



BIODIVERSE
CONSULTING

GLAN LLYN

**PRELIMINARY ECOLOGICAL
APPRAISAL**

FOR: LIDL GB LTD

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DOCUMENT CONTROL

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EXECUTIVE SUMMARY

Biodiverse Consulting Ltd was commissioned to undertake a Preliminary Ecological Appraisal (PEA) of land near Queen’s Way, Glan Llyn, Newport, NP19 4UH. The Site is proposed to be developed for mixed use commercial units and a nursery. This report presents the key ecological constraints and opportunities in relation to the development, as summarised in the table below.

This document is a draft for review by client.

ECOLOGICAL CONSIDERATIONS FOR GLAN LLYN PROPOSAL	
Designated Sites	Two statutory and ten non-statutory designated sites were identified within 2km: two Sites of Special Scientific Interest (SSSI) and ten Sites of Importance for Nature Conservation (SINC).
Habitats	The Other Neutral Grassland, Modified Grassland, Mixed Scrub and Sparsely Vegetated Urban Land are considered to be of low value, the Developed Land; Sealed Surface and Artificial Unvegetated; Unsealed Surface are considered to be of negligible value.
Great Crested Newt	No waterbodies present onsite but some temporary wet areas may offer suitable breeding habitat. Grassland and scrub habitat onsite provides limited foraging habitat. 11 ponds were identified within 500m of the Site with moderate connectivity to the Site.
Bats	Grassland and scrub onsite offer foraging and commuting opportunities, with trees and watercourses providing good connectivity to the surrounding landscape.
Birds	The Site provides habitat of limited suitability to both breeding and non-breeding birds. Further assessment required to determine suitability for Schedule 1 species recorded within proximity to the Site.
Badger	The Site provides suitable foraging and commuting habitat but no opportunities for sett creation onsite.
Otter	The Site provides habitat of limited suitability, however the surrounding area has good opportunity for foraging, commuting and breeding otter. Further assessment required.
Water Vole	The Site provides no suitable habitat for water vole, however Pond 5 adjacent to the Site provides opportunity for foraging, commuting and burrow creation. Further assessment required.



ECOLOGICAL CONSIDERATIONS FOR GLAN LLYN PROPOSAL	
Reptiles	The scrub onsite provides suitable foraging and refuge habitat with good connectivity to the wider landscape.
Hazel Dormouse	No suitable habitat onsite, therefore scoped out of further assessment.
Priority Species	The Site offers limited suitability for hedgehog and common toad, no evidence was found during the walkover survey.
Further Survey and Assessment	- eDNA survey of ponds within 250m to determine presence/absence of GCN. - Mammal surveys to include otter and water vole comprising a minimum of 2 survey visits conducted between mid-April and mid-September. - Breeding bird survey (BBS) consisting of 6 visits (5 diurnal and 1 nocturnal) between mid-March – June. - Construction Ecological Management Plan (CEcMP). - A range of good practice avoidance, mitigation and compensation measures are recommended to address ecological impacts and reduce the likelihood of legal offences.



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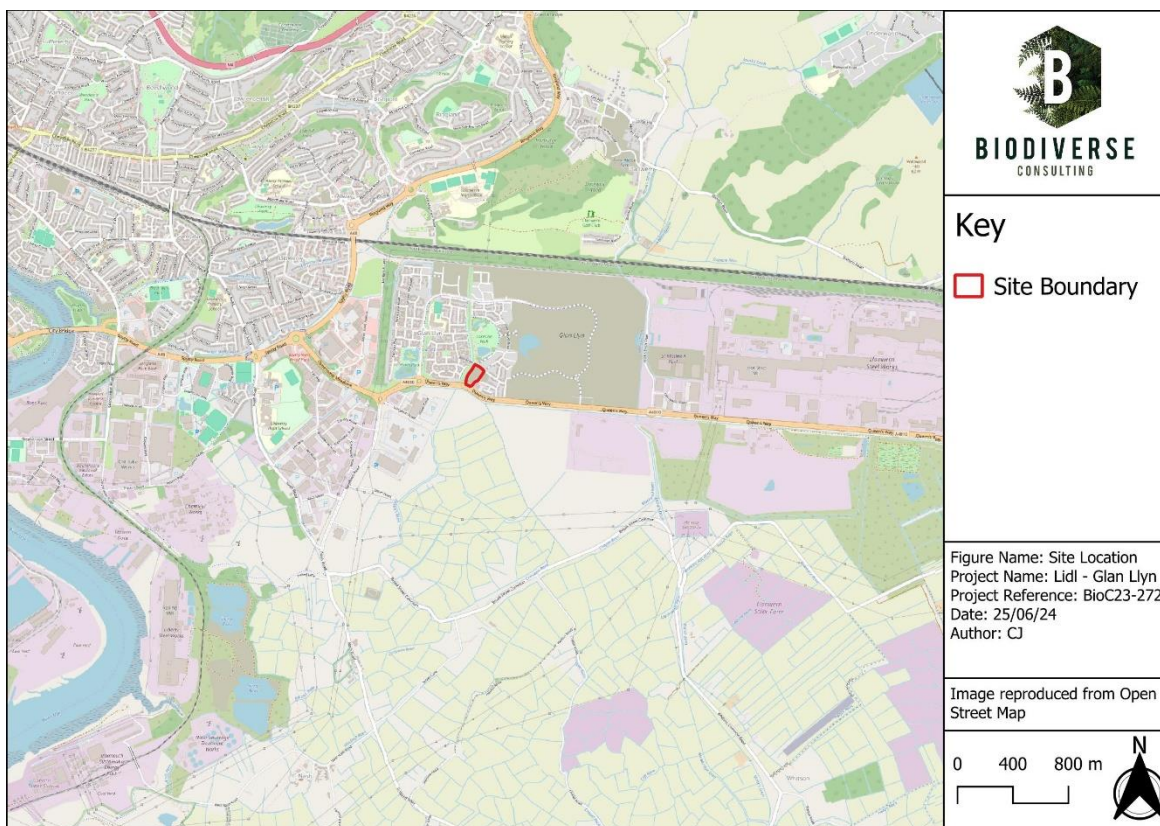


1 INTRODUCTION

1.1 SITE LOCATION & DESCRIPTION

The Site is located near Queen's Way, Glan Llyn, Newport, NP19 4UH at an approximate central grid reference of ST 35530 86571 as illustrated in Figure 1. The Site currently consists of grassland and unvegetated ground.

FIGURE 1: SITE LOCATION



1.2 REPORT OBJECTIVES

The aim of this report is to determine the potential ecological constraints and opportunities to development. The objectives of this report are to:

- Identify and describe ecological features/receptors that may be present on Site or within an identified Zone of Influence (Zoi).
- Assess the potential for the development to impact the identified features.
- Outline potential mitigation, compensation or enhancement measures if required.
- Determine the need for and scope of further surveys.



1.3 DEVELOPMENT PROPOSALS

The Site is proposed to be developed into for mixed use commercial units and a nursery with associated infrastructure including a hardstanding carpark and landscaping based on current plans at the date of production of this report (see Figure 2; CA 2024-GL-03 Rev A LIDL Glan Llyn Landscape Proposals DRAFT).

