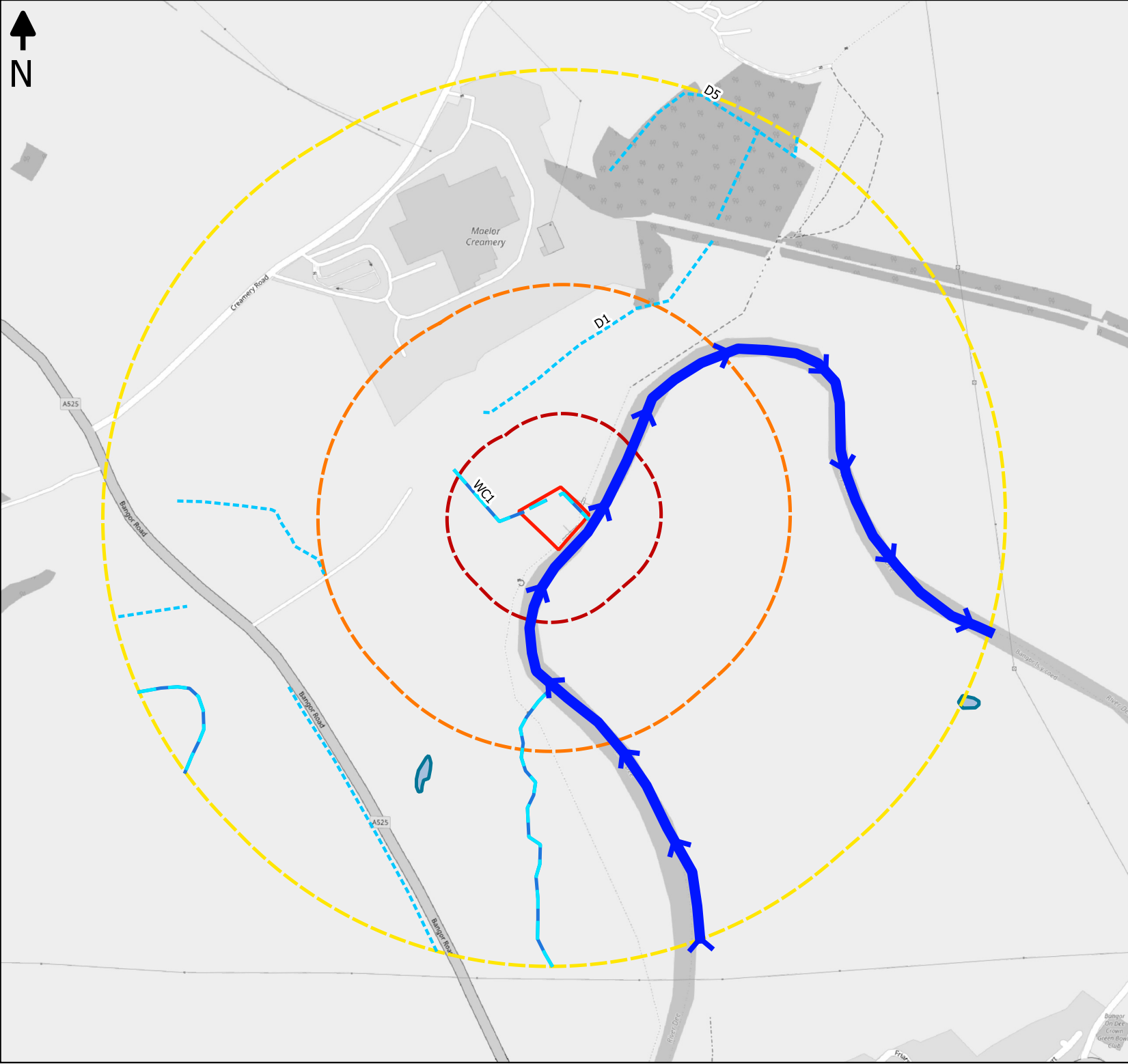




Key

- Afon Dyfrdwy (River Dee)
- Drain
- Watercourse
- 500m buffer
- 250m buffer
- 100m buffer
- Site Boundary
- Pond Locations

RammSanderson

Client:
Hafren Dyfrdwy (Severn Trent Water)

