

Preliminary Ecological Appraisal

Dowlais

May 2024

A report by

Chris Ayre BSc (Hons)

Report details

Site name: Dowlais
Site address: Dowlais, Merthy Tydfil, CF48 2TA
Grid reference: SO 07791 08849
Survey date: 17th May 2024
Report date: 31st July 2024
Report author: Chris Ayre BSc (Hons)
Report checked by: Colin Hicks BSc (Hons) MCIEEM

Report reference: WOR 4554.2

Declaration of compliance

BS 42020:2013

This study has been undertaken in accordance with British Standard 42020:2013 Biodiversity, Code of practice for planning and development.

Code of Professional Conduct

The information which we have prepared is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

Validity of survey data and report

The findings of this report are valid for 24 months from the date of survey. If work has not commenced within this period, an updated survey by a suitably qualified ecologist will be required.

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Non-technical summary

Western Ecology has been commissioned to complete a Preliminary Ecological Appraisal of an area of land at Dowlais, in Merthyr Tydfil. The proposed works are for a hydrogen plant at this site.

To ensure compliance with nature conservation legislation and planning policy, the following recommendations are made with regards to species:

Nesting birds

It is possible that common bird species nest within scattered scrub. Vegetation clearance in these areas should be completed during the period September to February inclusive, outside the accepted bird nesting season. If this is not practicable prior to the start of construction, the site should be thoroughly inspected by a suitably qualified person. If nesting birds are found, all activities likely to adversely impact the nesting area should be delayed until chicks have fledged.

Japanese Knotweed

Japanese Knotweed is growing just outside the southern boundary of the site, and it is likely that over time this plant will begin to colonise the development site. A Japanese knotweed management should be developed to avoid its spread into the site and may include vertical root barriers at the site margin.

Further surveys

No further surveys are required to support this planning application.

1. Introduction

Western Ecology has been commissioned to complete a Preliminary Ecological Appraisal of an area of land associated with the Dowlais power station.

The proposed works are for a hydrogen plant at this site.

1.1. Survey aims

The survey and this report identify features of conservation importance that could constitute a constraint to the works at this site. Where appropriate, recommendations for impact avoidance, mitigation and post-works enhancement are made to ensure compliance with wildlife legislation and relevant planning policy.

This survey has been prepared in accordance with the 'Guidelines for Preliminary Ecological Appraisal' produced by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2017).

1.2. Site location

The land surveyed is an area of land to the north of Merthyr Tydfil with open moorland to the north and developed areas to the south, east and west.

2. Survey methodology

2.1. Desktop survey

The desktop survey collated existing biological records for the site and adjacent areas, and identified any nature conservation sites that may be affected by the proposed works. This comprises an important part of the assessment process, providing information on ecological issues that may not be apparent during the site survey.

Consultees for the data search included:

- SEWBRc provided biological records for Protected and Priority Species, Other Species of Conservation Concern, Locally Important Species, Invasive & Non-Native Species, Designated Sites and Phase I habitats within 1km
- Natural England - GIS dataset of SSSI Impact Risk Zones, statutory nature conservation sites and Ancient Woodland.

Species data was examined for protected and notable species records. An assessment was then made, based on known habitat preferences, as to whether these species might be present within the site and how they might be affected by the proposed works.

The location of nature conservation sites was examined to determine their ecological and landscape relationships with the proposed works. An assessment was then made of how the sites may be affected by the proposed works, taking into account these relationships, and the species and/or habitat types for which the nature conservation site was chosen.

SSSI Impact Risk Zones are areas where the proposed planned change to the environment could either create significant damage to a local SSSI, or might require additional planning and consultation in order to avoid impacting such sites. The assessments are made according to the particular sensitivities of the features for which the SSSI is notified, and specifies the types of works that have the potential for adverse impacts.

In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

2.2. Field survey

A Preliminary Ecological Appraisal of the site was completed by Chirs Ayre BSc (Hons) 17th May 2024 in suitable weather conditions.

Habitats were classified using the Phase 1 Habitat Survey methodology developed by the Joint Nature Conservation Committee (JNCC, 2010) and modified by the Institute of Environmental Assessment (IEA, 1995), with quadrats undertaken according to UK Habitats Classification methodology (UK Habitat Classification Working Group, 2018) (see Plan 1). The main plant species were recorded, and broad habitat types mapped according to the UK Habitats Classification definitions. Habitats encountered are described within the Results section, with a map included within the report. Plant species were identified according to Stace (1997).

2.3. Method for valuation of habitats

The ecological value of habitats present is provided in line with Guidelines for Ecological Impact Assessment (CIEEM, 2018), and those which are important in terms of legislation or policy are identified. Table 1 summarises this information and details the extent of each habitat recorded here.

The nature conservation value, or potential value, of the habitat is determined within the following geographic context:

- International importance (e.g. internationally designated sites such as Special Areas of Conservation, Special Protection Areas, Ramsar sites);
- National importance (e.g. nationally designated sites such as Sites of Special Scientific Interest or species populations of importance in the UK context);
- County importance (e.g. SNCI, habitats and species populations of importance in the context of Mid Glamorgan);
- Local importance (e.g. important ecological features such as old hedges, woodlands, ponds);
- Site importance (e.g. habitat mosaic of grassland and scrub which may support a diversity of common wildlife species);
- Negligible importance. Usually applied to areas such as built development or areas of intensive agricultural land.

The examples are not exclusive and are subject to further professional ecological judgment.

2.4. Survey constraints

All areas of the site were readily accessible. Some plant species would have not been visible during the survey period due to the timing.

It should also be noted that habitats, and the species they may support, change over time due to natural processes and because of human influence. In line with current guidelines, the survey on which this report is based is valid for two years, after which time it will need updating. This report is valid until

2.5. Study area

The study area for the Preliminary Ecological Appraisal was the footprint of the proposed development, hereafter referred to as the ‘assessment site’, and its immediate boundaries. This is the area included within the line described as “Survey area” within the legend of Map 1.