FIGURE 2: DEVELOPMENT PLANS



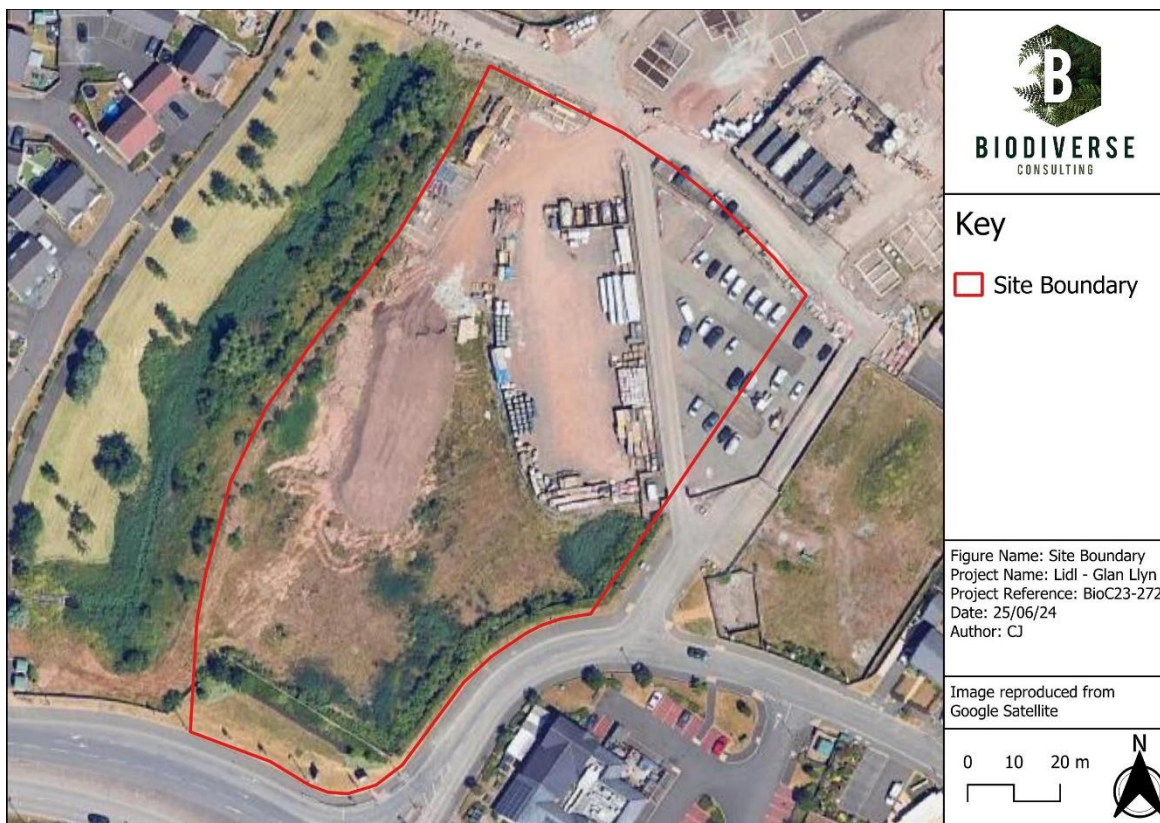


2 METHODOLOGY

2.1 SURVEY AREA

The survey area comprised the 'Site' (Figure 3) and, where access was available, an approximate 50m buffer.

FIGURE 3: SURVEY AREA



2.2 DESK STUDY

A desk study was undertaken to obtain pre-existing ecological information relevant to the assessment. The desk study included:

- An assessment of aerial imagery and Ordnance Survey mapping.
- A search of the MAGIC website¹ for designated Sites and European Protected Species within 2km of the Site.
- A request to the Local Record Centre (LRC) for records of non-statutory designated Sites and protected and priority habitats and species within 2km of the Site.

¹ Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)



2.3 FIELD SURVEY

Table 1 provides a summary of the field surveys undertaken. Full details of each survey are provided in the subsequent sections. All surveys were undertaken by suitably experienced and licenced ecologists; full details are available on request.

TABLE 1: SURVEY SUMMARY

SURVEY TYPE	DATE	TEMPERATURE	CLOUD	PRECIPITATION	WIND
PEA	14/05/2024	16°C	85%	None	1 BF

2.3.1 Habitats/Protected Species

The Site was subjected to a Preliminary Ecological Appraisal (PEA) walkover survey during which habitats were assessed in line with the UK Habitat Classification (UKHab) methods². As part of the survey, the Site was also checked for evidence of protected and priority species, and habitats were assessed for their potential to support them.

2.3.2 Bats

Survey methods and assessment are based on the Bat Conservation Trust (BCT) Good Practice Guidelines³. A Ground Level Tree Assessment (GLTA) determined the value of trees and a Preliminary Roost Assessment (PRA) determined the value of structures to roosting bats and the need for further survey and/or mitigation.

A Daytime Bat Walkover (DBW) assessed habitats for bats to roost, commute, and forage both on Site and in the surrounding area. The aim is to determine the suitability of the Site for bats, to assess whether further bat surveys will be needed and how those surveys should be safely carried out.

2.4 LIMITATIONS TO SURVEY

The survey was not considered to have any significant limitations.

2.5 ASSESSMENT

The PEA surveys may provide sufficient information to accurately determine the value of some features, whereas other features may require further study to allow this. Features for which sufficient information is available at this stage are assigned a value using a geographic frame of

² Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023) The UK Habitats Classification User Manual Version 2. Available from: <http://www.ukhab.org/>

³ Collins, J. (ed) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust



reference in line with guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) (Appendix G).



3 RESULTS

3.1 DESK STUDY

3.1.1 Designated Sites

Two statutory and ten non-statutory designated sites were identified within 2km of the Site; two Sites of Special Scientific Interest (SSSI) and ten Sites of Importance for Nature (SINC).

A summary of statutory and non-statutory designated Sites is provided in Table 2.

TABLE 2: DESIGNATED SITES

DESIGNATION	SITE NAME	REASON FOR DESIGNATION	DISTANCE FROM SITE
Statutory Designated Sites			
SSSI	Gwent Levels – Nash and Goldcliff	Rich plant species and communities. The site has a diverse range of aquatic invertebrate fauna and is an important area for snails and dragonflies. Hedgerows and green banks provide habitat for nationally important assemblages of terrestrial invertebrates.	75m
SSSI	Gwent Levels - Whitson	Rich plant species and communities. The site has a diverse range of aquatic invertebrate fauna and is an important area for snails and dragonflies. Hedgerows and green banks provide habitat for nationally important assemblages of terrestrial invertebrates. Whitson is particularly important for its large number of nationally rare invertebrate species, with 65 species recorded in this area.	1616m
Non-Statutory Designated Sites			
SINC	Former Steel Works Site	Dragonflies, as well as mosaic habitat for freshwater, grassland and woodland.	381m



DESIGNATION	SITE NAME	REASON FOR DESIGNATION	DISTANCE FROM SITE
	of Queensway Meadow		
SINC	Dockwell Wood	Ancient semi-natural woodland.	1164m
SINC	Ringland Way Marsh	Reedswamp and marsh, with wet grassland areas; supports bird species including Cetti's warbler and reed bunting (a UKBAP Priority Species).	1180m
SINC	Hartridge Fields	Calcareous grassland.	1225m
SINC	Monk's Ditch	Linear freshwater stream used by otters.	1333m
SINC	Hartridge Wood	Ancient semi-natural woodland.	1472m
SINC	Solutia Site	A series of improved and semi-improved grasslands with traditional ditches and ponds; site supports a range of species including nesting birds such as Cetti's warbler, and invertebrates including hairy dragonfly.	1550m
SINC	Liswerry Playing Fields and Angling Ponds	An amenity area with a neutral grassland that borders the edge of the field. Scattered scrub around edges.	1659m
SINC	Ringland Wood	Ancient semi-natural woodland.	1799m
SINC	Ladyhill Wood	Ancient semi-natural woodland.	1802m



3.1.2 Priority Habitats

There are no records of Priority Habitats within or bordering the Site. There are records of Priority Habitats within 2km of the Site including: Semi-improved Neutral Grassland, Swamp, Standing Water and Semi-natural Broadleaved Woodland. The LRC map of the Priority Habitats is provided in Appendix D.

