

Technical Report

Preliminary Ecological Appraisal

Blaen Cefn Accommodation Block

Hochtief UK

March 2023



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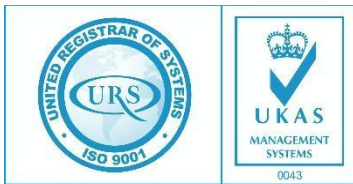
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1 Introduction

1.1 Terms of Reference

Atmos Consulting Ltd (Atmos) were commissioned by Hochtief Ltd in March 2022 to undertake various pre-construction surveys to support the Snowdonia Impact Provision Project (VIPP) which spans over two sites, referred to as 'Garth' in Gwynedd County Council area and 'Cilfor' within Snowdonia National Park.

As part of these works, a separate planning application is being submitted to cover the development of a temporary accommodation block for contractors during the works. This Preliminary Ecological Appraisal has been prepared to support the planning application and covers the proposed accommodation block, which is situated in a separate location to the VIP sites at Garth and Cilfor and is referred to as the 'Site' throughout this report.

1.2 Site Location and Description

The Site is located north of Penrhyndeudraeth, off the A487 with a NGR of SH 62030 39714. The Site is within Snowdonia National Park Authority (SNPA) and is within a caravan site, used throughout the year for static caravans and camping. The Site is predominantly improved grassland with a woodland border.

1.3 Objectives

The objectives of this report are:

- to undertake an extended Phase I habitat survey to describe the baseline ecological status of the proposed accommodation site, including an appropriate buffer;
- to determine the potential of the Site and the buffer area to support protected sites, habitats and / or species;
- to assess the likely effects that the proposed works could have on protected species; and
- to put forward recommendations for further ecological survey work/mitigation that may be required.

2 Relevant Legislation

Conservation of Habitats and Species Regulations (2017)

The Conservation of Habitats and Species Regulations 2017, (the Habitats Regulations) consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations provide for the designation and protection of 'European Sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites ('Natura 2000 Sites termed Special Areas of Conservation SACs or Special Protection Areas (SPAs). The Regulations designate these sites as being important for either habitats or species (listed in Annexes I and II of the Habitats Directive respectively).

Wildlife and Countryside Act 1981

National legislation for the special protection of selected species is provided in the Wildlife and Countryside Act 1981, as amended (WCA) and the Habitats Regulations.

Under Section 1(1) and 1(2) of the WCA, all British bird species, their nests and eggs (excluding some pest and game species) are protected from intentional killing, injury or damage. Under Sections 1(4) and 1(5), special penalties are applied to bird species included in Schedule 1 of the WCA and protection is extended for these species to disturbance to birds whilst building, in or near a nest and disturbance to dependant young. Schedule 5 provides special protection to selected animal species other than birds, through Section 9(4) of the WCA, against damage to "any structure or place which any [wild animal included in the schedule] uses for shelter and protection" and against disturbance whilst in such places.

Non-native invasive plants are listed in Schedule 9 of the WCA which makes it an offence to spread or enable them to be spread in the wild. The list includes species such as Japanese knotweed *Reynoutria japonica* and Himalayan balsam *Impatiens glandulifera*.

A number of animals, known as European protected species (EPS), are provided full protection through inclusion in Schedule 2 of The Habitats Regulations. The Habitats Regulations provide protection against deliberate disturbance to those animals wherever they are present and provides tests against which the permission for a development (that may have an effect on a Schedule 2 protected species) must be assessed before permission can be given.

In addition to species protection, the WCA and Habitats Regulations also set out requirements/procedures for the notification, designation, and protection of a range of statutory site designations in order to preserve important nature conservation resources.

All public authorities have a requirement to pay due regard to the conservation and enhancement of habitats and species through Section 7 of the Environment (Wales) Act, 2016. "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". To this end, Section 7 provides a list of habitat and species that are

considered to be of “principal importance for the conservation of biological diversity in Wales”.

Bats

All bat species in the England and Wales are protected through the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); Environment (Wales) Act, 2016 and by the Conservation of Habitats and Species Regulations (2017). Bats are commonly referred to as European Protected Species (EPS).

It is an offence to deliberately or recklessly:

- capture, injure or kill a bat;
- harass an individual or group of bats;
- disturb a bat while it is occupying a structure or place used for shelter or protection;
- disturb a bat while it is rearing or otherwise caring for its young;
- obstruct access to a breeding Site or resting place, or otherwise deny the animal use of the breeding Site or resting place;
- disturb a bat in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs;
- disturb a bat in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young;
- disturb a bat while it is migrating or hibernating;

It is also an offence of strict liability to:

- Damage or destroy a breeding Site or resting place of a bat even if they are not in use at the time (i.e. a summer roost during the winter period).

Great Crested Newt

Great crested newt (GCN) *Triturus cristatus* are afforded full statutory protection as a European protected species listed on Schedule 2 of The Conservation (Natural Habitats, &c.) Regulations 2017 (1994, as amended), which transpose into British law the European Community's Habitats Directive (92/43/EEC).

Under the terms of Regulation 39(1), with certain exceptions, a person commits an offence if he/she:

“(a) deliberately captures, injures or kills any [a great crested newt];

(b) deliberately disturbs wild [great crested newts].

(1A) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely —

(a) to impair their ability –

(i) to survive, to breed or reproduce, or rear or nurture their young; or

(ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or

(b) to affect significantly the local distribution or abundance of [great crested newts];

(c) deliberately takes or destroys the eggs of [a great crested newt]; or

(d) damages or destroys a breeding site or resting place of [a great crested newt]."

It is also an offence under Regulation 39 to keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild Great crested newt, or any part of, or anything derived from one.

All of the above protections apply regardless of the stage of the life of the animal in question.