Project:
Sesswick Eels screen

Drawing Title:
Waterbody Plan

Drawing No.	Rev:
RSE_5278_F010	V1
Drawn By:	Date:
AGF	29/07/2021
Scale:	
1:6,000	

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APPENDIX 2

Botanical Species List

Table 8: Broadleaved Woodland

Species	Latin	DAFOR Scale
Hawthorn	<i>Crataegus monogyna</i>	A
Alder	<i>Alnus glutinosa</i>	F
Willow	<i>Salix sp.</i>	O
Ash	<i>Fraxinus excelsior</i>	O
Understory		
Bramble	<i>Rubus fruticosus</i>	F
Ash (young)	<i>Fraxinus excelsior</i>	O
Alder (young)	<i>Alnus glutinosa</i>	O
Ground flora		
Nettle	<i>Urtica dioica</i>	A
Ivy	<i>Hedera helix</i>	A
Scaly male fern	<i>Dryopteris affinis</i>	O
Red campion	<i>Silene dioica</i>	O
Herb robert	<i>Geranium robertianum</i>	O
Common bindweed	<i>Convolvulus arvensis</i>	O
Himalayan balsam	<i>Impatiens glandulifera</i>	R

Table 9: Dense Continuous Scrub

Species	Latin	DAFOR Scale
Bramble	<i>Rubus fruticosus</i>	D
Creeping thistle	<i>Cirsium arvense</i>	A
Spear thistle	<i>Cirsium vulgare</i>	A
Himalayan balsam	<i>Impatiens glandulifera</i>	F
Hoary willowherb	<i>Epilobium parviflorum</i>	F
Cow parsley	<i>Anthriscus sylvestris</i>	O
Red dead nettle	<i>Lamium purpureum</i>	O
Ragwort	<i>Jacobaea vulgaris</i>	R
Hogweed	<i>Heracleum sphondylium</i>	R
Yarrow	<i>Achillea millefolium</i>	R

Table 10: Scattered broadleaved trees

Species	Latin	DAFOR Scale
Ash	<i>Fraxinus excelsior</i>	O
Willow	<i>Salix sp.</i>	O
Alder	<i>Alnus glutinosa</i>	O

Table 11: Poor semi-improved grassland

Species	Latin	DAFOR Scale
Perennial rye grass	<i>Lolium perenne</i>	D
Cock's foot	<i>Dactylis glomerata</i>	A
Yorkshire fog	<i>Holcus lanatus</i>	A
Meadow buttercup	<i>Ranunculus acris</i>	F

Creeping buttercup	<i>Ranunculus repens</i>	F
Creeping thistle	<i>Cirsium arvense</i>	F
White clover	<i>Trifolium repens</i>	F
Dandelion	<i>Taraxacum sp.</i>	O
Mayweed	<i>Tripleurospermum sp.</i>	O
Plantain	<i>Plantago sp.</i>	O
Chickweed	<i>Stellaria media</i>	R

Table 12: Tall Ruderal

Species	Latin	DAFOR Scale
Bramble	<i>Rubus fruticosus</i>	D
Creeping thistle	<i>Cirsium arvense</i>	A
Spear thistle	<i>Cirsium vulgare</i>	A
Himalayan balsam	<i>Impatiens glandulifera</i>	F
Hoary willowherb	<i>Epilobium parviflorum</i>	F
Meadow sweet	<i>Filipendula ulmaria</i>	O
Sedge	<i>Carex sp.</i>	O
Cow parsley	<i>Anthriscus sylvestris</i>	O
Red dead nettle	<i>Lamium purpureum</i>	O
Ragwort	<i>Jacobaea vulgaris</i>	R
Hogweed	<i>Heracleum sphondylium</i>	R
Yarrow	<i>Achillea millefolium</i>	R

APPENDIX 3

Relevant Species Legislation

General & Regionally Specific Policies

Articles of British legislation, policy guidance and both Local Biodiversity Action Plans (BAPs) and the NERC Act 2006 are referred to throughout this report. Their context and application is explained in the relevant sections of this report. The relevant articles of legislation are:

- The National Planning Policy Framework (2021);
- ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2021);
- Local planning policies in Cheshire Local Plan;
- The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019;
- The Wildlife and Countryside Act 1981 (as amended);
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
- National Parks and Access to the Countryside Act 1949;
- The Protection of Badgers Act 1992;
- The Countryside and Rights of Way Act 2000;
- The Hedgerow Regulations 1997;
- The Natural Environment and Rural Communities (NERC) Act 2006; and
- Local Biodiversity Action Plan for Cheshire.