3.1.3 Protected and Priority Species

A summary of recent (2014–present) records of protected, priority or otherwise notable species provided by the LRC is presented in Appendix E and relevant records are discussed in the results sections below. The LRC search results are available on request.

3.1.4 Landscape Context

A review of aerial imagery and Ordnance Survey mapping shows that the surrounding landscape comprised predominately residential areas to the west with a large quarry site and associated infrastructure extending from the east of the Site. To the south lies the Gwent Levels SSSI.



3.2 FIELD SURVEY

3.2.1 Habitats

The 1.13ha Site is comprised of grassland, scrub and loose gravel with some small temporary wet areas. Detailed accounts of the UKHab habitats are provided below. A map of the UKHab habitats is provided in Appendix A.

IMAGE 1 – OTHER NEUTRAL GRASSLAND



IMAGE 2 – MIXED SCRUB



IMAGE 3 – SPARSELY VEGETATED LAND



IMAGE 4 – ARTIFICIAL UNSEALED SURFACE





3.2.1.1 g3c - Other Neutral Grassland

Unmanaged grassland to an area of 0.383ha. The grassland is and a good representation of the habitat type. The sward height is varied with species present including red fescue *Festuca rubra*, meadow foxtail *Alopecurus pratensis*, Yorkshire fog *Holcus lanatus*, creeping buttercup *Ranunculus repens*, red clover *Trifolium pratense*, broad leaved dock *Rumex obtusifolius* and common selfheal *Prunella vulgaris*. Some small areas of bramble *Rubus sp.* are present covering less than 5% of the area.

This habitat is considered to be of low value as it is of moderate diversity and supports a range of locally and nationally common species.

3.2.1.2 g4 – Modified Grassland

Heavily mown grassland by the side of the road to an area of 0.058ha. Dominated by perennial ryegrass *Lolium perenne*.

This habitat is considered to be of low value as it is of low diversity and supports a range of locally and nationally common species.

3.2.1.3 h3h – Mixed Scrub

Scrub dominated by a mixture of willow *Salix sp* and bramble to an area of 0.056ha. Scrubs are mostly young to semi-mature with a lack of mature individuals present. There is a well-developed edge between the scrub and adjacent habitats.

This habitat is considered to be of low value as it is of moderate diversity and supports a range of locally and nationally common species.

3.2.1.4 u1b – Developed Land; Sealed Surface

Hardstanding to the east of the site to an area of 0.148ha.

This habitat is considered to be of negligible value.

3.2.1.5 u1f - Sparsely Vegetated Urban Land

An area of Sparsely Vegetated Urban Land is present within the Site to an area of 0.065ha, with species including creeping buttercup *Ranunculus repens*, dandelion *Taraxacum officinale* and ribwort plantain *Plantago lanceolata*.

This habitat is considered to be of low value as it is of low diversity and supports a range of locally and nationally common species.

3.2.1.6 u1c - Artificial Unvegetated; Unsealed Surface

Artificial Unvegetated; Unsealed Surface is present in the north of the Site to an area of 0.418ha. The area is comprised of gravel and soil, and is largely used for storage of plant and materials.



This habitat is considered to be of negligible value.

3.2.2 Protected Species

Protected species are afforded a level of legal protection which means that their presence may pose a constraint to development. A summary of relevant legislation and associated species is provided in Appendix F.

The following sections describe the results of the field surveys and an appraisal of desk study data. Species not addressed below are considered extremely unlikely to be present and/or affected by the development and so are scoped out of further assessment.

3.2.2.1 Great Crested Newt (*Triturus cristatus*)

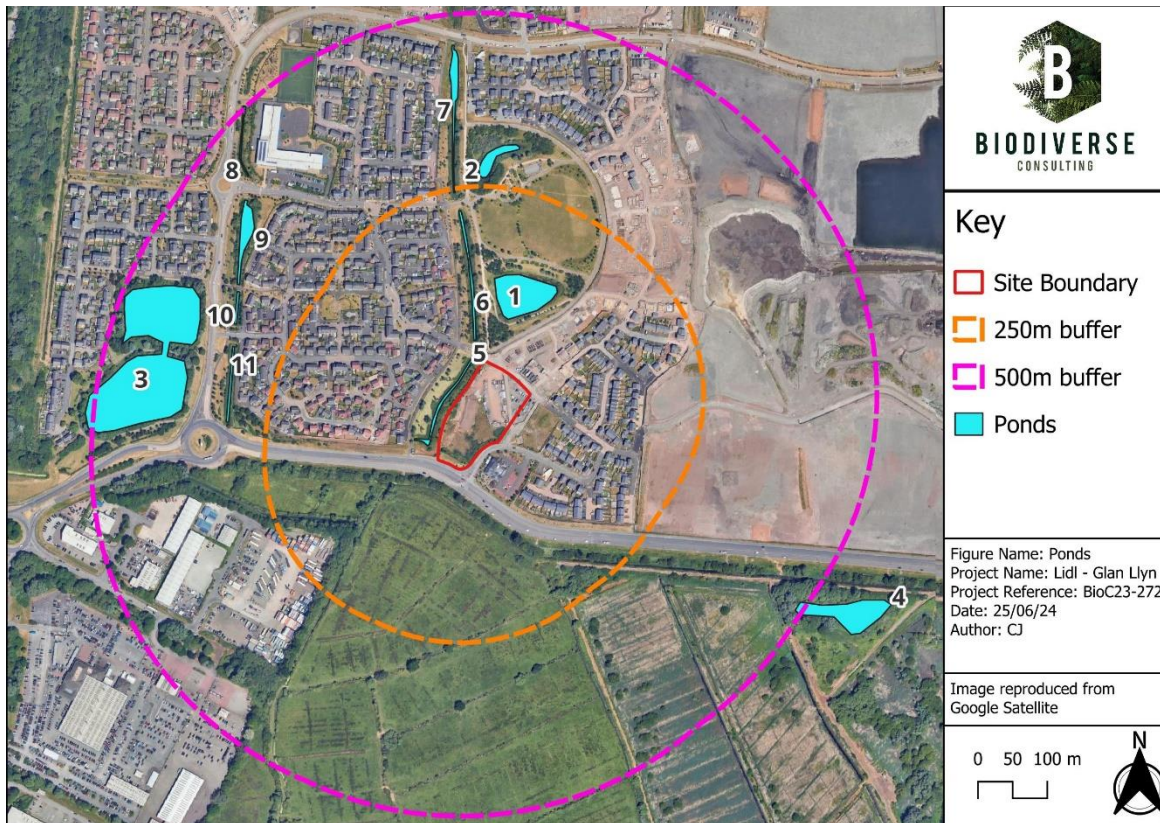
The desk study returned 13 records of GCN, all from outside of the Site with the nearest record being 756m from the Site.