Protection of great crested newts' is also provided for in the Wildlife and Countryside Act 1981, as amended. The great crested newt is listed on Schedule 5 of the Act, and is afforded partial protection under the terms of section 9(4)(b) and (c) and (5). This makes it an offence if any person:

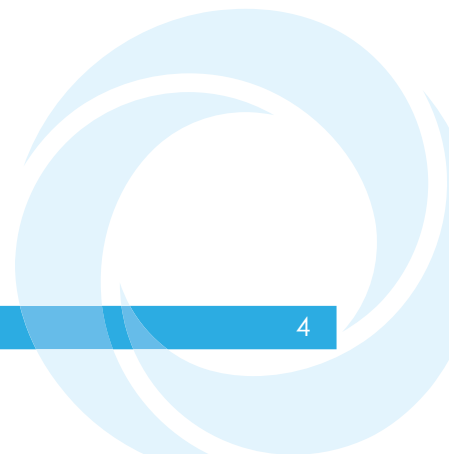
9(4) *"... intentionally or recklessly ... (b) ... disturbs any [great crested newt] while it is occupying a structure or place which it uses for shelter or protection; or (c) ... obstructs access to any structure or place which any [great crested newt] uses for shelter or protection."*

9(5) *"... (a) sells, offers or exposes for sale, or has in his possession or transports for the purpose of sale, any live or dead [great crested newt], or any part of, or anything derived from, such an animal; or (b) publishes or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things".*

There are provisions in the above legislation for the licensing of activities to facilitate development that would otherwise constitute an offence. However, the statutory agency Natural Resources Wales (NRW) advises that the requirement for licensing should be carefully considered by developers, on a site/activity-specific basis, and recommends consideration of non-licensed mitigation such as reasonable avoidance measures relating to timing of works and sensitive site clearance to minimise potential for adverse impacts to this species where this can be achieved.

Badgers

Badgers and their setts are protected under the Protection of Badgers Act 1992 (as amended) and by Section 11 (Schedule 6) of the Wildlife and Countryside Act 1981 (as amended). It is illegal to kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so. Badger setts are protected from interference and it is an offence to obstruct access to, or any entrance of, a badger sett. In addition, it is illegal to disturb a badger when it is occupying a sett.



3 Methodology

3.1 Desk Study

A review of online data was undertaken in February 2023 to gather details of statutory nature conservation designations within 2 km of the Site, e.g., Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar Sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and Local Nature Reserves (LNRs).

Cofnod was contacted in February 2023 to obtain the following ecological data for the area:

- Details of non-statutory designated sites of nature conservation importance within 2 km of the Site, e.g., areas included on the Ancient Woodland Inventory (AWI), Sites of Nature Conservation Interest (SNCIs) and Local Wildlife Sites (LWSs); and
- Details of legally protected species or otherwise notable species within 2 km of the Site.

A review of Ordnance Survey maps and aerial images was undertaken to identify the presence of waterbodies within 500 m of the Site. Great crested newts *Triturus cristatus*, which are protected together with their habitats, can travel relatively large distances between breeding ponds and terrestrial habitat. Following guidance issued by Natural England (English Nature, 2001), land within 500 m of a great crested newt breeding pond should be treated as potential great crested newt terrestrial habitat and evaluated accordingly.

3.2 Extended Phase 1 Habitat Survey

An extended Phase I habitat survey was undertaken by a suitably experienced ecologist on the 2nd of February 2023. It included land within the Site boundary and a suitable buffer, where access permitted.

A Phase I habitat survey is a standardised method of recording habitat types and characteristic vegetation, as set out in the *Handbook for Phase 1 Habitat Survey – a technique for Environmental Audit* (JNCC, 2010). The Phase I survey method is 'extended' through the additional recording of specific features indicating the presence, or likely presence, of protected species or other species of nature conservation significance.

In addition to mapping out habitats, a series of target notes included in Appendix A were produced to highlight features of ecological interest, or any other features that may present a potential constraint to the proposed development. Whilst not a full protected species or botanical survey, the extended Phase I method enables a suitably experienced ecologist to undertake a baseline ecological appraisal of the Site that:

- Provides a preliminary evaluation of the nature conservation significance of the Site and assesses the potential for impacts on habitats/species likely to represent a material consideration in planning terms; and
- Determines the scope of further specialized surveys that may be required to inform an ecological assessment.

3.3 Preliminary Bat Roost Assessment

A daytime survey of the trees in proximity to the working areas was undertaken by an experienced ecologist on the 2nd February 2023. The trees were subject to a preliminary roost assessment as detailed in the Bat Conservation Trust (BCT) survey guidelines (Collins, 2016). This involved a detailed external inspection to look for entry/exit points for bats and any potential roosting features, such as rot holes, cracks, lifted bark or ivy cover.

A search was also conducted for any evidence of roosting bat presence; including bat droppings, and urine/fur oil staining.

The potential of the trees to host roosting bats was then categorised as per the criteria within the BCT survey guidelines, as summarised in Table 1.

Table 1: BCT Bat Roost Categories

Potential suitability	Key features
Negligible	Negligible habitat features not likely to be used by roosting bats
Low	A structure or tree with one or more potential roost Sites that could be used by individual bats opportunistically. However, these potential roost Sites do not provide enough space, shelter, protection and or suitable foraging/commuting habitat to be used on a regular basis or by large numbers of bats
Medium	A structure or tree with one or more potential roost Sites that could be used by bats due to their size and surrounding habitat but which are unlikely to support a roost of high conservation importance
High	A structure or tree with one or more potential roost Sites that are obviously suitable for use by large numbers of bats on a regular basis and potentially for longer periods of time owing to their size and surrounding habitat
Confirmed roost	A structure or tree supporting evidence of bat presence, such as droppings and feeding remains.

3.4 Habitat Suitability Index (HSI) Surveys

Due to the lake present on Site, a Habitat Suitability Index (HSI) assessment was carried out at this waterbody.

This followed published guidance¹ which assigns a value to ten suitability indices including pond size, presence of aquatic plant species, fish and waterfowl. The overall value indicates the suitability of the pond for GCN, as follows:

< 0.5 Poor

0.5 – 0.59 Below average

0.6 – 0.69 Average

0.7 – 0.79 Good

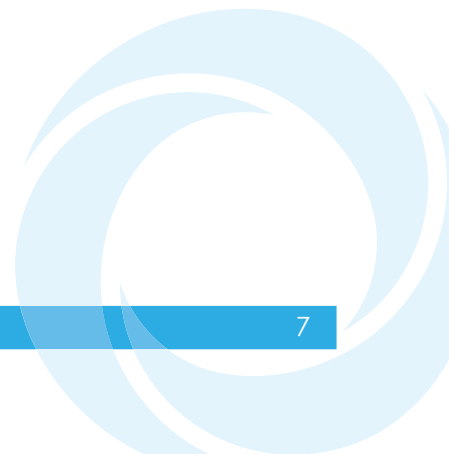
>0.8 Excellent

¹ Habitat Suitability Index, Oldham et al 2000

3.4.1 Limitations

The entirety of the Site was fully accessible and walked over by a suitably competent ecologist with no access issues. The Extended Phase 1 survey was carried outside of what is considered the optimum time for Phase I habitat surveys (April to September inclusive). However, the modified nature of the habitats present on Site meant that this was not considered a limitation.

