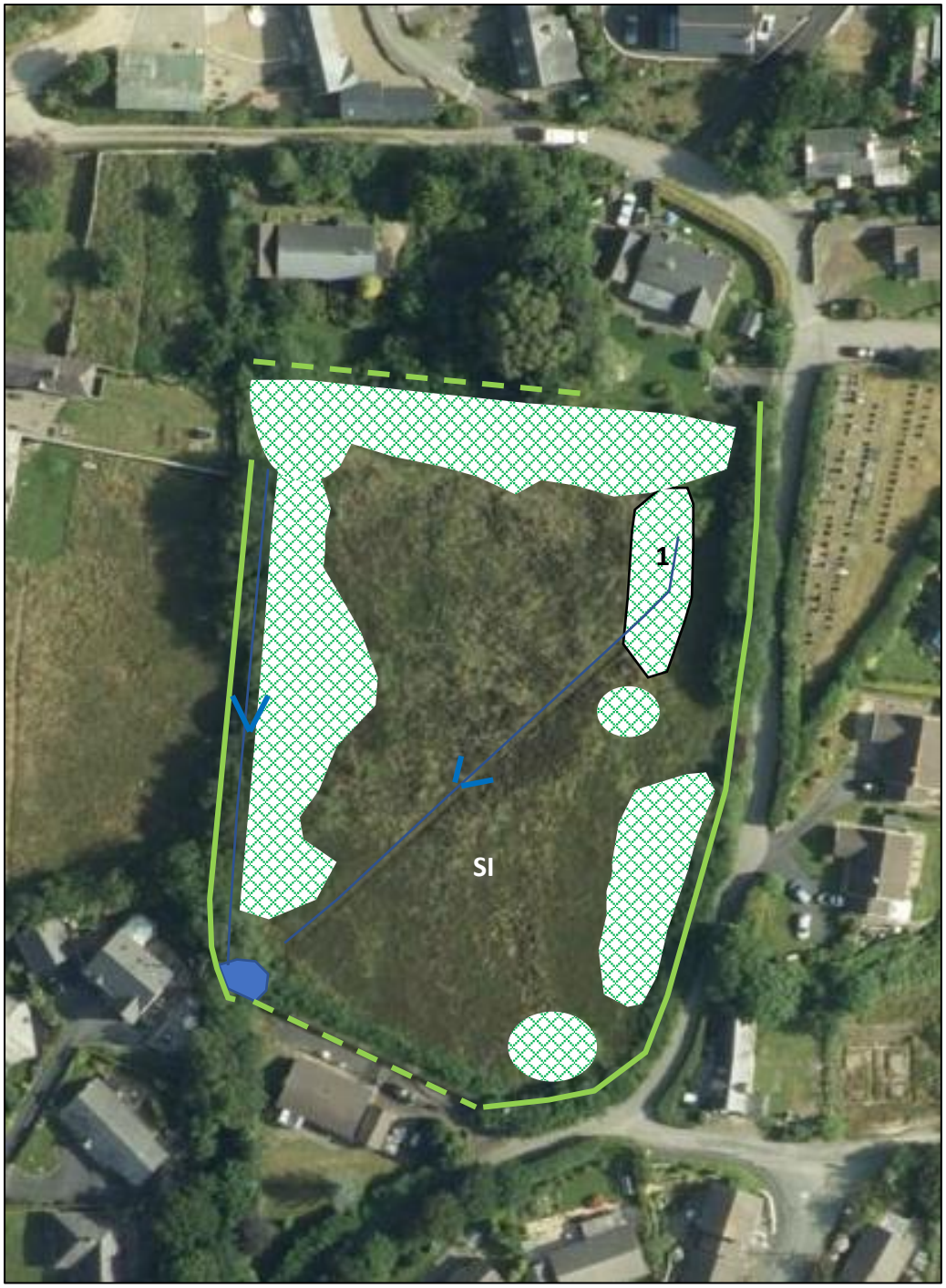
APPENDIX I: EXTENDED PHASE 1 HABITAT PLAN



Phase 1 Habitat Code Key:

Colour	Code	Description
SI	B6	Semi-improved neutral grassland
	A2.1	Dense continuous scrub
	G1	Standing water
	G2	Running water
	J2.1.2	Intact species-poor hedgerow
	J2.3.1	Native species rich hedgerow

APPENDIX II: SURVEY PHOTOGRAPHS

Below: Semi-improved grassland


Below: Scrub.


Below: Brash Pile.

Below: Hedgerows




Below: Ditch line & Pond


APPENDIX III: FULL SPECIES LIST

Common name	Scientific name
Common bent	*Agrostis capillaris*
Cock's foot	*Dactylis glomerata*
Red fescue	*Festuca rubra*
Yorkshire fog	*Holcus lanatus*
Pendulous sedge	*Carex pendula*
Glaucous sedge	*Carex flacca*
Soft rush	*Juncus effusus*
Sharp flowered rush	*Juncus acutiflorus*
Greater birds-foot trefoil	*Lotus pendunctulatus*
Creeping buttercup	*Ranunculus repens*
Common knapweed	*Centaurea nigra*
Cleavers	*Galium aparine*
Red clover	*Trifolium pratense*
Hedgerow cranesbill	*Geranium pyrenaicum*
Common dandelion	*Taraxacum officinale*
Broad leaved dock	*Rumex obtusifolius*
Clustered dock	*Rumex conglomeratus*
Herb Robert	*Geranium robertianum*
Ivy	*Hedera helix*
Common nettle	*Urtica dioica*
Ribwort plantain	*Plantago lanceolata*
Marsh ragwort	*Jacobea aquatica*
Common ragwort	*Jacobaea vulgaris*
Selfheal	*Prunella vulgaris*

Common sorrel	*Rumex acetosa*
Marsh thistle	*Cirsium*
Spear thistle	*Cirsium vulgare*
Tormentil	*Potentilla erecta*
Broad leaved willowherb	*Epilobium montanum*
Wild strawberry	*Fragaria vesca*
Wood sage	*Teucrium scorondia*
Alder	*Alnus glutinosa*
Ash	*Fraxinus excelsior*
Blackthorn	*Prunus spinose*
Bramble	*Rubus fruticosus*
Buddleja	*Buddleja sp*
European gorse	*Ulex europaeus*
Hazel	*Corylus avellana*
Holly	*Ilex aquifolium*
Hawthorn	*Crataegus monogyna*
Sessile oak	*Quercus petraea*
Snowberry	*Symphoricarpus albus*
Sycamore	*Acer pseudoplatanus*
Grey willow	*Salix cinerea*
Leylandii	L*eylandii*
Japanese barberry	*Berberris thunbergii*
Berberris sp	
Dog rose	*Rosa canina*
Yew	*Taxus baccata*
Broad buckler fern	*Dryopteris dilatata*
Hart’s tongue Fern	*Asplenium scolopendrium*

Common male fern	*Dryopteris felix mas*
Scaly male fern	*Dryopteris affinis*
Borrers Scaly male fern	*Dryopteris borreri*
Lady Fern	*Athyrium felix femina*
Polypodium sp.	
Bank hair cap	*Polytrichum formosum*
Common haircap	*Polytrichum commune*