No ponds are present within the Site, however 11 ponds were identified within 500m. Pond 5 is the closest at approximately 20m from the Site boundary (see Figure 4). Pond 5 is immediately adjacent to the western boundary of the Site. All other ponds, except for Pond 4, are considered to have moderate connectivity to the Site. Connectivity between Pond 4 and the Site is severed due to distance and the presence of a dual carriage way (A4810).

Small areas of temporarily wet land within the south of the Site offer potential breeding habitat, and the grassland and scrub onsite offer some suitable habitat for the terrestrial phase of this species.

Given the temporary nature of wet areas onsite and disturbance from plant movement, the Site is considered to be of low value to great crested newt.

Further assessment is required to determine the likely impact of the development on great crested newt.

**FIGURE 4: POND LOCATIONS**

3.2.2.2 Bats

The desk study identified 24 records of bats within 2km of the Site, with species including: Noctule *Nyctalus noctule*, Lesser Horseshoe *Rhinolophus hipposideros*, Natterer's *Myotis nattereri*, Daubenton's *Myotis daubentonii*, Brandt's *Myotis brandtii*, Pipistelle species *Pipistrellus sp.* and Long-eared species *Plecotus sp.*

The Site contained no buildings, trees or other structures, therefore offers no roosting opportunities for bats. Grassland and scrub offer limited foraging potential within the Site with linear treelines immediately adjacent to the Site boundary offering good connectivity to the wider landscape.

The Site is considered to be of low value to bats.

3.2.2.3 Birds

The desk study returned a large number of bird species within 2km of the Site, including Schedule 1 species: Cetti's Warbler *Cettia cetti*, Barn Owl *Tyto alba*, Goshawk *Accipiter gentilis*, Hen Harrier *Circus cyaneus*, Marsh Harrier *Circus aeruginosus* and Peregrine *Falco peregrinus*, all of which were recorded 69m from the Site.



The Site offers some potential nesting habitat within the scrub along the southern and western boundaries and potential for ground-nesting species within the grassland. The grassland onsite offers limited foraging and roosting opportunities for wintering birds.

Further assessment is required to assess the value of the Site to birds, particularly the Schedule 1 species recorded in close proximity to the Site.

3.2.2.4 Badger (*Meles meles*)

The desk study returned 7 records of badger within 2km of the Site, with the closest being 983m from the Site.

The grassland and scrub provide foraging and commuting opportunities onsite, however there is no suitable habitat for sett creation present. No evidence of badger activity, such as footprints, latrines, or snuffle holes were found during the walkover survey.

The Site is considered to be of low value to badger and a precautionary approach will be taken during construction.

3.2.2.5 Otter

The desk study returned 4 records of otter within 2km of the Site, with the closest being 368m from the Site.

The habitats within the Site provide limited opportunity for foraging, commuting and holt-creation. Pond 5 to the west of the site may provide suitable foraging and commuting habitat.

Further assessment is required to determine the likely impact of the development on otters.

3.2.2.6 Water Vole

The desk study returned 20 records of water vole within 2km of the Site, with the closest being 389m from the Site.

There is no suitable habitat onsite for water vole, however Pond 5 to the immediate west of the Site may provide potential foraging, commuting and burrowing habitat.

Further assessment is required to determine the likely impact of the development on water voles.

3.2.2.7 Reptiles

The desk study returned 14 records within 2km of the Site, including grass snake *Natrix Helvetica* (closest record 442m from the Site) and Slow-worm *Anguis fragilis* (closest record 1052m from the Site).

The Site offers some opportunity for foraging, commuting, basking and hibernating in the grassland and sparsely vegetated areas. Disturbance from plant operation is present but connectivity to better suited habitat within the wider area is considered to be good.



The Site is considered to be of low value to reptiles.

3.2.2.8 Hazel Dormouse

The desk study returned 8 records of hazel dormouse within 2km of the site, with the closest being 415m from the site.

The Site provides no suitable habitat for hazel dormouse; therefore this species is scoped out of further assessment.

3.2.2.9 Priority Species

The Site has the potential to support priority species including hedgehog *Erinaceus europaeus* and common toad *Bufo bufo*, however, no evidence of priority species was found at the time of survey.



4 RECOMMENDATIONS

4.1 POTENTIAL IMPACTS

The development has the potential to adversely impact valuable ecological features and some of these impacts may also constitute legal offences. The broad impacts include:

- Direct harm of animal species
- Disturbance of animal species
- Loss and degradation of valuable habitats
- Loss and degradation of habitats that support protected/priority species

Many of these impacts can be adequately addressed at this stage and therefore a range of good practice avoidance, mitigation and compensation measures are recommended below. Impacts to some features cannot be robustly assessed without additional information and so further surveys and assessments are recommended for such features.

4.2 FURTHER SURVEY AND ASSESSMENT

The following survey and assessment is recommended to provide a robust baseline for the assessment of the potential ecological impacts of the development:

- eDNA survey of ponds within 250m due proximity and connectivity to the Site.
- Mammal surveys to include otter and water vole comprising a minimum of two survey visits between mid-April and mid-September. The number of survey visits required will be determined by the results of the initial survey.
- Breeding bird survey (BBS) consisting of 6 visits (5 diurnal and 1 nocturnal) between mid-March – June.
- Construction Ecological Management Plan (CEcMP).
- Measures to achieve a Net benefit for Nature (NBN) as per Chapter 6 of Planning Policy Wales by following the stepwise approach should be outlined within a Green Infrastructure Statement and its accompanying Ecological Management Plan.

4.3 AVOIDANCE

The following measures should be incorporated into the design of the development, including the construction phase, to avoid and reduce impacts on wildlife:



- Avoid Site clearance works during the nesting bird season (March to August inclusive) unless the Site is checked by a Suitably Qualified Ecologist (SQE) and active nests are confirmed to be absent no later than 48 hours before works commence.
- External lighting will be designed in line with BCT guidance⁴ to reduce impacts on bats and a range of other wildlife associated with retained and off-site habitats.

4.4 MITIGATION

Mitigation is proposed to reduce the impacts on wildlife that cannot be avoided through design:

- All construction activities will be programmed to daytime hours to reduce disturbance to sensitive nocturnal species, such as bats and roosting bird species.
- Excavations should be securely covered or fenced overnight, or otherwise provide a means of escape for animals that may become trapped in the form of a ramp at least 300mm wide and angled no greater than 45°. Excavations should be inspected for the presence of animals before work recommences and, in the event of trapped animals being trapped, an ecologist contacted for advice.
- Gaps of at least 13cm by 13cm will be created within boundaries to facilitate movement of hedgehogs and other small animals throughout the Site.

4.5 COMPENSATION/ENHANCEMENT

Compensation is proposed to address the impacts on habitats which cannot be avoided or mitigated:

- Landscape planting to compensate for any tree/shrub loss shall include species native to the local area as well as berry and fruit-bearing species alongside pollinator species, to provide increased foraging opportunities in the local area.