There are not considered to be any limitations regarding the PBRA and HSI surveys.



4 Results

4.1 Desk Study

4.1.1 Statutory Designated Nature Conservation Sites

There are eight Statutory designated sites within 2 km of the Site. These sites are two Special Area of Conservation (SAC), one Local Nature Reserve (LNR), and five Sites of Special Scientific Interest (SSSI).

Coedydd Derw a Safleoedd Ystlumod Meirion / Meirionnydd Oakwoods and Bat Sites SAC

This SAC is located 0.3 km from the Site and is primarily designated for the large population of less horseshoe bats *Rhinolophus hipposideros*. The site supports a large number of maternity roosts for this species. It is also primarily designated for Annex I sessile oak woodland habitat.

Pen Llyn a'r Sarnau / Llyn Peninsula and the Sarnau SAC

Pen Llyn a'r Sarnau is 0.8 km away from the Site on the north-west coast of Wales and is primarily designated for its Annex I habitats, including sandbanks, estuaries, reefs and coastal lagoons. It also supports bottlenose dolphin *Tursiops truncatus*, otter *Lutra lutra* and grey seal *Halichoerus grypus* which are qualifying features of the SAC designation.

Gwaith Powdwr LNR

The LNR is located 0.4 km from the Site and is of interest for the large population of native reptiles and lesser horseshoe bats which are recorded roosting in the old buildings and tunnels within the LNR.

Coedydd Dyffryn Ffestiniog (Gogleddol) SSSI

The site is 0.3 km from the Site and is of special interest for its biological features. These features comprise: semi- natural broadleaved woodland, woodland bird assemblage, moss, liverwort, lichen and slime mould assemblages and lesser horseshoe bats.

Mwyngloddiau Llanfrothen SSSI

This SSSI is 0.3 km away from the Site and is selected for its biological interest. The site consists of a series of mine shafts, adits and other disused mine workings and is of special interest for hibernating bats, particularly lesser horseshoe bats.

Glaslyn SSSI

This site is 0.7 km from the Site and is selected for its biological interest including salt marsh communities which support a wide breeding and wintering bird assemblage. It is also of interest of the lesser horseshoe bat nursery roosts.

Morfa Harlech SSSI

Morfa Harlech is 0.8 km from the Site and is of special interest for its geomorphological and biological (terrestrial and marine) features, which include salt marsh, estuary and sand dune habitats.

Ysbyty Bron y Garth SSSI

This SSSI is located south of the quarry 1.5 km away and it consists of small amounts of woodland, as well as old factory buildings. This site was awarded SSSI status due to the roosting populations of lesser horseshoe bats.

4.1.2 Non-statutory Designated Nature Conservation Sites

Table 2: Non-statutory designated sites within 2 km of the Site

Name	Distance from the Site
Maes-y-coed woods - Wildlife Site	0.1 km
Pen-y-Bwlch - Wildlife Site	0.3 km
Gwaith Powdwr - Wildlife Site [Candidate]	0.4 km
Ty Mawr - Wildlife Site	0.7 km
Coedydd Cae-merched - Wildlife Site [Candidate]	0.8 km
Bryn Llydan - Wildlife Site [Candidate]	1 km
Pen-y-bryn - Wildlife Site	1.1 km
Hir Ynys bog - Wildlife Site [Candidate]	1.2 km
Bronygarth Hospital - Wildlife Site	1.5 km
Tyn Coed - Wildlife Site [Candidate]	1.5 km
Abergafren - Wildlife Site	1.8 km

4.1.3 Species of conservation interest

Amphibians

There are no records of GCN within 2 km of the Site. There are twenty-two records of common toad *Bufo bufo* within 2 km of the Site. The most recent record was in 2022 and it was 0.7 km south of the Site. Additionally, there are eight records of common frogs *Bufo bufo* within 2 km of the Site. 2022 was the most recent of these and was seen 0.7 km south of the Site.

There are twenty-three records of palmate newts *Lissotriton helveticus* within 2 km of the Site. The most recent record was reported in 2022, 0.6 km south of the Site. This location has had multiple records of palmate newts. Two unidentified newts *Lissotriton* were recorded in 2005, 0.4 km south and 0.8 km south-east of the Site.

Bats

Recent records show 156 bat sightings have been recorded within the 2 km of the Site. These records consist of six species with additionally unidentified bats and bats not identified down to species level. See the table below for a full breakdown.

Table 3: Bat species recorded within 2 km of the Site

Species	No. of records	Most recent record	Distance from Site centre	Roost records within 2 km
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	10	2020	1.1	1
Pipistrelle Spp <i>Pipistrellus</i>	16	2022	0.6	5
Daubenton's bat <i>Myotis daubentonii</i>	1	2019	0.9	1
Whiskered/brandt bat	2	2020	0.6	1

Species	No. of records	Most recent record	Distance from Site centre	Roost records within 2 km
<i>Myotis mystacinus/brandtii</i>				
Natterer's bat <i>Myotis nattereri</i>	4	2022	0.4	1
Noctule Bat <i>Nyctalus noctula</i>	5	2020	0.5	0
Brown Long-eared <i>Plecotus auritus</i>	18	2020	0.4	11
Lesser Horseshoe <i>Rhinolophus hipposideros</i>	81	2022	0.5	37
Myotis Spp <i>Myotis</i>	4	2020	0.5	0
Unidentified bat <i>Chiroptera</i>	15	2020	0.6	9

A majority of the bat records were focused on the SAC and SSSI sites as described above.

Reptiles

A total of forty-one adders *vipera berus* have been recorded in recent years within 2 km of the Site. Of these an adult male was the last identified species in 2022, 0.6 south-east of the Site. There have also been forty-seven reports of grass snakes *Natrix Helvetica*, with the most recent being in 2022, 0.7 km south of the Site-east.