In relation to these proposals relevant sections of the NPPF, 2021 are:

“promote the conservation restoration and enhancement of priority habitats and ecological networks and the protection and recovery of priority species...identify and pursue opportunities for securing measurable net gains for biodiversity (174b)”

“minimising impacts on and providing net gains for biodiversity (170d)”

“if significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused (175)”

Bats and Great Crested Newts

Great crested newt and species of British bats are fully protected within UK Law under *Wildlife and Countryside Act 1981* (as amended) through their inclusion in Schedule 5. Under the Act, they are protected from:

- Intentional or reckless killing, injury, taking;
- Damage to or destruction of or, obstruction of access to any place of shelter, breeding or rest;
- Disturbance of an animal occupying a structure or place;
- Possession or control (live or dead animals);
- Selling, bartering or exchange of these species, or parts of.

This law is reinforced by the UK's transposition of the EU Habitats Regulations under *The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended)*. These Regulations also prohibit:

- the deliberate killing, injuring or taking of great crested newt or bats;
- the deliberate disturbance of any great crested newt or bat species in such a way as to be significantly likely to affect:
 - their ability to survive, hibernate, migrate, breed, or rear or nurture their young; or
 - the local distribution or abundance of that species.
- damage or destruction of a breeding site or resting place;
- the possession or transport of great crested newt or bats or any other part of.

Under certain circumstances a licence may be granted by Natural England to permit activities that would otherwise constitute an offence. In relation to development, a scheme must have full planning permission before a licence application can be made.

In addition, seven British bat species are listed as Species of Principal Importance (SPI) under the Natural Environment and Rural Communities (NERC) Act, 2006. These are barbastelle (*Barbastellus*

barbastellus), Bechstein's (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared (*Plecotus auritus*), greater horseshoe (*Rhinolophus ferrumequinum*) and lesser horseshoe (*Rhinolophus hipposideros*).

Under the National Planning Policy Framework 2021 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

Birds

The Wildlife and Countryside Act 1981 (as amended) is the Priority legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions, to recklessly or intentionally:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built;
- Take or destroy the egg of any wild bird.

For birds listed on Schedule 1 of the Act, it is an offence to disturb any bird while it is building a nest, is at or near a nest with young; or disturb the dependant young of such a bird.

Species listed in Annex 1 of the EU Birds Directive 1994 (e.g. barn owl) are required to have special conservation measures taken to preserve their habitats and sites to be classified as Special Protection Areas (SPAs) where appropriate.

Reptiles

All reptile species are partially protected under Schedule 5 (Sections 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended). This legislation protects these animals from:

- Reckless or intentional killing and injury;
- Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species.

In addition to the above legislation, UK rare reptiles; sand lizards (*Lacerta agilis*) and smooth snakes (*Coronella austriaca*), are listed under The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended). This makes it an offence to;

- Capture, kill, injure and disturb;
- Take or destroying eggs;
- Damage or destroy breeding/resting places;
- Obstruct access to resting places; and
- Possess, advertise for sale, sell or transport for sale, live or dead (part or derivative).

Where these animals are confirmed as present on land that is to be affected by development guidance recommends that:

- The animals should be protected from injury or killing during construction operations;
- Mitigation should be provided to maintain the conservation status of the species locally;
- Under the National Planning Policy Framework 2021 the presence of any protected species is a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/compensated for and that opportunities for ecological enhancement should be sought.

Water Vole

Water voles (*Arvicola amphibius*) are protected under Schedule 5 Section 9 of the Wildlife & Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or capture a water vole, to intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or to disturb water voles while they are using such a place.

White-clawed Crayfish

White-clawed crayfish (*Austropotamobius pallipes*) are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended and under the Act it is an offence to intentionally take white-clawed crayfish from the wild and to sell them. This species is also protected under the Habitat Regulations

2010 (as amended), requiring the designation of Special Areas of Conservation to protect important populations of this species.

Otter

The European otter (*Lutra lutra*) is the only native UK otter species. It is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. This law is reinforced by the UK's transposition of the EU Habitats Regulations under The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended). Together, these Regulations make it an offence to:

- capture, kill, disturb or injure otters (on purpose or by not taking enough care)
- damage or destroy a breeding or resting place (deliberately or by not taking enough care)
- obstruct access to their resting or sheltering places (deliberately or by not taking enough care)
- possess, sell, control or transport live or dead otters, or parts of otters

A convicted offence could get an unlimited fine and up to 6 months in prison.