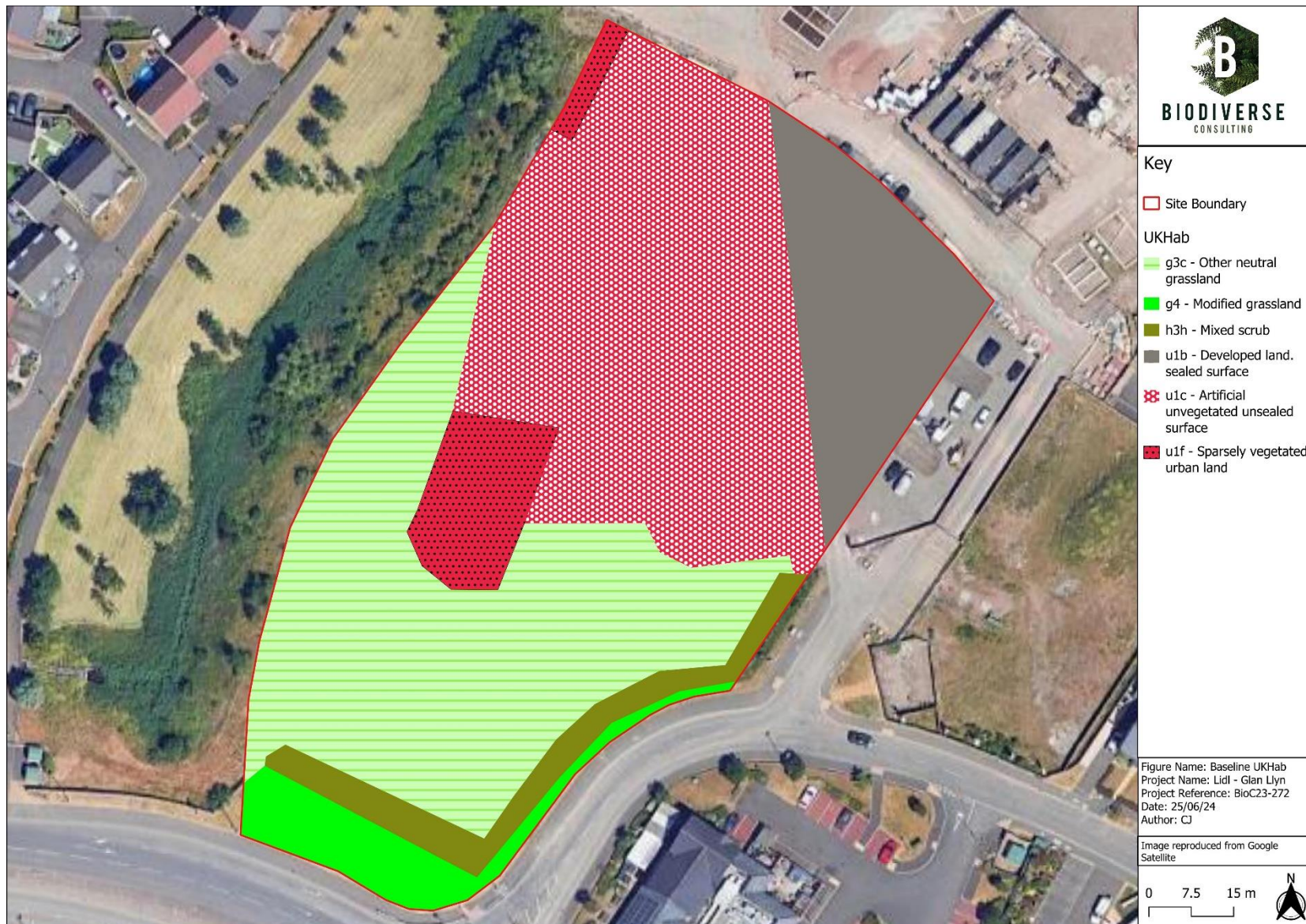
⁴ Bat Conservation Trust (2023) Guidance Note 08/23: Bats and Artificial Lighting at Night



APPENDICES



APPENDIX A – UKHAB MAP





APPENDIX B – BAT ROOST SUITABILITY

POTENTIAL SUITABILITY	DESCRIPTION	
	ROOSTING HABITATS IN STRUCTURES	POTENTIAL FLIGHT-PATHS AND FORAGING HABITATS
None	No habitat features on Site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all grounds/underground levels).	No Habitat features on Site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats.
Negligible (a)	No obvious habitat features on Site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can be use small and apparently unsuitable features on occasion.	No obvious habitat features on Site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost Sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost Sites do not provide enough space, shelter, protection, appropriate conditions(b) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not classic cool/stable hibernation Site, but could be used by individual hibernating bats).	Habitat that could be used by small numbers of bats as flight-paths such as gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost Sites that could be	Continuous habitat connected to the wider landscape that could be used by



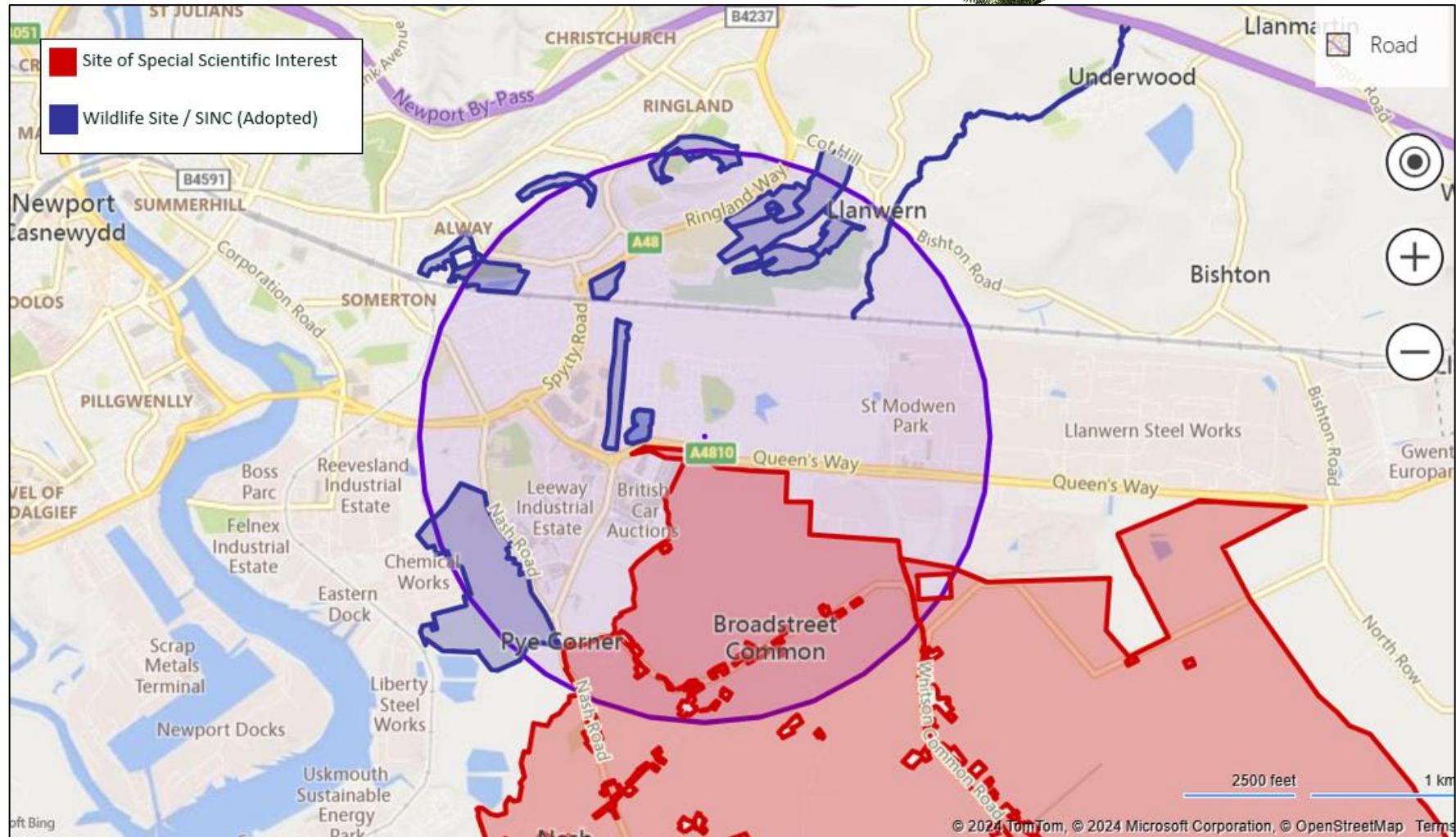
POTENTIAL SUITABILITY	DESCRIPTION	
	ROOSTING HABITATS IN STRUCTURES	POTENTIAL FLIGHT-PATHS AND FORAGING HABITATS
	used by bats due to their size, shelter, protection conditions(b) and hibernation – categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed.	bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	A structure with one or more potential roost Sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions(b) and surrounding habitat. These structures have a potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation Site.	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys. Streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.