Recent records show that there are 209 slow-worm *Anguis fragilis* sightings within 2 km of the Site. The most recent and closest of these was recorded in 2022, 0.4 km to the south-east.

Invertebrates

There are a total of 279 invertebrate records, which include 99 different species. In 2023, a common carder bee *Bombus pascuorum* was recorded 0.4 km south-east of the Site. Forty-six of the species found were listed as Species with European and/or UK Legal Protection, Section 7 Species or UK BAP Priority Species (category 1), twelve were listed as under Global Red List, British Red Data Book, Nationally Rare & Scarce, Welsh Red and Amber Birds & Welsh Vascular Plant Red Data List (category 2), and twenty-four were listed as Local species not identified under Categories 1 & 2, Locally Important species as specified by local experts (Category 3).

Birds

There are 1,123 bird sightings which comprise of 138 different species within 2 km of the Site. The species recorded closest to the Site was a red kite *Milvus milvus* in 2004, which was 35 m from the Site.

There were fifty-eight species that were listed as Species with European and/or UK Legal Protection, Section 7 Species or UK BAP Priority Species (category 1), 56 that were listed under Global Red List, British Red Data Book, Nationally Rare & Scarce, Welsh Red and Amber Birds & Welsh Vascular Plant Red Data List (category 2), and 25 species listed as

Local species not identified under Categories 1 & 2, Locally Important species as specified by local experts (Category 3).

Refer to the table in Appendix B to see a full breakdown of bird species and their categories, present within 2 km of the centre of the Site.

Otter and Water vole

There are thirty-six records of European otter *Lutra lutra*. The most recent sighting was in February 2023. This sighting was 1.2 km to the south-east of the Site and was a record of an otter spraint.

There are seven water voles *Arvicola amphibius* within 2 km. Of these 2011 was reported last, and this was an adult, 1 km south of the Site.

Badgers

The Eurasian Badger *Meles meles* has twenty-five records within 2 km of the Site. 2021 was the most recent report, which was 0.6 km west of the Site. This sighting had a comment saying digging activity was occurring but no mention of whether this was at a sett. In 2020 a record was made that suggested that a sett was being established, 0.7 km to the south-east.

Other mammals

In regard of other mammals, there have been multiple records of brown hare *Lepus europaeus*, polecat *Mustela putorius*, stoat *Mustela erminea* and water shrew *Neomys fodiens*, west european hedgehog *Erinaceus europaeus*. The most recent sighting was that of a stout in 2021, 0.6 km south-east.

See the table below for a full list of these records.

Table 4: Other mammal records within 2 km of Site boundary

Species	Number of records	Dates
Brown hare <i>Lepus europaeus</i>	6	2005-2020
Pole cat <i>Mustela putorius</i>	10	2003-2011
Stoat <i>Mustela erminea</i>	5	2006-2021
Water shrew <i>Neomys fodiens</i>	1	2015
West european hedgehog <i>Erinaceus europaeus</i>	7	2000-2013

Non-native Invasive Species

There are multiple records that Japanese knotweed was last reported on the Site 2016. This is also the case for Himalayan Balsam *Impatiens glandulifera* which was reported on Site in 2017. Rhododendron *Rhododendron ponticum* has also been reported to be on Site in 2017.

New Zealand willowherb *Epilobium brunnescens* has been recorded 0.5 km to the east of Site in 2012. Montbretia *Crocasmia* has been recorded 0.2 km to the south of Site in 2017.

The following fauna species have also been recorded within 2 km of the Site- Canada goose *Branta canadensis*, American mink *Neovison vison*, and Golden Pheasant *Chrysolophus pictus*.

4.2 Extended Phase I Habitat Survey

The habitats recorded on and off-site within the survey buffer are described below. Target notes (TN) are provided in Appendix A and illustrated in Figure 1.

4.2.1 On-site Habitats

Improved Grassland with Amenity Use

The majority of the Site is improved grassland with amenity use as a caravan site. The grassland is well managed and cut to a short sward (TN1). In some areas there was evidence of previous excavation and disposal of soil, so in these areas the grassland was bare and in disturbed condition (TN5). There were areas of common nettle *Urtica dioica* and thistle *Cirsium* spp. encroachment and to the rear of the Site the grassland is grazed by sheep.

Ditch

There is a field ditch running along the northern field boundary (TN2). The ditches were approximately 0.5m wide and 0.5m deep with a mix of clay, earth and hardstanding banks. There was no aquatic vegetation present.

At the time of survey it held turbid standing water as there had been a period of rainfall beforehand. The water did not appear to be flowing and was not obviously connected to any other watercourses.

Bare Ground

There were numerous areas of bare ground, likely caused by erosion and soil disposal (TN3). These areas were located near previous caravan pitches.

Hedgerow

Surrounding the Site is a thick intact hedgerow comprised of mature trees (TN6). This hedgerow was largely comprised of ivy *Hedera helix*, willow *Salix* spp, silver birch *Betula pendula* and hawthorn *Crataegus monogyna*.

Standing Water – Pond

There is a large fishing pond/lake to the rear of the proposed accommodation block (TN4). This is a manmade feature and supports native and ornamental aquatic plant species. This waterbody is self-contained and is stocked as a fishing lake. The lake is fairly shallow on the edges, and is around 0.2 ha in size and 30m wide.

Mixed Woodland

Adjacent to the waterbody on Site there is an area of planted mixed woodland which is linked to the hedgerow boundary. Species here are holly *Ilex aquifolium*, silver birch and willow with occasional oak *Quercus* spp.. The woodland is fairly young with limited mature trees and was planted as a screen from the A487.

Hardstanding / Buildings

To the rear of the Site there is an existing hardstanding track which links the Site to the A487. Adjacent to this track is a farm building, which looked to be an old stable now used for storage.

4.2.2 Protected and Priority Species

Amphibians

There are limited ponds within 500m. The pond shown on aerials within the caravan park was not present during the survey, with no evidence of a pond being in this location. There is limited connectivity to the ponds in the wider area as due to the closely mown grassland and deep ditches on Site and adjacent to Site. The other large pond on Site is stocked for fishing and is therefore considered unsuitable for breeding GCN. The HSI of this waterbody was scored as poor (0.31). This is likely due to the evidence of waterfowl and fish within the waterbody paired with the lack of ponds within 1 km.