3. Results

3.1. Site description

The assessment site comprises bare ground, grassland, spoil heaps with some scattered scrub and trees.

3.2. Phase 1 habitats

Habitats have been classified using the Phase 1 Habitat Survey methodology and UK Habitats Classification methodologies, and are described below and detailed in Map 1. Habitats which are important in terms of legislation or policy are identified in Table 1. Plant species that characterise each of these habitats are identified, although this is for descriptive purposes, and comprehensive inventory is not provided.

Table 1. Phase 1 habitats

Phase 1 habitat	Description	Ecological value
Bare ground	Gravelled hardcore which is bare.	Negligible
Ephemeral/short perennial	Other parts of the gravelled hardcore has encroaching vegetation colonising the ground, which grows thicker toward the fence boundaries. Species include ribwort plantain, barren strawberry, dandelion, dock, Italian alder, pussy willow, green strawberry, cowslip, birds foot trefoil, coltsfoot, rosebay willowherb, timothy and cocksfoot.	Site
Scattered scrub	On the southern fence boundary and growing around parts of the spoil heap, are patches of low, recently seeded scrubby vegetation, with buddleia, alder, pussy willow and bramble.	Site
Semi-improved neutral grassland	Boundary edges support low grass and forbs, with some ruderal and scrub growing in patches. Species include horsetail, bramble, rosebay willowherb, dandelion, oxeye daisy, cowslip, coltsfoot, common ragwort, vetch, timothy, cocksfoot, gorse, birds foot trefoil, ribwort plantain, sweet vernal grass, corkscrew rush and pendulous rush.	Site
Spoil	On the east side of the compound is a large spoil heap, consisting of hardcore, gravel and earth. It has been profiled and sloped and has been colonised by grasses, forbs and scrub. Water is draining through the spoil to the bottom edges. Species growing on it are coltsfoot, dandelion, rosebay willowherb, green strawberry, alder, horsetail, oxeye daisy, cocksfoot, timothy, bramble, buddleia, birds foot trefoil, vetch, weedy hawksbeard and pendulous sedge.	Site

3.3. Desktop survey

Statutory nature conservation sites

There is no statutory nature conservation site within 2km.

Non-statutory nature conservation sites

This industrial area is surrounded to three sides by Sites of Importance for Nature Conservations (SINC) as follows:

- Pan March and Traed y Milwyr, Llechryd SINC is 430m to the east of the assessment site
- Merthyr Common North SINC is 120m to the north of the assessment site
- Blaenmorlais SINC is 150m to the west of the assessment site

The following records for notable species are present within 1km of the Site:

Group	Latin name	Common name	Distance to nearest record (m)	Status	count
amphibian	Rana temporaria	Common Frog	641	HDir, WCA5, Bern, LBAP (ANG, CLY, CON, FLI, POW, TRA), WS_C	2
	Bufo bufo	Common Toad	157	WCA5, S7, Bern, LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, TRA, VOG), WS_C	3
	Triturus cristatus	Great Crested Newt	1393	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CLY, CON, DEN, FLI, MON, POW, SNP, TRA, TRF, LI(BIS), WS_C	1
	Lissotriton helveticus	Palmate Newt	1021	WCA5, Bern, LBAP (ANG, CLY, CON, DEN, FLI, POW, TRA), LI(BIS), WS_C	1
bird	Recurvirostra avosetta	Avocet	495	BDir1, WCA1.1, Bern, WBAm(RSPB), UKBAm(RSPB)	2
	Tyto alba	Barn Owl	583	WCA1.1, WCA9, Bern, CITES, LBAP (ANG, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, VOG, WRE), L	10
	Chlidonias niger	Black Tern	2178	BDir1, WCA1.1, Bern	1
	Chroicocephalus ridibundus	Black-headed Gull	316	BDir22, S7, WBR(RSPB), LBAP (GWY, VOG), UKBAm(RSPB)	7
	Podiceps nigricollis	Black-necked Grebe	2178	WCA1.1, Bern, WBAm(RSPB), UKBAm(RSPB)	1
	Pyrrhula pyrrhula	Bullfinch	495	S7, WBR(RSPB), LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, TRF, VOG), UKBAm(RSPB), WS_C	3
	Buteo buteo	Buzzard	447	CITES, LBAP (CLY, CON, POW)	12
	Branta canadensis	Canada Goose	495	BDir21, WCA9, INNS	9
	Larus canus	Common Gull	495	BDir22, WBR(RSPB), UKBAm(RSPB)	2
	Actitis hypoleucos	Common Sandpiper	300	WBR(RSPB), UKBAm(RSPB)	9