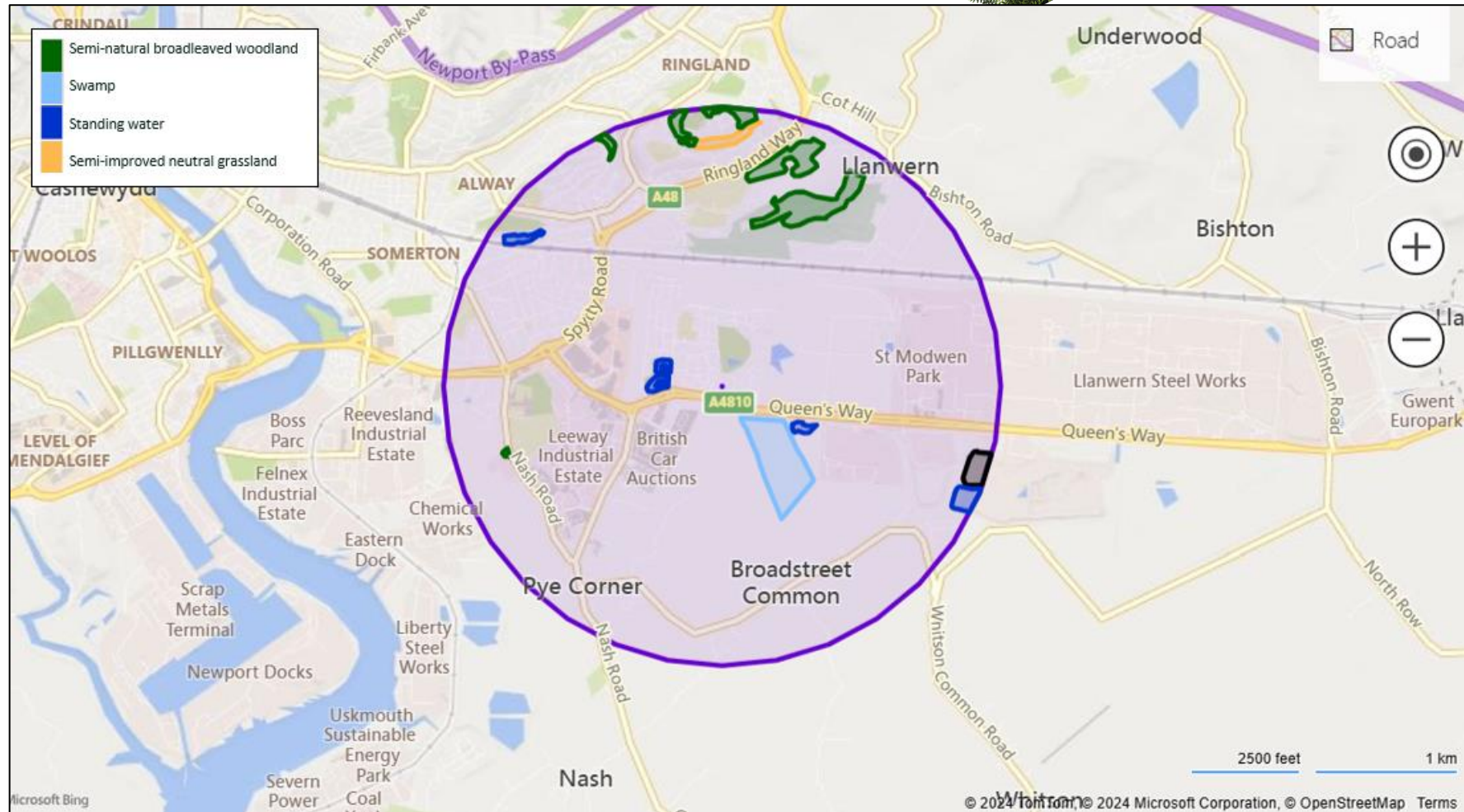
POTENTIAL SUITABILITY	DESCRIPTION	
	ROOSTING HABITATS IN STRUCTURES	POTENTIAL FLIGHT-PATHS AND FORAGING HABITATS
	a. Negligible is defined as ‘so small or unimportant as to be not worth considering, insignificant’. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute). b. For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. c. Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2016 and Jansen et al., 2022). Common pipistrelle swarming has been observed in that UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.	



APPENDIX C – DESIGNATED SITES MAP



APPENDIX D – PRIORITY HABITATS MAP





APPENDIX E – LOCAL RECORDS SEARCH

PROTECTED SPECIES RECORDS FROM LRC

COMMON NAME	SCIENTIFIC NAME	RECORDS	DISTANCE (M)
AMPHIBIANS			
Common Toad	<i>Bufo bufo</i>	2	1533
Great Crested Newt	<i>Triturus cristatus</i>	12	756
REPTILES			
Grass Snake	<i>Natrix helvetica</i>	5	442
Slow-worm	<i>Anguis fragilis</i>	6	1052
BIRDS			
Avocet	<i>Recurvirostra avosetta</i>	1	2304
Bar-headed Goose	<i>Anser indicus</i>	1	2304
Barn Owl	<i>Tyto alba</i>	21	69
Bar-tailed Godwit	<i>Limosa lapponica</i>		2304
Bearded Tit	<i>Panurus biarmicus</i>	1	2304
Bittern	<i>Botaurus stellaris</i>		2304
Black Redstart	<i>Phoenicurus ochruros</i>	1	933
Black Swan	<i>Cygnus atratus</i>	1	69
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	9	69
Black-tailed Godwit	<i>Limosa limosa</i>	2	1450
Bullfinch	<i>Pyrrhula pyrrhula</i>	10	828
Cetti's Warbler	<i>Cettia cetti</i>	31	69
Common Gull	<i>Larus canus</i>	2	675
Common Sandpiper	<i>Actitis hypoleucos</i>	2	69
Coot	<i>Fulica atra</i>	12	69
Cormorant	<i>Phalacrocorax carbo</i>	13	69
Crane	<i>Grus grus</i>	2	69
Cuckoo	<i>Cuculus canorus</i>	4	69
Curlew	<i>Numenius arquata</i>	4	205