The ditch present on Site is sub-optimal for great crested newt as breeding habitat. This is due to the poor-quality water condition and lack of aquatic vegetation.

The hedgerow and woodland on the Site boundary could provide potentially suitable terrestrial habitat for great crested newts, if present. However, this is considered unlikely due to the proximity of the busy A487 and lack of connectivity to other waterbodies, therefore GCN are not considered further in this report.

Bats

A PBRA was carried out on all trees in the working area and no trees are to be removed. A majority were young trees with smooth bark and did not exhibit any features which could be used by roosting bats.

The surrounding area represents a moderate-quality foraging habitat for a number of bat species, with some linear features (such as the hedgerow) and waterbodies, set within a wider built-up area, with no direct linkages to the SAC and SSSI areas designated for bats.

Badgers

There were no badger setts or badger signs identified on Site during the survey, although it is likely that badgers are present in the wider area.

Birds

There were a number of common bird species incidentally recorded on Site during the survey. These included goldfinch *Carduelis carduelis* and black-headed gull *Chroicocephalus ridibundus*. The woodland and hedgerows on Site are considered to

potentially support nesting birds during the breeding season (March to August, inclusive). The Site itself is fairly disturbed as a caravan park and therefore less suitable for ground nesting birds.

Invertebrates

Due to the time of year, there were no incidental records of butterflies or other invertebrates during the survey. The grassland habitats on the Site would be sub-optimal for invertebrate species due to the regular mowing preventing flowering and reducing the available egg-laying material. The improved nature of the grassland with fewer flowering plant species makes it sub-optimal as a nectar source. Common carder bee is the closest invertebrate species record and the Site does not support the flowering plant species this bee requires (e.g heather *Calluna* spp.). It is considered that the Site is sub-optimal for invertebrates and they are therefore not considered further in this report.

Otter

There were no incidental signs of otter recorded during the survey, but it is considered that the species may range through the area if they are present in the wider landscape. The Site had no suitable locations for couches or lay-up sites where otters may occasionally rest. The lake on Site would provide a suitable food source for otters and it is considered likely that they may be present on Site throughout the year.

Water Vole

The ditch on Site is shallow with a clay and stone substrate which would not provide potentially suitable habitat for water vole burrow construction. There were no incidental signs of water vole recorded during the survey nor were there any signs of burrows in the ditches. Although the survey was completed at a time of year when water vole are active, it is considered that the Site is sub-optimal for water vole due to the lack of suitable watercourses and records in the local area. Accordingly, they are not considered further in this report.

Reptiles

The working area presents potentially suitable habitat for reptiles. However, it is fragmented and isolated within a heavily managed caravan park, where the closely cut grassland are unsuitable habitat for reptiles and are not well-connected. Given the relatively small size of the working area, it is unlikely reptiles would be able to sustain and complete their lifecycle within it. However, their potential presence cannot be completely ruled out due to the woodland and lake on Site which are suitable habitats for reptile.

4.2.3 Non-native Invasive Species

As per the data search, numerous stands of Himalayan balsam were recorded alongside the ditch and during the survey the landowner confirmed this species had been there for numerous years.

The landowner also informed the surveyor of the previous presence of Japanese Knotweed adjacent to the A487. This was not present during the survey and the landowner informed it had previously been removed.

5 Evaluation and Potential Impacts

5.1 Proposed Works

The proposed development is part of the Snowdonia VIP Project which has been granted planning permission from Snowdonia National Park Authority (Ref: NP5/77/336B). As part of these works, temporary accommodation is required, and a separate planning application is being prepared. The proposed accommodation block will be temporary and comprised of shipping container style accommodation blocks, with an access road from the A487.

5.2 Statutory Designated Sites

The Site is located 0.3 km from **Meirionnydd Oakwoods and Bat Sites SAC**. The SAC is designated for its lesser horseshoe maternity roosts and oak woodland. There is no connectivity to the SAC from the Site and no habitats suitable to support lesser horseshoe maternity roosts. However due to the proximity of the SAC, a Habitat Regulations Assessment (HRA) report will be required to screen out impacts on this SAC.

As above, the Site is also in close proximity to **Pen Llyn a'r Sarnau SAC** (0.8 km north). The SAC is designated for marine and coastal habitats such as salt marsh, estuary and reefs, and none of these habitats are present on Site and will not be impacted by the works which are contained to the grassland on Site. However, due to the drains on Site potentially being linked with the SAC and the proximity of the Site to the SAC a HRA report will also be required to screen out impacts on this SAC (see Section 6).

Due to the potential for indirect effects on the features of the Meirionnydd Oakwoods and Bat Sites and Pen Llyn a'r Sarnau SACs, a Habitats Regulations Assessment (HRA) is recommended (refer to Section 6) for submission to NRW and SNPA.

The SSSI sites, **Coedydd Dyffryn Ffestiniog (Gogleddol) SSSI**, **Mwyngloddiau Llanfrothen SSSI**, **Glaslyn SSSI**, **Morfa Harlech SSSI** and **Ysbyty Bron y Garth SSSI** are not functionally linked to the Site and are all at least 0.3 km from the proposed Site. These SSSIs are mainly designated for lesser horseshoe bats and salt marsh habitats. The Site does not present suitable roosting habitat for lesser horseshoe bats and the works are limited to the envelope of the caravan site itself, with no encroachment on surrounding habitat. It is not considered that the works will have any impact on these above SSSIs.

5.3 Non-statutory Designated Sites

There are 11 wildlife sites within 2 km of the Site. A majority of these sites are a sufficient distance away it is considered unlikely the small scale works on Site impact them.

Maes-y-coed Woods are within 0.1 km of the Site, located to the north-east. To prevent impacts on this wildlife site, it is recommended that works on Site are kept within a fenced area and do not encroach onto the surrounding woodland.

The other wildlife sites are separated from the Site by the A-road and therefore there are no direct links and will be no impact.

5.4 Habitats

The habitats on Site are generally of low ecological value, with the caravan site being a mix of manmade hardstanding and disturbed improved grassland. The access is via existing access routes, using nearby roads. There will be no vegetation removal associated with the works and the accommodation will be sited on existing hardstanding and improved grassland which is usually covered by caravan units.

The adjacent habitats surrounding the Site will not be impacted by the works, including the hedgerow, lake and woodland.