Badgers

Badgers (*Meles meles*) and their setts are protected by the Protection of Badgers Act 1992. This makes it an offence to:

- intentionally capture, kill or injure a badger;
- damage, destroy or block access to their setts;
- disturb badgers in setts;
- treat a badger cruelly;
- deliberately send or intentionally allow a dog into a sett; and
- bait or dig for badgers.

Case law for this species contains example prosecutions of imprisonment for six months and heavy fines.

Hedgehogs and Common Toads

Under the NERC Act 2006, the hedgehog (*Erinaceus europaeus*) and common toad (*Bufo bufo*) are categorised as a 'Species of Principal Importance' (SPI) for biodiversity. Listing as SPI reflects concerns that populations have suffered a rapid and sustained decline in the UK. As such, they are a material consideration during planning.

Hedgerows

All native hedgerows (including species-poor ones) are listed under Section 41 of the NERC Act (2006) and are a Local Biodiversity Action Plan (LBAP) habitat. All native hedgerows are considered to be of high conservation value.

The Hedgerow Regulations (1997) classifies a hedgerow as 'important' if it:

- Satisfies at least 1 of the criteria listed in Part II of Schedule 1
- Has existed for 30 years or more

Any person wishing to remove a hedgerow is required to submit a hedgerow removal notice to the LPA. Items of Legislation that are pertinent regarding hedgerows include:

- Hedgerow Regulations 1997
- The countryside Rights of Way Act 2000
- Natural Environment and Rural Communities Act (NERC) 2006
- Planning Policy Statement (PPS) 9: Biodiversity and Geological Conservation
- NERC Act 2006
- The Conservation of Habitats & Species (Amendment) (EU Exit) Regulations 2019 (as amended)

Methodology

To complete a preliminary ecological assessment of the proposals, a desk-based assessment including the use of high-level satellite imagery to classify habitat types where access was not available, Extended Phase 1 Habitat Survey, and a preliminary protected species assessment were carried out. Taken together, in common with the Chartered Institute of Ecology & Environmental Management's (CIEEM) 2017 publication this is termed as a Preliminary Ecological Appraisal (PEA). This report aims to provide general advice on ecological constraints associated with any development of the site and includes recommendations for further survey; it is not intended that this report should be submitted with a planning application for development of the site, unless supported by the results of further surveys and a detailed assessment of the effects of the proposed development. Therefore, this assessment is considered 'preliminary' until any required protected species, habitat or invasive species surveys can be completed, and the results are then updated into a final 'Ecological Impact Assessment', which can be used to lawfully determine a planning application in line with current planning policy⁹. A standalone PEAR can be used for the following (all other circumstance will require an EclA for planning permission):

- Scoping for an Environmental Impact Assessment (EIA);
- an assessment as to whether a particular site should be included as an allocated site in a development plan;
- nature conservation development plans;
- sustainability appraisals (e.g. BREEAM); or
- an assessment of likely compliance with statutory obligations for developments which do not require planning consent or under Permitted Development Rights.

The study area included the Sesswick site as well as considering desk study data and applicable legislation (Appendix 3) as shown in the enclosed Site Location Plan (Appendix 1) and Phase 1 Habitat plan (Section 3) plus a buffer zone extended to include the Zone of Influence (see section below) of the proposals (hereafter referred to as the "Site").

This preliminary appraisal is based on a review of the development proposals provided by the Client, desk study data (third party information) and a survey of the Site. The aims of this report are to:

- Classify the habitat types at the site based on standard Phase 1 Habitat survey methodology;
- Evaluate any potential for protected or priority species/habitats to be present;
- Identify any ecological constraints that may affect the scheme design;
- Provide recommendations for any further surveys that might be required (for example to confirm presence / likely absence of protected species), which would need to be obtained for a subsequent EclA in order for a planning decision to be concurrent with current planning policy; and
- Identify opportunities for ecological enhancement to provide net biodiversity gain in line with the National Planning Policy Framework (NPPF, 2019).

This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist and therefore the view of RammSanderson Ecology Ltd.

The surveys and desk-based assessments undertaken as part of this review and subsequent report including the Ecological Constraints and Opportunities Plan are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).