Dunlin	<i>Calidris alpina</i>	2	1450
Dunnock	<i>Prunella modularis</i>	46	442
Fieldfare	<i>Turdus pilaris</i>	6	69
Garganey	<i>Spatula querquedula</i>	2	69
Goldcrest	<i>Regulus regulus</i>	7	675
Goshawk	<i>Accipiter gentilis</i>	2	69
Grasshopper Warbler	<i>Locustella naevia</i>	3	69
Great Black-backed Gull	<i>Larus marinus</i>	2	1709
Green Sandpiper	<i>Tringa ochropus</i>	3	69
Green Woodpecker	<i>Picus viridis</i>	7	675
Greenfinch	<i>Chloris chloris</i>	10	69
Greenshank	<i>Tringa nebularia</i>	1	2304
Grey Heron	<i>Ardea cinerea</i>	11	69
Grey Plover	<i>Pluvialis squatarola</i>	1	1450
Grey Wagtail	<i>Motacilla cinerea</i>	7	1098
Hen Harrier	<i>Circus cyaneus</i>	2	69
Herring Gull	<i>Larus argentatus</i>	19	69
Hobby	<i>Falco subbuteo</i>	1	205
House Sparrow	<i>Passer domesticus</i>	12	675
Jack Snipe	<i>Lymnocyptes minimus</i>	2	69
Kestrel	<i>Falco tinnunculus</i>	8	69
Kingfisher	<i>Alcedo atthis</i>	9	69
Knot	<i>Calidris canutus</i>	3	1450
Lapwing	<i>Vanellus vanellus</i>	8	69
Lesser Black-backed Gull	<i>Larus fuscus</i>	16	69
Lesser Redpoll	<i>Acanthis cabaret</i>	2	205
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	1	1932
Linnet	<i>Linaria cannabina</i>	15	69
Little Ringed Plover	<i>Charadrius dubius</i>	9	205



Long-tailed Tit	<i>Aegithalos caudatus</i>	22	675
Mallard	<i>Anas platyrhynchos</i>	27	69
Manx Shearwater	<i>Puffinus puffinus</i>		1709
Marsh Harrier	<i>Circus aeruginosus</i>	1	69
Meadow Pipit	<i>Anthus pratensis</i>	23	631
Mediterranean Gull	<i>Ichthyaeetus melanocephalus</i>	2	69
Mistle Thrush	<i>Turdus viscivorus</i>	8	475
Oystercatcher	<i>Haematopus ostralegus</i>	1	2304
Peregrine	<i>Falco peregrinus</i>	5	69
Pintail	<i>Anas acuta</i>	3	69
Pochard	<i>Aythya ferina</i>	5	69
Red Kite	<i>Milvus milvus</i>	1	1020
Redshank	<i>Tringa totanus</i>	1	2304
Redstart	<i>Phoenicurus phoenicurus</i>	2	69
Redwing	<i>Turdus iliacus</i>	8	69
Reed Bunting	<i>Emberiza schoeniclus</i>	16	69
Ringed Plover	<i>Charadrius hiaticula</i>	6	500
Ruff	<i>Calidris pugnax</i>	1	2304
Sand Martin	<i>Riparia riparia</i>	2	205
Shelduck	<i>Tadorna tadorna</i>	6	69
Shoveler	<i>Spatula clypeata</i>	6	69
Skylark	<i>Alauda arvensis</i>	4	636
Snipe	<i>Gallinago gallinago</i>	15	69
Song Thrush	<i>Turdus philomelos</i>	21	205
Spotted Flycatcher	<i>Muscicapa striata</i>	1	205
Spotted Redshank	<i>Tringa erythropus</i>	1	1450
Starling	<i>Sturnus vulgaris</i>	11	69
Swallow	<i>Hirundo rustica</i>	13	69
Swift	<i>Apus apus</i>	6	205



Teal	<i>Anas crecca</i>	12	69
Tree Sparrow	<i>Passer montanus</i>	1	1932
Tufted Duck	<i>Aythya fuligula</i>	8	69
Water Pipit	<i>Anthus spinoletta</i>	1	1416
Wheatear	<i>Oenanthe oenanthe</i>	5	69
Whimbrel	<i>Numenius phaeopus</i>	1	2304
Whitethroat	<i>Curruca communis</i>	12	69
Wigeon	<i>Mareca penelope</i>	3	69
Willow Warbler	<i>Phylloscopus trochilus</i>	12	69
Wood Warbler	<i>Phylloscopus sibilatrix</i>	1	69
Woodcock	<i>Scolopax rusticola</i>	3	69
Wren	<i>Troglodytes troglodytes</i>	128	442
Yellow Wagtail	<i>Motacilla flava</i>	1	205
BUTTERFLIES			
Small Heath	<i>Coenonympha pamphilus</i>	2	1969
Wall	<i>Lasiommata megera</i>	1	1983
DRAGONFLIES			
Banded Demoiselle	<i>Calopteryx splendens</i>	2	195
Beautiful Demoiselle	<i>Calopteryx virgo</i>	1	1605
Black-tailed Skimmer	<i>Orthetrum cancellatum</i>	10	195
Golden-ringed Dragonfly	<i>Cordulegaster boltonii</i>		1272
Hairy Dragonfly	<i>Brachytron pratense</i>	1	150
Red-eyed Damselfly	<i>Erythromma najas</i>	2	933
Ruddy Darter	<i>Sympetrum sanguineum</i>	2	1572
Scarce Blue-tailed Damselfly	<i>Ischnura pumilio</i>		983
Variable Damselfly	<i>Coenagrion pulchellum</i>		1302
BEETLES			
Adonis' Ladybird	<i>Hippodamia variegata</i>		1596
Berosus affinis	<i>Berosus affinis</i>	2	1119



Helochares lividus	<i>Helochares lividus</i>	3	1429
MAMMALS			
Bat	<i>Chiroptera</i>	2	1188
Brandt's Bat	<i>Myotis brandtii</i>	1	464
Brown Long-eared Bat	<i>Plecotus auritus</i>	2	502
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	6	464
Daubenton's Bat	<i>Myotis daubentonii</i>	2	383
Eurasian Badger	<i>Meles meles</i>	4	983
Eurasian Otter	<i>Lutra lutra</i>	4	368
Eurasian Water Shrew	<i>Neomys fodiens</i>	1	1015
European Water Vole	<i>Arvicola amphibius</i>	20	389
Hazel Dormouse	<i>Muscardinus avellanarius</i>	8	415
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	1	1860
Long-eared Bat species	<i>Plecotus</i>		1859
Myotis Bat species	<i>Myotis</i>		1860
Natterer's Bat	<i>Myotis nattereri</i>	2	464
Noctule Bat	<i>Nyctalus noctula</i>		1858
Nyctalus Bat species	<i>Nyctalus</i>		1860
Pipistrelle	<i>Pipistrellus pipistrellus</i>		858
Pipistrelle Bat species	<i>Pipistrellus</i>	2	1436
Serotine	<i>Eptesicus serotinus</i>	3	1182
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	1	464
West European Hedgehog	<i>Erinaceus europaeus</i>	13	305
Whiskered Bat	<i>Myotis mystacinus</i>	1	464



APPENDIX F – POLICY AND LEGISLATION

The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981⁵, as amended by the Countryside and Rights of Way Act (CROW) 2000⁶ and the Natural Environment and Rural Communities Act (NERC) 2006⁷, is the main legislation that protects wildlife in Great Britain and is the mechanism for defining and protecting nationally important Sites of Special Scientific Interest (SSSI). The legislation makes it an offence to:

- Intentionally kill, injure or take any wild bird or their eggs or nests (with certain exceptions) and disturb any bird species listed under Schedule 1 to the Act, or its dependent young while it is nesting;
- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection; and
- Pick or uproot any wild plant listed under Schedule 8 of the Act. Schedule 9, Part II of the Act also lists many species for which it is an offence to plant, or otherwise cause to grow, in the wild. Any material containing Japanese knotweed is also identified as controlled waste under the Environmental Protection Act 1990⁸ and must be disposed of properly at licensed landfill according to the Environmental Protection Act (Duty of Care) Regulations 1991⁹.

The Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017¹⁰ (the 'Habitat Regulations'), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹¹, establish the requirements for protecting Sites that are internationally important for threatened habitats and species – the National Site Network – and thus the requirement for a 'Habitat Regulations Assessment' of plans or developments with potential to affect them.

⁵ Wildlife and Countryside Act 1981. Available from: <https://www.legislation.gov.uk/ukpga/1981/69>

⁶ The Countryside and Rights of Way Act 2000. Available from: <https://www.legislation.gov.uk/ukpga/2000/37/contents>

⁷ Natural Environment and Rural Communities Act 2006. Available from: <https://www.legislation.gov.uk/ukpga/2006/16/contents>

⁸ The Environmental Protection Act 1990. Available from: <https://www.legislation.gov.uk/ukpga/1990/43/contents>

⁹ The Environmental Protection Act (Duty of Care) Regulations 1991. Available from: <https://www.legislation.gov.uk/uksi/1991/2839/made>

¹⁰ The Conservation of Habitats and Species Regulations 2017. Available from: <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

¹¹ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available from: <https://www.legislation.gov.uk/ukdsi/2019/9780111179512/contents>



The Habitat Regulations also establish the strict protection of some species – European Protected Species – and make it an offence to deliberately capture, kill or disturb certain wild animals, and to damage or destroy a breeding Site or resting place of such an animal even if the animal is not present at the time.

Natural Environment & Rural Communities (NERC) Act 2006

The NERC Act 2006⁷ places a duty on local planning authorities to have due regard for biodiversity and nature conservation during their operations, and thus ensures that biodiversity is a key consideration in the planning process. The Act also establishes a list of species and habitats of principal importance ('Priority' Species and Habitats) for the conservation of biodiversity.

The Environment (Wales) Act 2021¹²

The Environment Act 2021 provides a framework for environmental protection in the UK. It is a wide-range piece of legislation affecting many aspects of the natural environment, including biodiversity. The act sets clear targets to halt the decline in wildlife populations through a legally binding target for species abundance by 2030 and a requirement to increase species populations by 10% by 2042.

Ramsar Convention

The Convention on Wetlands of International Importance especially as Waterfowl Habitat (the 'Ramsar Convention'¹³) provides the only international mechanism for protecting internationally important wetlands; such Sites are designated as Ramsar Sites. It is government policy that Ramsar Sites are afforded the same level of protection as Sites in the National Site Network and so they are also subject to HRA.

Protection of Badgers Act 1992

Badgers receive strict protection under the Protection of Badgers Act 1992¹⁴, which prohibits the taking, injuring, selling, possessing or killing of badgers and makes it an offence to ill-treat any badger, damage, destroy, disturb or cause a dog to enter a badger sett.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997¹⁵ establishes the legal protection of important countryside hedgerows, principally ancient and species-rich hedgerows. The Hedgerow Regulations also

¹² The Environment Act 2021. Available from: <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

¹³ The Ramsar Convention <https://www.ramsar.org/>

¹⁴ Protection of Badgers Act 1992. Available from: <https://www.legislation.gov.uk/ukpga/1992/51/contents>

¹⁵ The Hedgerow Regulations 1997. Available from: <http://www.legislation.gov.uk/uksi/1997/1160/contents/made>



provide arrangements for planning authorities to protect important hedgerows in the countryside by controlling their removal through a system of notification.

Planning Policy Wales

Planning Policy Wales¹⁶ sets out the Welsh Government's requirement for the planning system in Wales and in doing so establishes the framework within which local planning authorities can develop their own planning policies.

Biodiversity Action Plans

The UK Biodiversity Action Plan (UK BAP) was developed to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. The UK Post-2010 Biodiversity Framework¹⁷ succeeded the UKBAP and expired in 2019, but the UKBAP priority species and habitats are retained through the NERC Act 2006. Regional and local BAPs have also been developed for species/habitats of nature conservation importance at regional and local levels.

APPENDIX G – VALUE OF ECOLOGICAL FEATURES

VALUE	EXAMPLES
International	- An internationally designated Site or candidate Site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar Site) or an area which meets the designation criteria for such Sites. - Internationally significant and viable areas of a habitat type listed in Annexe 1 of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. - Any regularly occurring, globally threatened species. - A regularly occurring population of an internationally important species, which is threatened or rare in the UK, of uncertain conservation status - A regularly occurring, nationally significant population/number of any internationally important species.
National	- A nationally designated Site (<u>e.g.</u> SSSI, NNR) or a discrete area which meets the published selection criteria for national designation (e.g. SSSI selection guidelines) irrespective of whether or not it has yet been notified. - A viable area of a UK BAP priority habitat, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. - A regularly occurring significant number/population of a nationally important species <u>e.g.</u> listed on the Wildlife and Countryside Act 1981 (as amended).

¹⁶ Planning Policy Wales 2021 (edition 11). Available from:

https://www.gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf

¹⁷ UK Post-2010 Biodiversity Framework. Available from: <https://hub.jncc.gov.uk/assets/587024ff-864f-4d1d-a669-f38cb448abdc>



VALUE	EXAMPLES
	• A regularly occurring population of a nationally important species that is threatened or rare in the county or region. • A feature identified as being of critical importance in the UK BAP.
Regional / County	• Viable areas of key habitat identified in the Regional or County BAP or smaller areas of such a habitat, which are essential to maintain the viability of the larger whole. • Regional/county significant and viable areas of key habitat identified as being of regional value in the appropriate English Nature (now Natural England) Natural Area. • A regularly occurring significant population/number of any important species important at a regional/county level. • Any regularly occurring, locally significant population of a species which is listed in a Regional/County Red Data Book or BAP on account of its regional rarity or localisation. • Sites of conservation importance that exceed the district selection criteria but that fall short of SSSI selection guidelines.
City/District/ Borough	• Areas of habitat identified in a District/City/Borough BAP or in the relevant Natural Area profile. • Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on District/City/Borough ecological criteria. • Sites/features that are scarce within the District/City/Borough or which appreciably enrich the District/City/Borough habitat resource. • A diverse and/or ecologically valuable hedgerow network. • A population of a species that is listed in a District/City/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/City/Borough important species during key phases of its life cycle.
Parish	• A feature considered scarce within a Parish or which appreciably enriches the Parish resource.
Local	• Areas identified in a Local BAP or the relevant natural area profile. • Sites/features which are scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context, e.g. species-rich hedgerows. • Local Nature Reserves selected on Parish/Local ecological criteria. • Significant numbers/population of a locally important species <u>e.g.</u> one which is listed on the Local BAP. • Any species, populations or habitats of local importance.
Low	• Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.





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