Bats

All native bat species and their roosts are protected as UK and European Protected Species, and at least five species were identified by records within 2km of the Site, including 9 roosts of these species.

The no potential bat roosting features were identified within the working area of the Site. The mature trees in the wider area are suitable for roosting bats, however no works will be undertaken in this area. If the plans for the works are adapted in any way and will require works to these trees then further bat surveys will be required.

The Site has moderate potential for foraging and commuting bats, however the works will be undertaken in the daytime outside of the bat active season and therefore there will be no night-time lighting during the works that could negatively affect any foraging bats by restricting their range. The accommodation block will have night time lighting and recommendations regarding the lighting are included in Section 6.

Badgers

There are records of badger activity within 2 km of the Site. The Site has limited suitability for sett creation, but the woodland edges would provide suitable habitat. No badger setts or signs of badger activity were found to be present on the Site, but it is likely they may range on Site if present in the wider area. There will be no effects on badger setts however good practice construction measures are proposed to reduce effects on foraging badgers, as set out in Section 6.

Breeding Birds

The desk study returned numerous records of birds not listed in the SSSI within 2 km, although none from within the Site itself. The trees and hedgerows in the Site boundary could support nesting birds during the breeding season.

The proposed development will retain and protect hedgerows and is not considered to have a significant effect on breeding birds, provided the works are carried out following recommendations in Section 6.

Otter

The Site and surrounding areas are not considered suitable to support otter. The ditch present is shallow, with no connectivity. However, the lake on Site would be suitable to support foraging otter due to the fish present in the lake. There are records of otter in the wider area, and it is considered they may range on to Site, recommendations are set out in Section 6.

6 Recommendations

6.1 Good Practice Construction Measures

It is recommended that good practice construction measures are employed during the works to minimise noise and to avoid pollution.

Protective fencing (Heras style or similar) should be erected around all habitat areas to be retained to ensure that no encroachment of works.

With the presence of existing hardstanding and disturbed improved grassland on Site, it is recommended that site compounds and welfare facilities are located on hardstanding to avoid effects on habitats.

It is recommended that pollution prevention measures are in place as a matter of good practice and due to proximity of the SACs (see below).

6.2 Statutory Designated Sites

As assessed in Section 5, the Site is near both **Meirionnydd Oakwoods and Bat Sites SAC** and **Pen Llyn a'r Sarnau SAC**. It is therefore recommended that a HRA is undertaken to further assess the impacts of this development on the SACs. As there are no species or habitats present on Site that are reflected in the SAC designations, it is considered likely that the works could be screened out without specific mitigation following consultation with NRW.

6.3 Protected Species

Bats

To prevent effects on foraging bats, there should be no additional night-time lighting of compounds or working areas.

Bat-friendly lighting is proposed to be incorporated into the proposed development and will be assessed within the HRA report once it is completed.

Badger

Whilst there are no signs of badger on Site, it remains a possibility that they may range onto Site as there are records within the wider area. Therefore, as a good practice measure, any excavations should be covered overnight, or a mammal ladder placed inside to prevent any ranging mammals (such as badger) from becoming trapped.

Breeding Birds

Ideally any vegetation clearance should be timed outside of the breeding season (March to August inclusive). If not possible, it will be supervised and checked beforehand by an Ecologist.

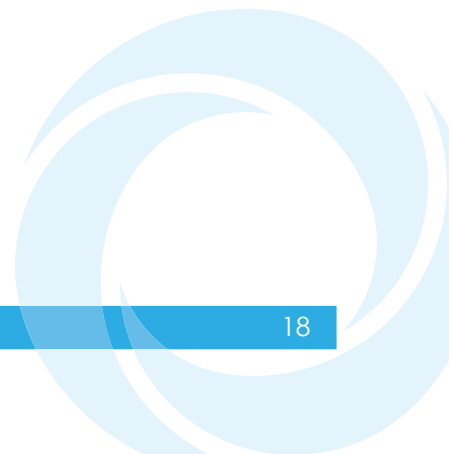
Otter

As it is likely species will range onto Site, the good practice measures set out for badgers will also ensure any otters will not become trapped in excavations. It is recommended

that the works are kept a safe distance from the lake and any works to the pathway adjacent to the lake should be undertaken following pollution prevention guidance and an ECoW is present to complete a check for the species prior to the works.

6.4 Invasive Species

Due to the presence of Himalayan balsam, and historical records of Japanese knotweed on Site, a full biosecurity risk assessment will be in place prior to the works. It is recommended that the invasive species on Site are removed during the works to avoid the spread of these species. Good biosecurity measures should be followed, which can include cleaning boots and wheels with a suitable disinfectant when leaving site and removing excess soil and any seeds/vegetation from boots or equipment.