Sterna hirundo	Common Tern	2178	BDir1, Bern, LBAP (ANG, CON, GWY), WBAm(RSPB), UKBAm(RSPB)	1
Fulica atra	Coot	495	BDir21, LBAP (BRG), WBAm(RSPB)	7
Phalacrocorax carbo	Cormorant	495	LBAP (CON, GWY, POW), WBAm(RSPB), WS_C	5
Cuculus canorus	Cuckoo	495	S7, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, VOG), UKBR(RSPB), WS_C	4
Numenius arquata	Curlew	495	BDir22, S7, WBR(RSPB), LBAP (ANG, BBNP, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, VOG), LI(VC43),	3
Cinclus cinclus	Dipper	1160	Bern, LBAP (BRG, CLY, CON, MTR, POW, RCT, TRA), WBAm(RSPB), UKBAm(RSPB)	1
Calidris alpina	Dunlin	2178	Bern, WBR(RSPB), LBAP (CON, GWY, POW), LI(VC43), UKBAm(RSPB)	1
Prunella modularis	Dunnock	157	S7, Bern, LBAP (CON, POW, VOG), UKBAm(RSPB)	7
Turdus pilaris	Fieldfare	495	BDir22, WCA1.1, LBAP (CON, POW), WBAm(RSPB), UKBR(RSPB)	7
Larus hyperboreus	Glaucous Gull	200	Bern, UKBAm(RSPB)	2
Regulus regulus	Goldcrest	495	Bern, LBAP (CON, POW), WBAm(RSPB)	4
Pluvialis apricaria	Golden Plover	2178	BDir1, BDir22, S7, WBR(RSPB), LBAP (BBNP, CON, CRM, FLI, GWY, POW, SNP, VOG), LI(VC43), WS_C	1
Bucephala clangula	Goldeneye	920	BDir22, WCA1.2, LBAP (CON, POW), UKBAm(RSPB)	3
Locustella naevia	Grasshopper Warbler	2178	S7, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, VOG), UKBR(RSPB), WS_P	1
Larus marinus	Great Black-backed Gull	738	BDir22, WBR(RSPB), UKBAm(RSPB), WS_C	4
Tringa ochropus	Green Sandpiper	738	WCA1.1, Bern, LBAP (CON, VOG), WBAm(RSPB), UKBAm(RSPB)	3
Picus viridis	Green Woodpecker	495	Bern, LBAP (CLY, CON, DEN, FLI, GWY, PEM, POW, SNP), WBAm(RSPB), WS_C	4
Chloris chloris	Greenfinch	806	Bern, LBAP (CON, POW), WBAm(RSPB)	3
Ardea cinerea	Grey Heron	495	LBAP (BRG, RCT), WBAm(RSPB)	8
Motacilla cinerea	Grey Wagtail	495	Bern, LBAP (CLY, CON, POW, TRA), WBAm(RSPB), UKBR(RSPB)	2
Circus cyaneus	Hen Harrier	495	BDir1, WCA1.1, S7, CITES, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, SNP, VOG), LBAP (BBNP, DEN	4
Larus argentatus	Herring Gull	316	BDir22, S7, WBR(RSPB), LBAP (CON, GWY, POW, VOG), UKBR(RSPB), WS_C	18
Falco subbuteo	Hobby	2178	WCA1.1, Bern, CITES, LBAP (CON, GWY, POW, VOG), LI(VC43), WS_P	1
Passer domesticus	House Sparrow	389	S7, LBAP (CLY, CON, FLI, GWY, VOG), WBAm(RSPB), UKBR(RSPB), WS_C	11
Larus glaucoides	Iceland Gull	495	Bern, UKBAm(RSPB)	3
Lymnocyptes minimus	Jack Snipe	861	BDir21, LBAP (CON, POW), WBAm(RSPB)	3

Coloeus monedula	Jackdaw	157	BDir22	16
Falco tinnunculus	Kestrel	495	S7, Bern, CITES, WBR(RSPB), LBAP (ANG, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), LI(VC43), UKBAm(RSPB)	17
Alcedo atthis	Kingfisher	824	BDir1, WCA1.1, Bern, LBAP (CLY, CON, DEN, FLI, GWY, POW, TRA), WBAm(RSPB), UKBAm(RSPB), WS_C	2
Vanellus vanellus	Lapwing	472	BDir22, S7, WBR(RSPB), LBAP (ANG, BBNP, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM, POW, SNP, TRF, VOG),	26
Larus fuscus	Lesser Black-backed Gull	495	BDir22, LBAP (CON, GWY, PEM, POW, SNP), WBAm(RSPB), UKBAm(RSPB), WS_C	12
Acanthis cabaret	Lesser Redpoll	2178	S7, LBAP (CON), LBAP (DEN, POW, VOG), WBAm(RSPB), UKBR(RSPB), WS_C	1
Limosa limosa islandica	Limosa limosa islandica	2178	BDir22, WCA1.1, LBAP (CON, GWY), WBAm(RSPB), UKBR(RSPB)	1
Linaria cannabina	Linnet	316	S7, Bern, WBR(RSPB), LBAP (ANG, BBNP, CER, CLY, DEN, FLI, PEM, VOG), LBAP (CON, GWY), UKBR(RSPB), WS	7
Athene noctua	Little Owl	495	Bern, CITES, LBAP (CLY, CON), LI(VC43)	2
Charadrius dubius	Little Ringed Plover	738	WCA1.1, Bern, LBAP (CON, POW, VOG), LI(VC43)	2
Aegithalos caudatus	Long-tailed Tit	495	WBAm(RSPB)	7
Anas platyrhynchos	Mallard	300	BDir21, LBAP (CON, GWY), WBAm(RSPB), UKBAm(RSPB)	12
Poecile palustris	Marsh Tit	1498	S7, Bern, WBR(RSPB), LBAP (BBNP, CON, DEN, FLI, GWY, POW, VOG), UKBR(RSPB), WS_P, WS_C	1
Anthus pratensis	Meadow Pipit	157	Bern, LBAP (CON), WBAm(RSPB), UKBAm(RSPB)	13
Falco columbarius	Merlin	738	BDir1, WCA1.1, Bern, CITES, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, POW), LI(VC43), UKBR(RSPB), WS_P, W	3
Turdus viscivorus	Mistle Thrush	495	BDir22, Bern, WBAm(RSPB), UKBR(RSPB)	5
Haematopus ostralegus	Oystercatcher	495	BDir22, LBAP (CON, GWY), WBAm(RSPB), LI(VC43), UKBAm(RSPB)	2
Falco peregrinus	Peregrine	157	BDir1, WCA1.1, Bern, CITES, LBAP (ANG, CLY, CON, GWY, PEM, POW, TRF, VOG), LI(VC43), WS_P, WS_C	6
Ficedula hypoleuca	Pied Flycatcher	863	S7, WBR(RSPB), LBAP (CON, GWY, POW, SNP, VOG), UKBR(RSPB), WS_C	1
Anas acuta	Pintail	2178	BDir21, WCA1.2, CITES, LBAP (CON, GWY), WBAm(RSPB), UKBAm(RSPB)	1
Aythya ferina	Pochard	2178	BDir21, WBR(RSPB), LBAP (CON, POW), UKBR(RSPB), WS_C	1
Milvus milvus	Red Kite	495	BDir1, WCA1.1, WCA9, CITES, LBAP (CON, CRM, GWY, POW), WBAm(RSPB), WS_P	25
Tringa totanus	Redshank	2178	BDir22, LBAP (ANG, CON, GWY, POW), WBAm(RSPB), UKBAm(RSPB)	1
Phoenicurus phoenicurus	Redstart	495	Bern, LBAP (CON, GWY, POW, SNP), WBAm(RSPB), UKBAm(RSPB), WS_C	2
Turdus iliacus	Redwing	479	BDir22, WCA1.1, LBAP (CON, POW), WBAm(RSPB), UKBR(RSPB)	6