⁹ Office of the Deputy Prime Minister Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System

Zone of Influence

The Zone of Influence (ZoI) is used to describe the geographic extent of potential impacts of a proposed development. The Zone is determined by the development proposals in relation to individual species ecological requirements indicated in best practice guidelines.

In relation to great crested newts (GCN), the ZoI is considered to be up to 500m from the site boundaries, as this is the distance that Natural England would require to be considered in relation to GCN licensing.

For badgers, the zone of influence is typically 30-50m from the Site boundary as this is the distance within which a sett can be damaged or disturbed by heavy machinery.

As bats are highly mobile species, the ZoI for these can be 5km from a site wherein high-quality habitat will be impacted by proposals.

For designated sites, the Zone of Influence can be >10km from the site and this is termed the Impact Risk Zone (IRZ). Where sites occur within an IRZ the requirement for a Habitat's Regulations Assessment or Environmental Impact Assessment may be triggered.

Preliminary Appraisal

The preliminary ecological appraisal is based on the standard best practice methodology provided by the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017). The assessment identifies sites, habitats, species and other ecological features that are of value based on factors such as legal protection, statutory or local site designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS) or inclusion on Red Data Book Lists or Local Biodiversity Action Plans. Based upon this, recommendations for further, more detailed surveys are made as appropriate to confirm presence / likely absence of a protected species.

In identifying constraints, the review considers the Client's Site proposals and any subsequent recommendations made are proportionate / appropriate to the site and have considered the Mitigation Hierarchy as identified below:

- **Avoid:** Provide advice on how the development may proceed by avoiding impacts to any species or sites by either consideration of site design or identification of an alternative option.
- **Mitigate:** Where avoidance cannot be implemented mitigation proposals are put forward to minimise impacts to species or sites as a result of the proposals. Mitigation put forward is proportionate to the site.
- **Compensate:** Where avoidance cannot be achieved any mitigation strategy will consider the requirements for site compensatory measures.
- **Enhance:** The assessment refers to planning policy guidance (e.g. NPPF) to relate the ecological value of the site and identify appropriate and proportionate ecological enhancement in line with both national and local policy.

Desk Based Assessment

Data regarding statutory and non-statutory designated sites, plus any records of protected or Priority species and habitats was requested from the local ecological records centre and online resources, details of which are provided in Table 2 below.

Table 13: Consulted resources

Habitats	Amount	
COFNOD	Non-Statutory Site Designations	2km
	Protected/Principal Species Records	2km
www.magic.gov.uk ^{10 11}	Statutory Site Designations (Impact Risk Zones)	20km
	Habitats of Principal Importance (NERC Act, 2006)	1km
		5km
	European Protected Species Licences	
Natural Resources Wales	Statutory Site Designations	2km

NB: Desk study data is third party controlled data, purchased or consulted for the purposes of this report only. RammSanderson Ecology Ltd cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.

Phase 1 Habitat Survey

An extended Phase 1 Habitat Survey of the site was completed to identify habitats present. All habitats within the site boundary were described and mapped following standard Phase 1 Habitat Survey methodology (JNCC, 2010), which categorises habitat type through the identification of individual plant species.

Nomenclature follows Stace (Stace, 2010) for vascular plant species and the DAFOR scale for relative abundance was used in the field to determine dominant plants within habitats and communities (D = dominant, A = abundant, F = frequent, O = occasional and R = rare).

Protected / Priority Species Scoping Assessment

The habitats on site were assessed for their suitability for supporting any legally protected or Priority species that would be affected by the proposed development. This includes invasive non-native plant species such as Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*).

Limitations

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

The main floristic season is April – September. Surveys conducted outside of this time may under record botanical species and habitats of note. However, due to the types of habitats present in the survey area the time of year is not seen as a limitation to overall habitat classification in this instance. However, local records of notable plant species were returned and should impacts to woodlands or grassland verges be expected, further surveys for these plants in order to avoid them may be required.

Accurate lifespan of ecological data

The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for approximately 18 months from the date of survey, notwithstanding any considerable changes to the

¹⁰ Multi Agency Geographic Information for the Countryside Interactive GIS Map.

¹¹ MAGIC resource was reviewed on the 02/08/2021. Natural Resources Wales was reviewed on the 06/08/2021

site conditions, the presence of mobile species such as bats, otters and badgers or where species/county specific guidance dictates otherwise (CIEEM, 2019).