7 References

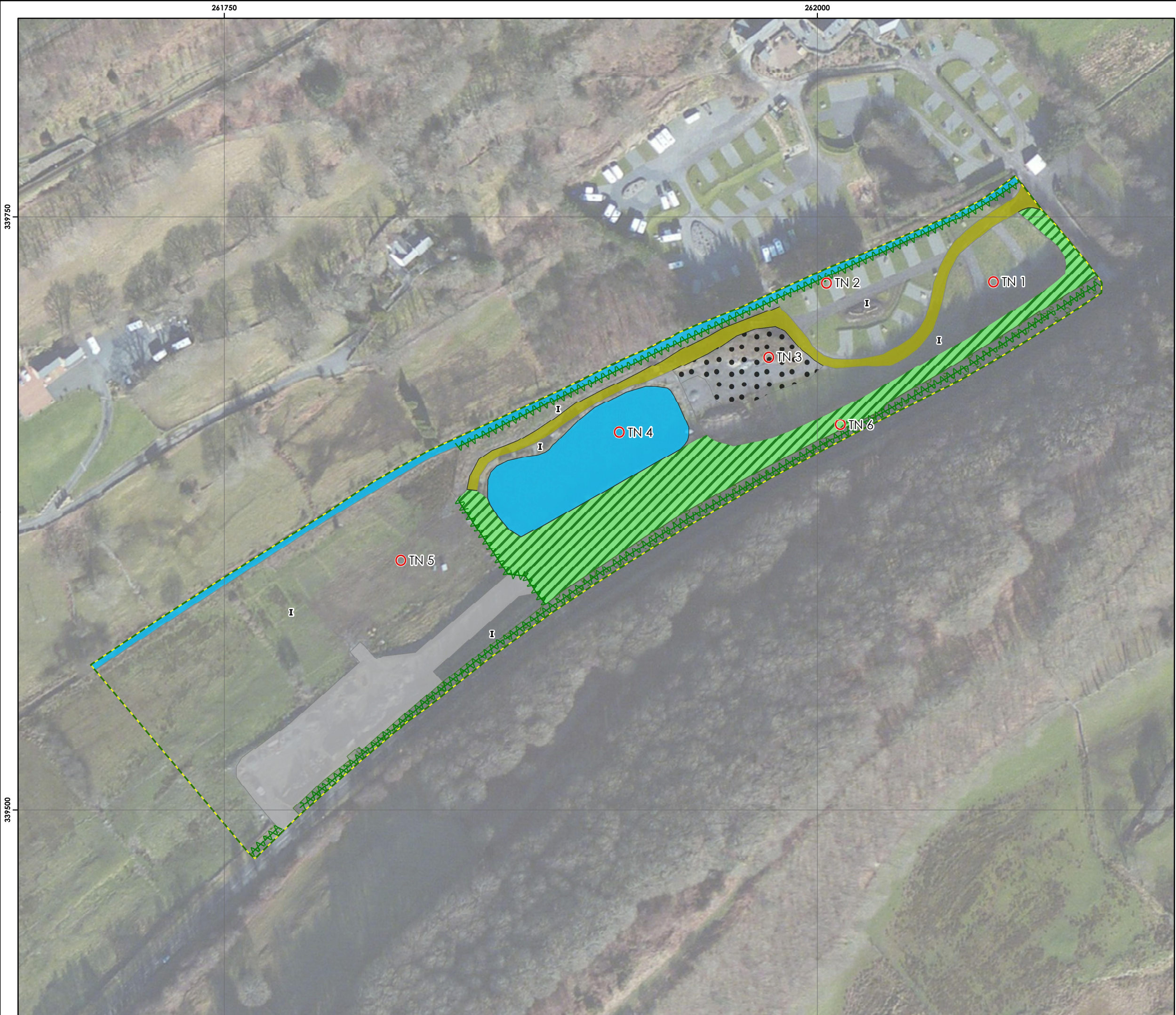
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8 Figures

Figure 1: Phase 1 Map



Snowdonia Visual Impact Tunnels



Phase 1 Survey Results:
Blaen Cefn

Key

- Survey area
- Target Note
- Habitat areas
 - Hedge with trees - native species-rich
 - Mixed woodland - plantation
 - Improved grassland
 - Standing water
 - Bare ground
 - Hardstanding
 - Track
 - Intact hedge - native species-rich

atmos
CONSULTING

0 12.5 25 50

Meters



Scale @ A3:
1:1,500





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10/03/2023 64050/HB/029a
Drawn by: AF Checked by: TH Approved by: CH


Appendices

Appendix A. Target Notes

Table 5: Target Notes and images

Target Note	Image
<p>TN1 - A majority of the Site is comprised of improved grassland, managed at a short sward.</p>	
<p>TN2 – The ditch on site is clay and stone lined, with vertical sides.</p>	

Target Note	Image
<p>TN3 – The Site has large areas of bare ground.</p>	
<p>TN4 – There is a large manmade lake to the rear of the Site that is stocked for fishing.</p>	
<p>TN5 – The field to the rear of the Site is comprised of disturbed improved grassland, with hardstanding material buried underneath.</p>	

Target Note	Image
<p>TN6 – The hedgerow separating the Site from the main road will be maintained and supports numerous mature trees.</p>	

Appendix B. Existing Bird Records

Table 6: Bird records within 2 km of the Site

Scientific Name	Common Name	Category
<i>Milvus milvus</i>	Red Kite	1
<i>Cuculus canorus</i>	Cuckoo	1
<i>Pyrrhula pyrrhula</i>	Bullfinch	1
<i>Turdus philomelos</i>	Song Thrush	1
<i>Accipiter gentilis</i>	Goshawk	1
<i>Emberiza citrinella</i>	Yellowhammer	1
<i>Falco peregrinus</i>	Peregrine	1
<i>Turdus iliacus</i>	Redwing	1
<i>Acanthis cabaret</i>	Lesser Redpoll	1
<i>Anthus trivialis</i>	Tree Pipit	1
<i>Caprimulgus europaeus</i>	Nightjar	1
<i>Dryobates minor</i>	Lesser Spotted Woodpecker	1
<i>Ficedula hypoleuca</i>	Pied Flycatcher	1
<i>Fringilla montifringilla</i>	Brambling	1
<i>Hydrocoloeus minutus</i>	Little Gull	1
<i>Linaria cannabina</i>	Linnet	1
<i>Loxia curvirostra</i>	Crossbill	1
<i>Pandion haliaetus</i>	Osprey	1
<i>Passer domesticus</i>	House Sparrow	1
<i>Phylloscopus sibilatrix</i>	Wood Warbler	1
<i>Prunella modularis</i>	Dunnock	1
<i>Spatula querquedula</i>	Garganey	1
<i>Troglodytes troglodytes</i>	Wren	1
<i>Tyto alba</i>	Barn Owl	1
<i>Larus argentatus</i>	Herring Gull	1
<i>Numenius arquata</i>	Curlew	1
<i>Falco tinnunculus</i>	Kestrel	1
<i>Circus cyaneus</i>	Hen Harrier	1
<i>Emberiza schoeniclus</i>	Reed Bunting	1
<i>Turdus pilaris</i>	Fieldfare	1
<i>Coccothraustes coccothraustes</i>	Hawfinch	1
<i>Sturnus vulgaris</i>	Starling	1
<i>Tringa ochropus</i>	Green Sandpiper	1
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	1
<i>Cygnus cygnus</i>	Whooper Swan	1
<i>Alauda arvensis</i>	Skylark	1
<i>Alcedo atthis</i>	Kingfisher	1
<i>Falco columbarius</i>	Merlin	1
<i>Motacilla flava</i>	Yellow Wagtail	1
<i>Regulus ignicapilla</i>	Firecrest	1
<i>Chlidonias niger</i>	Black Tern	1
<i>Vanellus vanellus</i>	Lapwing	1