Emberiza schoeniclus	Reed Bunting	495	S7, Bern, LBAP (BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, VOG), WBAm(RSPB), UKBAm(RSPB), WS_C	8
Charadrius hiaticula	Ringed Plover	2178	S7, Bern, WBR(RSPB), LBAP (BBNP, CON, CRM, GWY, VOG), UKBR(RSPB), WS_C	1
Calidris pugnax	Ruff	2178	BDir1, BDir22, WCA1.1, LBAP (CON), WBAm(RSPB), UKBR(RSPB)	1
Riparia riparia	Sand Martin	2178	Bern, LBAP (CON, DEN, FLI, GWY, POW, VOG), WBAm(RSPB), WS_C	1
Calidris alba	Sanderling	2178	Bern, LBAP (CON), WBAm(RSPB), UKBAm(RSPB)	1
Aythya marila	Scaup	2178	BDir22, WCA1.1, LBAP (CON, GWY), WBAm(RSPB), UKBR(RSPB)	1
Tadorna tadorna	Shelduck	2178	Bern, LBAP (CON, GWY, VOG), WBAm(RSPB), UKBAm(RSPB)	1
Asio flammeus	Short-eared Owl	2178	BDir1, Bern, CITES, WBR(RSPB), LBAP (CON, DEN, GWY, PEM, POW), LI(VC43), UKBAm(RSPB), WS_P	1
Spatula clypeata	Shoveler	2178	BDir21, CITES, LBAP (ANG, CON, GWY, POW), WBAm(RSPB), UKBAm(RSPB)	1
Alauda arvensis	Skylark	316	BDir22, S7, LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRF, VOG), WBAm(RSPB)	11
Gallinago gallinago	Snipe	738	BDir21, LBAP (ANG, CON, DEN, FLI, GWY, POW), WBAm(RSPB), LI(VC43), UKBAm(RSPB), WS_C	7
Anser caerulescens	Snow Goose	2178	WCA9, INNS	1
Turdus philomelos	Song Thrush	412	BDir22, S7, Bern, LBAP (ANG, BBNP, CER, CLY, CON, DEN, FLI, GWY, PEM, POW, SNP, TRF, VOG, WRE), WBAm	6
Tringa erythropus	Spotted Redshank	2178	BDir22, LBAP (CON), WBAm(RSPB), UKBAm(RSPB)	1
Sturnus vulgaris	Starling	412	BDir22, S7, Bern, WBR(RSPB), LBAP (BBNP, CON, FLI, GWY, VOG), UKBR(RSPB), WS_C	13
Hirundo rustica	Swallow	157	Bern, LBAP (ANG, CON, GWY, POW, VOG), WBAm(RSPB)	12
Apus apus	Swift	495	LBAP (BRG, RCT, VOG), WBAm(RSPB), UKBAm(RSPB)	3
Anas crecca	Teal	920	BDir21, CITES, LBAP (ANG, CON, DEN, FLI, GWY), LBAP (ANG, DEN, FLI), WBAm(RSPB), LI(VC43), UKBAm(RSP)	4
Aythya fuligula	Tufted Duck	495	BDir21, LBAP (CON, POW, VOG), WBAm(RSPB)	7
Cygnus columbianus	Tundra Swan	495	BDir1, WCA1.1, S7, Bern, WBR(RSPB), LBAP (CON, GWY, POW, VOG), UKBAm(RSPB)	1
Oenanthe oenanthe	Wheatear	316	Bern, LBAP (BRG, CON, POW), WBAm(RSPB)	11
Numenius phaeopus	Whimbrel	2178	BDir22, WCA1.1, LBAP (CON, GWY), WBAm(RSPB), UKBR(RSPB)	1
Saxicola rubetra	Whinchat	495	Bern, WBR(RSPB), LBAP (BRG, CON, DEN, FLI, GWY, PEM, POW, RCT), UKBR(RSPB)	4
Curruca communis	Whitethroat	495	WBR(RSPB), LBAP (CON, POW)	1
Cygnus cygnus	Whooper Swan	495	BDir1, WCA1.1, Bern, LBAP (CON, GWY, POW), UKBAm(RSPB)	2

	Mareca penelope	Wigeon	807	BDir21, CITES, LBAP (CON, GWY), WBAm(RSPB), UKBAm(RSPB), WS_C	2
	Phylloscopus trochilus	Willow Warbler	300	WBR(RSPB), LBAP (CON), UKBAm(RSPB)	11
	Scolopax rusticola	Woodcock	1160	BDir21, WBR(RSPB), LBAP (CON, DEN, FLI, GWY, POW), LI(VC43), UKBR(RSPB), WS_C	1
	Troglodytes troglodytes	Wren	393	Bern	7
	Motacilla flava	Yellow Wagtail	2178	S7, Bern, WBR(RSPB), LBAP (CON, DEN, FLI, POW, TRA, VOG), LI(VC43), UKBR(RSPB), WS_C	1
	Larus michahellis	Yellow-legged Gull	583	UKBAm(RSPB)	2
crustacean	Pacifastacus leniusculus	Signal Crayfish	848	WCA9, INNS	1
	Austropotamobius pallipes	White-clawed Crayfish	1498	HDir, WCA5, S7, Bern, RDB1 (UK) - EN, LBAP (BBNP, CLY, PEM, POW, TRA, TRF)	1
flowering plant	Ophrys apifera	Bee Orchid	316	CITES, LBAP (CLY, GWY, TRA, TRF), LI(SEWBRc), LI(VC47), LI(VC48, LR), LI(VC49, LS), WS_C	3
	Buddleja davidii	Butterfly-bush	157	INNS	5
	Pinguicula vulgaris	Common Butterwort	1005	LBAP (ANG), LI(SEWBRc), LI(VC47), LI(VC50, LS), LI(VC51, LS), WS_C	3
	Euphrasia micrantha	Common Slender Eyebright	728	RDB1 (Wales) - VU, RDB1 (UK) - DD, LI(SEWBRc), LI(VC48, LR), LI(VC49, LR), LI(VC51, LR), WS_P	1
	Dactylorhiza fuchsii	Common Spotted-orchid	640	LBAP (CLY, TRA)	1
	Cotoneaster	Cotoneaster	738	WCA9, INNS	1
	Primula veris	Cowslip	157	LBAP (CLY), LI(VC47), LI(VC48, LS)	1
	Empetrum nigrum	Crowberry agg.	738	LI(SEWBRc), LI(VC47), LI(VC51, LS), WS_C	1
	Lagarosiphon major	Curly Waterweed	894	WCA9, INNS	1
	Cirsium acaule	Dwarf Thistle	157	LBAP (DEN, FLI), LI(SEWBRc), LI(VC47), LI(VC50, LR), LI(VC51, LR), WS_C	1
	Sparganium angustifolium	Floating Bur-reed	300	LI(SEWBRc), LI(VC43), LI(VC47), LI(VC50, LR), WS_P	3
	Chenopodium bonus-henricus	Good-King-Henry	495	RDB1 (UK) - VU, LBAP (GWY, VOG), LI(SEWBRc), LI(VC48, LS), LI(VC49, LS), LI(VC50, LR), LI(VC52, LR)	2
	Plantago media	Hoary Plantain	157	LI(SEWBRc), LI(VC43), LI(VC48, LR), LI(VC49, LR), LI(VC50, LS), LI(VC52, LR), WS_C	1
	Alchemilla xanthochlora	Intermediate Lady's-mantle	640	LI(SEWBRc), LI(VC47), LI(VC50, LS), LI(VC51, LS), LI(VC52, LS), WS_C	2
	Fallopia japonica	Japanese Knotweed	752	WCA9, INNS	3
	Rosa rugosa	Japanese Rose	316	WCA9, INNS	3
	Sagina nodosa	Knotted Pearlwort	806	LI(SEWBRc), LI(VC43), LI(VC47), LI(VC50, LS), LI(VC51, LS), WS_C	1
	Carex viridula subsp. brachyrrhyncha	Long-stalked Yellow-sedge	1029	LBAP (BRG, DEN, VOG), LI(SEWBRc), LI(VC47), LI(VC49, LS), LI(VC51, LS), WS_C	1

	<i>Crocospia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>	Montbretia	157	WCA9, INNS	2
	<i>Epilobium brunnescens</i>	New Zealand Willowherb	738	INNS	3
	<i>Veronica catenata</i>	Pink Water-speedwell	738	LI(SEWBRcC), LI(VC43), LI(VC47), LI(VC48, LR), LI(VC49, LR), LI(VC50, LR), WS_C	1
	<i>Salix purpurea</i>	Purple Willow	316	LBAP (BGW), LI(SEWBRcC), LI(VC43), LI(VC47), LI(VC48, LS), LI(VC50, LR), LI(VC51, LR), LI(VC52, LS),	1
	<i>Anacamptis pyramidalis</i>	Pyramidal Orchid	500	LBAP (BRG, CLY, TRA), LI(SEWBRcC), LI(VC47), LI(VC48, LS), WS_C	1
	<i>Ceratophyllum demersum</i>	Rigid Hornwort	814	LBAP (BRG, CON), LI(SEWBRcC), LI(VC49, LR), LI(VC50, LR), LI(VC51, LR), LI(VC52, LS), WS_C	1
	<i>Hippophae rhamnoides</i>	Sea-buckthorn	316	RDB2 (UK) - S, LBAP (CON), INNS	1
	<i>Persicaria minor</i>	Small Water-pepper	451	RDB1 (UK) - VU, LBAP (CON, GWY, VOG), LI(VC43), LI(VC47), LI(VC48, LS), LI(VC49, LS), LI(VC52, LR),	2
	<i>Dactylorhiza praetermissa</i>	Southern Marsh-orchid	316	LBAP (CLY, GWY, TRA), LI(VC43), LI(VC47), LI(VC48, LR), LI(VC49, LR), LI(VC50, LR)	2
	<i>Viola palustris</i> subsp. <i>palustris</i>	<i>Viola palustris</i> subsp. <i>palustris</i>	738	LI(VC47)	1
	<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	157	WCA9, INNS	1
fungus	<i>Entoloma bloxamii</i> s. lat.	Big Blue Pinkgill	689	S7, WS_P	1
	<i>Geoglossum atropurpureum</i>	Dark-Purple Earthtongue	707	S7, LI(BIS), WS_P	1
horsetail	<i>Equisetum variegatum</i>	Variegated Horsetail	806	RDB2 (UK) - S, LBAP (ANG, BRG, CON, DEN, FLI, GWY), LI(SEWBRcC), LI(VC48, LR), LI(VC49, LR), LI(VC51	1
insect - beetle (Coleoptera)	<i>Harmonia axyridis</i>	Harlequin Ladybird	495	INNS	1
insect - butterfly	<i>Erynnis tages</i>	Dingy Skipper	316	S7, RDB1 (UK) - VU, LBAP (BGW, BRG, CON, FLI, GWY, SWN, VOG), LI(SEWBRcC), WS_C	2
	<i>Hipparchia semele</i>	Grayling	807	S7, RDB1 (UK) - VU, LBAP (BRG, CDF, GWY, RCT, VOG), LI(SEWBRcC), LI(VC43), WS_C	2
	<i>Euphydryas aurinia</i>	Marsh Fritillary	640	HDir, WCA5, S7, Bern, RDB1 (UK) - VU, LBAP (ANG, BBNP, CER, CON, CRM, GWY, PEM, POW, SNP, TRA, VOG),	2
	<i>Coenonympha pamphilus</i>	Small Heath	300	S7, RDB1 (UK) - NT, LBAP (GWY, VOG), WS_C	5
	<i>Lasiommata megera</i>	Wall	486	S7, RDB1 (UK) - NT, LBAP (GWY, VOG), WS_C	3
insect - dragonfly (Odonata)	<i>Coenagrion puella</i>	Azure Damselfly	300	LBAP (CLY, SNP), LI(BIS)	1
	<i>Sympetrum danae</i>	Black Darter	738	LBAP (CLY, SNP), LI(BIS), LI(SEWBRcC), WS_C	2
	<i>Orthetrum cancellatum</i>	Black-tailed Skimmer	300	LBAP (CLY, SNP), LI(BIS), LI(SEWBRcC), WS_C	1
	<i>Ischnura elegans</i>	Blue-tailed Damselfly	300	LBAP (CLY, SNP), LI(BIS)	4
	<i>Libellula depressa</i>	Broad-bodied Chaser	300	LBAP (CLY, SNP), LI(BIS)	2
	<i>Enallagma cyathigerum</i>	Common Blue Damselfly	300	LBAP (CLY, SNP), LI(BIS)	4