<i>Charadrius hiaticula</i>	Ringed Plover	1
<i>Muscicapa striata</i>	Spotted Flycatcher	1
<i>Locustella naevia</i>	Grasshopper Warbler	1
<i>Numenius phaeopus</i>	Whimbrel	1
<i>Phoenicurus ochruros</i>	Black Redstart	1
<i>Streptopelia turtur</i>	Turtle Dove	1
<i>Pernis apivorus</i>	Honey-buzzard	1
<i>Pyrhocorax pyrrhocorax</i>	Chough	1
<i>Charadrius dubius</i>	Little Ringed Plover	1
<i>Gavia immer</i>	Great Northern Diver	1
<i>Ichthyeta melanoccephalus</i>	Mediterranean Gull	1
<i>Limosa limosa</i>	Black-tailed Godwit	1
<i>Podiceps auritus</i>	Slavonian Grebe	1
<i>Podiceps nigricollis</i>	Black-necked Grebe	1
<i>Tringa nebularia</i>	Greenshank	1
<i>Picus viridis</i>	Green Woodpecker	2
<i>Accipiter nisus</i>	Sparrowhawk	2
<i>Aegithalos caudatus</i>	Long-tailed Tit	2
<i>Parus ater</i>	Coal Tit	2
<i>Scolopax rusticola</i>	Woodcock	2
<i>Gallinago gallinago</i>	Snipe	2
<i>Apus apus</i>	Swift	2
<i>Regulus regulus</i>	Goldcrest	2
<i>Anthus pratensis</i>	Meadow Pipit	2
<i>Ardea cinerea</i>	Grey Heron	2
<i>Chloris chloris</i>	Greenfinch	2
<i>Curruca communis</i>	Whitethroat	2
<i>Hirundo rustica</i>	Swallow	2
<i>Phoenicurus phoenicurus</i>	Redstart	2
<i>Phylloscopus trochilus</i>	Willow Warbler	2
<i>Streptopelia decaocto</i>	Collared Dove	2
<i>Strix aluco</i>	Tawny Owl	2
<i>Sylvia borin</i>	Garden Warbler	2
<i>Tringa erythropus</i>	Spotted Redshank	2
<i>Motacilla cinerea</i>	Grey Wagtail	2
<i>Turdus viscivorus</i>	Mistle Thrush	2
<i>Delichon urbicum</i>	House Martin	2
<i>Oenanthe oenanthe</i>	Wheatear	2
<i>Actitis hypoleucos</i>	Common Sandpiper	2
<i>Anas platyrhynchos</i>	Mallard	2
<i>Cygnus olor</i>	Mute Swan	2
<i>Haematopus ostralegus</i>	Oystercatcher	2
<i>Larus fuscus</i>	Lesser Black-backed Gull	2
<i>Larus marinus</i>	Great Black-backed Gull	2
<i>Mergus serrator</i>	Red-breasted Merganser	2
<i>Phalacrocorax carbo</i>	Cormorant	2

<i>Tadorna tadorna</i>	Shelduck	2
<i>Larus canus</i>	Common Gull	2
<i>Anthus spinoletta</i>	Water Pipit	2
<i>Aythya ferina</i>	Pochard	2
<i>Bucephala clangula</i>	Goldeneye	2
<i>Riparia riparia</i>	Sand Martin	2
<i>Tringa totanus</i>	Redshank	2
<i>Somateria mollissima</i>	Eider	2
<i>Calidris alpina</i>	Dunlin	2
<i>Cinclus cinclus</i>	Dipper	2
<i>Corvus frugilegus</i>	Rook	2
<i>Gallinula chloropus</i>	Moorhen	2
<i>Corvus cornix</i>	Hooded Crow	2
<i>Mareca strepera</i>	Gadwall	2
<i>Anas crecca</i>	Teal	2
<i>Mareca penelope</i>	Wigeon	2
<i>Anas acuta</i>	Pintail	2
<i>Branta leucopsis</i>	Barnacle Goose	2
<i>Calidris alba</i>	Sanderling	2
<i>Lymnocyrtus minimus</i>	Jack Snipe	2
<i>Pluvialis squatarola</i>	Grey Plover	2
<i>Podiceps cristatus</i>	Great Crested Grebe	2
<i>Spatula clypeata</i>	Shoveler	2
<i>Sterna hirundo</i>	Common Tern	2
<i>Buteo buteo</i>	Buzzard	3
<i>Dendrocopos major</i>	Great Spotted Woodpecker	3
<i>Carduelis carduelis</i>	Goldfinch	3
<i>Certhia familiaris</i>	Treecreeper	3
<i>Columba palumbus</i>	Woodpigeon	3
<i>Corvus corax</i>	Raven	3
<i>Cyanistes caeruleus</i>	Blue Tit	3
<i>Parus major</i>	Great Tit	3
<i>Phylloscopus collybita</i>	Chiffchaff	3
<i>Saxicola rubicola</i>	Stonechat	3
<i>Sitta europaea</i>	Nuthatch	3
<i>Spinus spinus</i>	Siskin	3
<i>Sylvia atricapilla</i>	Blackcap	3
<i>Motacilla alba yarrellii</i>	Pied Wagtail	3
<i>Egretta garzetta</i>	Little Egret	3
<i>Rallus aquaticus</i>	Water Rail	3
<i>Anser anser</i>	Greylag Goose	3
<i>Mergus merganser</i>	Goosander	3
<i>Motacilla alba</i>	Pied/White Wagtail	3
<i>Ardea alba</i>	Great White Egret	3
<i>Anthus petrosus</i>	Rock Pipit	3
<i>Motacilla alba alba</i>	White Wagtail	3

<i>Anser brachyrhynchus</i>	Pink-footed Goose	3
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	3

Appendix C. HSI Results

Table 7: HSI results of waterbody on Site

HSI categories	HSI scores	SI value
Geographic Location	B	0.5
Pond Count	1	0.65
Shade Cover	40%	1.0
Pond Area	2500m ²	N/A
Permanence	Never	0.9
Water Quality	Good	1.0
Waterfowl	Major	0.01
Fish	Major	0.01
Terrestrial Habitat	Moderate	0.67
Macrophyte Cover	10%	0.4

HSI SCORE: 0.31 (Poor)