	<i>Sympetrum striolatum</i>	Common Darter	300	RDB1 (UK) - DD, LBAP (CLY, SNP), LBAP (SNP), LI(BIS)	1
	<i>Aeshna juncea</i>	Common Hawker	300	LBAP (CLY, SNP), LI(BIS)	3
	<i>Lestes sponsa</i>	Emerald Damselfly	300	LBAP (CLY, SNP), LI(SEWBRc), LI(VC42), LI(VC43), LI(VC47), LI(VC50), WS_C	2
	<i>Anax imperator</i>	Emperor Dragonfly	300	LBAP (CLY, SNP), LI(BIS)	3
	<i>Libellula quadrimaculata</i>	Four-spotted Chaser	300	LBAP (CLY, SNP), LI(BIS)	2
	<i>Cordulegaster boltonii</i>	Golden-ringed Dragonfly	300	LBAP (CLY, SNP), LI(BIS), LI(SEWBRc), WS_C	3
	<i>Orthetrum coerulescens</i>	Keeled Skimmer	738	LBAP (BGW, BRG, CLY, SNP), LI(BIS), LI(SEWBRc), WS_P	3
	<i>Pyrrhosoma nymphula</i>	Large Red Damselfly	300	LBAP (CLY, SNP), LI(BIS)	7
	<i>Ischnura pumilio</i>	Scarce Blue-tailed Damselfly	300	RDB1 (UK) - NT, LBAP (BGW, BRG, CLY, GWY, PEM, SNP, TRF), LI(BIS), LI(SEWBRc), WS_C	5
insect - hymenopteran	<i>Bombus terrestris</i>	Buff-tailed Bumblebee	825	LBAP (FLI, MTR)	1
Insect - moth	<i>Tyria jacobaeae</i>	Cinnabar	157	S7, LBAP (GWY, VOG)	2
	<i>Crambus pratella</i>	Scarce Grass-veneer	990	RDB2 (UK) - NB	1
liverwort	<i>Ptilidium ciliare</i>	Ciliated Fringewort	157	RDB1 (Wales) - LC, LI(VC41, LR)	2
	<i>Solenostoma sphaerocarpaceum</i>	Round-fruited Flapwort	738	RDB1 (Wales) - LC, LI(VC41, LR), LI(VC43, LR), LI(VC44, LR), LI(WWBIC)	1
	<i>Solenostoma paroicum</i>	Shining Flapwort	1006	RDB1 (Wales) - LC, LI(VC35, LR), LI(VC41, LR), LI(VC42, LR), LI(VC43, LR), LI(VC44, LS), LI(WWBIC)	2
moss	<i>Polytrichastrum alpinum</i>	Alpine Haircap	738	RDB1 (Wales) - LC, LI(VC45, LS), LI(WWBIC)	2
	<i>Hygrohypnella ochracea</i>	Claw Brook-moss	738	RDB1 (Wales) - LC, LI(VC35, LR)	2
	<i>Amblystegium serpens</i>	Creeping Feather-moss	738	RDB1 (Wales) - LC, LI(VC44, EX), LI(VC44, LR), LI(WWBIC)	1
	<i>Palustriella commutata</i>	Curled Hook-moss	738	RDB1 (Wales) - LC, LI(VC46, EX), LI(VC46, LR), LI(WWBIC)	5
	<i>Hypnum cupressiforme</i> var. <i>lacunosum</i>	Great Plait-moss	157	RDB1 (Wales) - LC, LI(VC45, LR), LI(WWBIC)	2
	<i>Campylopus introflexus</i>	Heath Star Moss	738	INNS	1
	<i>Scorpidium cossonii</i>	Intermediate Hook-moss	738	RDB1 (Wales) - LC, LI(VC35, LS), LI(VC41, LR), LI(VC43, LR)	5
	<i>Dichodontium palustre</i>	Marsh Forklet-moss	738	RDB1 (Wales) - LC, LI(VC35, LS), LI(VC51, LR), LI(VC52, LR)	2
	<i>Palustriella falcata</i>	<i>Palustriella falcata</i>	806	RDB1 (Wales) - LC, LI(VC45, LS), LI(VC46, LR), LI(VC51, EX), LI(WWBIC)	3
	<i>Scorpidium revolvens</i>	<i>Scorpidium revolvens</i>	1005	LI(VC35, LR)	1
	<i>Flexitrichum gracile</i>	Slender Ditrichum	157	RDB1 (Wales) - LC, LI(VC43, LR), LI(VC45, LR), LI(VC47, LR), LI(VC48, LR), LI(VC50, LR), LI(WWBIC)	1
	<i>Plagiomnium elatum</i>	Tall Thyme-moss	806	RDB1 (Wales) - LC, LBAP (CON, FLI), LI(VC35, LS), LI(VC41, LR), LI(VC45, LR), LI(VC46, LR), LI(VC47,	1

	<i>Philonotis calcarea</i>	Thick-nerved Apple-moss	806	RDB1 (Wales) - LC, LBAP (CON, FLI), LI(VC41, LR), LI(VC45, LR), LI(VC46, LR), LI(VC48, LR), LI(VC49,	1
	<i>Tortula muralis</i>	Wall Screw-moss	738	RDB1 (Wales) - LC, LI(VC35, LR)	2
terrestrial mammal	<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	762	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW,	3
	<i>Lutra lutra</i>	Eurasian Otter	200	EPS, HDir, WCA5, S7, Bern, CITES, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM	2
	<i>Arvicola amphibius</i>	European Water Vole	824	WCA5, S7, LBAP (ANG, BBNP, CER, CLY, CON, CRM, DEN, FLI, GWY, PEM, POW, SNP, TRA, TRF, VoG), WS_P	1
	<i>Rhinolophus ferrumequinum</i>	Greater Horseshoe Bat	2173	EPS, HDir, WCA5, AnII, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CER, CLY, CRM, DEN, FLI, MON, PEM, POW,	1
	<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	1552	EPS, HDir, WCA5, AnII, S7, Bern, RDB2 (UK), LBAP (ANG, BBNP, CLY, CON, CRM, DEN, FLI, GWY, MON, PEM,	13
	<i>Myotis</i>	Myotis Bat species	762	EPS, HDir, WCA5, Bern, LBAP (ANG, DEN, FLI, SNP, TRA, TRF)	1
	<i>Nyctalus noctula</i>	Noctule Bat	1237	EPS, HDir, WCA5, S7, Bern, RDB2 (UK), LBAP (ANG, CLY, CON, DEN, FLI, GWY, POW, SNP, TRA, TRF, VOG),	1
	<i>Erinaceus europaeus</i>	West European Hedgehog	287	S7, Bern, LBAP (ANG, BGW, BRG, CON, FLI, GWY, NEW, POW, RCT, VOG)	5

1 Geffery Close
Landrake
Saltash
Cornwall
PL12 5HA

Tel: 0800 622 6828
email: office@westernecology.co.uk

- Legend
- Japanese Knotweed
 - Scattered scrub
 - Scattered trees
 - Semi-improved neutral grassland
 - Tarmac
 - Ephemeral/short perennial
 - Spoil

Title: Map 1. Phase 1 habitats

Project: Dowlais

Checked by: CDH Version: 03
Date: 04/10/2024



3.4. Potential for species of nature conservation importance

Habitats have been assessed from the results of the field survey for their potential to support the following protected species. Where there is no potential for a species or species group to be present within the site, they may be scoped out at this stage.

Table 4. Potential for species of nature conservation importance

Species	Assessment	Presence/likely value
Amphibians	There are no ponds within 250m of the site. Given the barriers to the site, including road and industrial sites, it is unlikely that Great crested newt or other amphibians are present.	Negligible
Badgers	No evidence of badger setts or activity. It is unlikely that badgers forage within the site.	Negligible
Bats (roosting/hibernating)	The trees on site have negligible potential for day roosting bats.	Negligible
Bats (foraging/commuting)	Sparsely vegetated land and bare ground has very little value for foraging bats whilst this site is set within an industrial area.	Low
Dormouse	There are no habitats on site to support Dormice. Dormice do not need to be considered further.	Negligible
Birds	Scrub and trees have some limited potential for common and widespread nesting birds.	Low
Reptiles	Sparsely vegetated land and bare ground has very little value for reptiles and would not provide sufficient cover.	Negligible
Otter	No watercourse suitable for otter were present. Otter do not need to be considered further.	Negligible
Water Vole	No watercourse suitable for water vole were present. Water vole does not need to be considered further.	Negligible
Notable invertebrates	Habitats at this assessment site are likely to support common and widespread invertebrate but have limited potential for notable species.	Negligible
Notable plants	Habitats within the assessment site provide little potential for notable or rare plants and they do not need to be considered further.	Negligible
Invasive non-native plants	Japanese Knotweed is growing just outside the southern boundary of the site. It is listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) with respect to England and Wales.	Present

4. Evaluation of ecological features and potential impacts

Ecological features that have the potential to be present have been assessed in light of current nature conservation policy, planning policy and wildlife legislation by an experienced ecologist (see Appendix 1). Where necessary, the ecological value of an ecological feature is given along with the potential effect of the proposed works.

If it is considered that the proposed works is likely to have no effect on features that have been identified as present, or potentially present, they may be scoped out at this stage.

Table 5. Assessment of ecological features

Feature group	Ecological feature	Assessment	Conservation status	Mitigation required?
Species of nature conservation importance	Bats (foraging and commuting)	Sparsely vegetated land and bare ground has very little value for foraging bats whilst this site is set within an industrial area. Development is extremely unlikely to result in an impact on this species group and no mitigation is recommended.	Wildlife and Countryside Act 1981 (as amended), and The Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 Seven species are listed as species “of principal importance for the purpose of conserving biodiversity”	No
	Nesting birds	It is possible that common bird species nest within scrub. Any works that damage these habitats can adversely impact nesting birds.	Wildlife and Countryside Act 1981 (as amended) Fifty-nine species are listed as species “of principal importance for the purpose of conserving biodiversity”	Yes
Invasive non-native plants	Japanese Knotweed	Japanese Knotweed is growing just outside the southern boundary of the site, and it is likely that over time this plant will begin to colonise the development site.	Wildlife and Countryside Act 1981 (as amended)	Yes

5. Recommendations

Mitigation

Where there is potential that vegetation management will have a significant¹ effect on a valued ecological feature of nature conservation interest, recommendations for mitigation are made based on the mitigation hierarchy suggested in Paragraph 118 of the National Planning Policy Framework and detailed in Paragraph: 018 Reference ID: 8-018-20140306 of National Planning Practice Guidance;

- Avoidance –significant harm to wildlife species and habitats should be avoided through design.
- Mitigation – where significant harm cannot be wholly or partially avoided, it should be minimised by design, or by the use of effective mitigation measures that can be secured by, for example, conditions or planning obligations.
- Compensation – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, this should be properly compensated for by measures to provide for an equivalent value of biodiversity.

Table 6 provides recommendations for impact avoidance, mitigation and compensation, along with a summary of net gains and losses to biodiversity resulting from the proposed development with mitigation, but without biodiversity enhancement.

Further surveys are recommended where additional information is required to inform a mitigation.

Table 6. Recommendations and summary of net gains and losses to biodiversity

Feature group	Ecological feature	Recommendations	Further surveys required to inform this assessment?	Summary of gains/losses
Species of conservation concern	Nesting birds	There is potential for common and widespread nesting birds to present within woody scrub and trees. Vegetation clearance in these areas should be completed during the period September to February inclusive, outside the accepted bird nesting season. If this is not practicable prior to the start of construction, the site should be thoroughly inspected by a suitably qualified	No	Impact/offence avoided

¹ For the purposes of this report, a practical approach has been taken to define the term 'significant'. If an effect is sufficiently important to be given weight in the planning process or to warrant the imposition of a planning condition, it is likely to be 'significant' in the context of the level under consideration (BSI, 2013).

		person. If nesting birds are found, all activities likely to adversely impact the nesting area should be delayed until chicks have fledged.		
Invasive non-native plants	Japanese Knotweed	It is likely that over time this plant will colonise the development site. A Japanese knotweed management should be developed to avoid its spread into the site and may include vertical root barriers at the site margin.	No	Impacts avoided

6. Further surveys

Information within this report is sufficient to allow a robust assessment of the potential effects on the majority of ecological features associated, or potentially associated, with this site.

No further surveys are recommended to support this planning application.

References

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Appendix 1:

Legislation and Policy used to assess habitats and species

Environment (Wales) Act 2016

The Environment (Wales) Act puts in place the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way.

The Act received Royal Assent in 2016. It delivers against Welsh Government's Programme for Government commitment to introduce new legislation for the environment.

European Habitats and Species Directive (CEC, 1992)

The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance.

European Red Data lists (IUCN, 2000)

International Union for Conservation of Nature (IUCN) and the European Commission have been working together on an initiative to assess around 6,000 European species according to IUCN regional Red Listing Guidelines. Through this process they have produced a European Red List identifying those species which are threatened with extinction at the European level so that appropriate conservation action can be taken to improve their status.

European Council Birds Directive (CEC, 1979)

The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. An important part of this Directive is the identification and classification of Special Protected Areas (SPAs) to protect vulnerable bird species listed in Annex 1 of the Directive and regularly occurring migrating species.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

This Act is the primary legislation that protects animals, plants and certain habitats in the UK.

The Conservation of Habitats and Species Regulations 2017

The Conservation of Habitats and Species Regulations 2017 consolidate and update the Conservation of Habitats and Species Regulations 2010, and transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") and elements of Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in England, Wales, and to limited extent, Scotland and Northern Ireland.

The objectives of the Habitats Directive is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Directive lays down rules for the protection, management and exploitation of such habitats and species.

The Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species. These sites form a network termed Natura 2000 and include Special Areas of Conservation and Special Protection Areas.

Protection of Badgers Act 1992

The Protection of Badgers Act 1992 consolidated and improved previous legislation. Under the Act it is an offence to kill, injure or take a Badger, or to damage or interfere with a sett used by a Badger unless a licence is obtained from a statutory authority.

The Hedgerow Regulations 1997

The Hedgerows Regulations 1997 protect certain hedgerows from being removed (uprooted or destroyed) if they meet certain criteria.

The Countryside and Rights of Way (CROW) Act 2000

This Act increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation.

Circular 06/2005 Biodiversity and geological conservation – statutory obligations and their impact within the planning system

This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It complements the national planning policy in the National Planning Policy Framework and the Planning Practice Guidance.

Natural Environment and Rural Communities Act 2006

The Act made amendments to the both the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way (CROW) Act 2000. For example, it extended the CROW biodiversity duty to public bodies and statutory undertakers.

UK Post-2010 Biodiversity Framework, 2012

The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach', and is the result of a change in strategic thinking.

Planning (Wales Act) 2015

As of 6th July 2015, the Planning (Wales) Act 2015 came into force. This Act puts into place delivery structures, processes and procedures to create a modern delivery framework for the preparation of development plans and planning decisions, ruling that any statutory body carrying out a planning function must exercise those functions in accordance with the principles of sustainable development as set out in the Well-being of Future Generations (Wales) Act 2015.

Planning Policy Wales - Edition 12

Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government, establishing a commitment towards sustainable development within the planning system. It envisions the planning system to recognise the threat of climate change, and to reconcile the need of development and conservation; fundamental for sustainable development.

The natural choice: securing the value of nature (2011) (Natural Environment White Paper)

This White Paper outlines the Governments vision for the future of landscape and ecosystem services.