



PROPOSED DEVELOPMENT:

**LAND AT GIBBONS COACHES,
BEDLINOG,
TREHARRIS**

PRELIMINARY ECOLOGICAL ASSESSMENT

JUNE 2022

Taff Bargoed Development Trust

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Celtic Ecology and Conservation Ltd
374 Cowbridge Road East
Cardiff
CF5 1JJ

info@cecltd.uk

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TAFF BARGOED DEVELOPMENT TRUST

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Preliminary Ecological Assessment

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Drawings

Drawing number	Title
-	Site Location Plan

NON-TECHNICAL SUMMARY

A preliminary ecological assessment was undertaken of a site on land owned by the Taff Bargoed Development Trust at Gibbons Coaches in Trelewis in south Wales in support of a retrospective planning application to use land adjacent to a large metal shed for parking coaches. A hard standing was created on 1 March 2013.

The work involved a phase 1 habitat survey to categorise the habitats present, an assessment of the site's ability to provide suitable habitats for protected species, in particular bats, and recommendations for further survey and actions as necessary.

There are no statutorily designated sites within 2km of the site notified for biological reasons.

There are thirteen Sites of Importance for Nature Conservation (SINCs) within 2km of the site.

Habitats on, and immediately adjacent to, the site included:

- Scattered trees;
- Scrub; and
- Bare ground;

No non-native invasive species were observed on the site.

There is one building on the site; however this does not provide any potential bat roosting habitat and will be retained as part of the development. None of the trees on the site provides potential roost features as they are all immature and/or small.

The denser areas of scrub around the site provide habitat for breeding birds.

The habitats on the edges of the site provide potential for reptiles.

No evidence of, or potential for, any other protected species was recorded within the site boundary.

Mitigation is not required as the work has already been undertaken.

It is considered that no further ecological surveys are required.

1 INTRODUCTION

1.1 OBJECTIVE

The objectives of this report are to:

- identify the habitats present on the site;
- identify the potential for protected species to be present on site;
- determine the presence of protected sites on or adjacent to the site;
- using the information gathered to determine whether there may be any impacts (both positive and negative) on protected species present;
- provide recommendations for further survey as necessary; and
- suggest outline mitigation and enhancement ideas and principles

1.2 METHODOLOGY

To achieve the objectives set out above, field based assessments of habitats and protected species were undertaken, with the results being assessed for any impacts (adverse and / or positive).

The impact assessment was undertaken by ecological feature rather than by section i.e. each subject is discussed and assessed separately and summarised in conjunction with the others.

1.3 SITE DESCRIPTION

Photos are at **Appendix A**.

The site is approximately 0.12ha in extent and is located on land owned by the Taff Bargoed Development Trust on the site of the former Trelewis Drift Mine between Trelewis and Bedlinog in Merthyr Tydfil County Borough in south Wales (centred on NGR ST 10279955) (**Figures 1 & 2** and **Appendix C**).

The site (Plates 1 - 3) is dominated by bare ground (tarmac and concrete), bounded by scrub and scattered trees to the north west and north east (Plates 4 & 5) and a large metal shed to the south west. The scrub and scattered trees takes the form of “ffridd” a habitat of bramble scrub and dense bracken under widely scattered trees.

There are areas of woodland and semi-improved grassland outwith the development site boundary but which have been included for completeness and clarity.

The boundaries of the site are open.

The whole site is located in a valley running north to south with the access coming via a private road off the B4255 linking Trelewis to Bedlinog. The valley vegetation is dominated by bracken, gorse stands, scrub and small woodlands. The Afon Bargoed Taff river flows north to south down the centre of the valley.

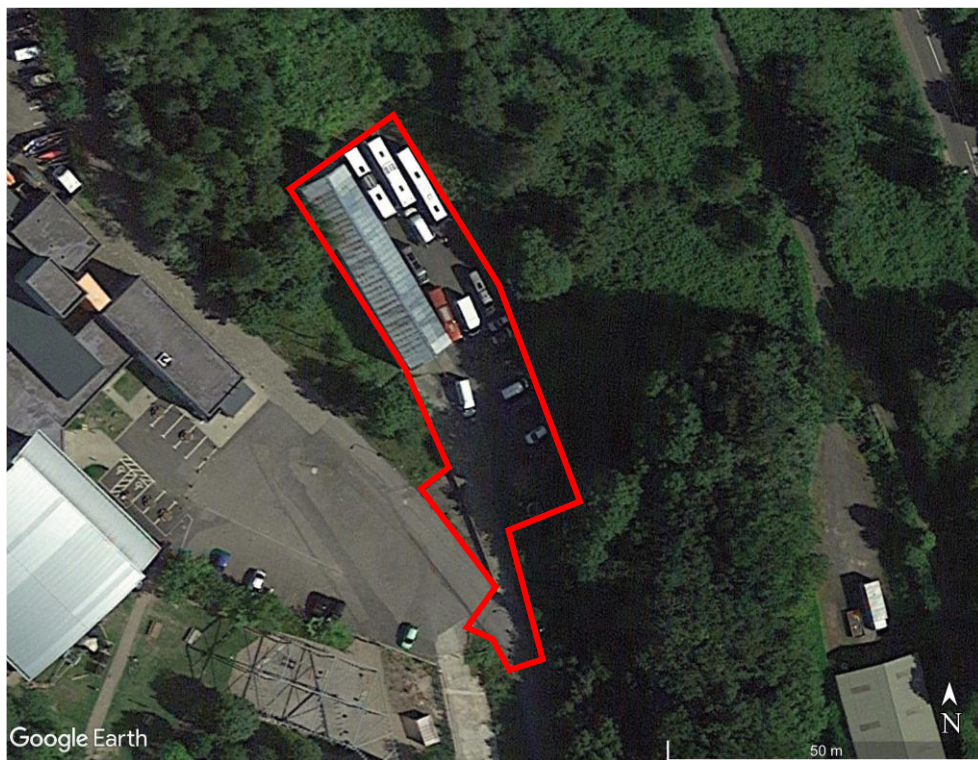
The site was cleared sometime prior to 2001 to create a hardstanding area (**Figure 3**) with work undertaken afterwards just prior to or in 2013 to create a formal hard standing (**Figure 4**). A photo of the site taken sometime between 2008 and 2010 is at **Plate 6**. The site was then allowed to revegetate before being cleared again and surfaced in 2018 (**Figure 5**). Following this, the areas outwith the tarmac were allowed to revegetate and have since recovered the scrub and bramble mosaic they had before the clearance.

Figure 1 – location of the Gibbons Coaches development site (arrowed red)



(Image courtesy of Google Earth)

Figure 2 – detailed view of the Gibbons Coaches development site (approximate boundary in red)



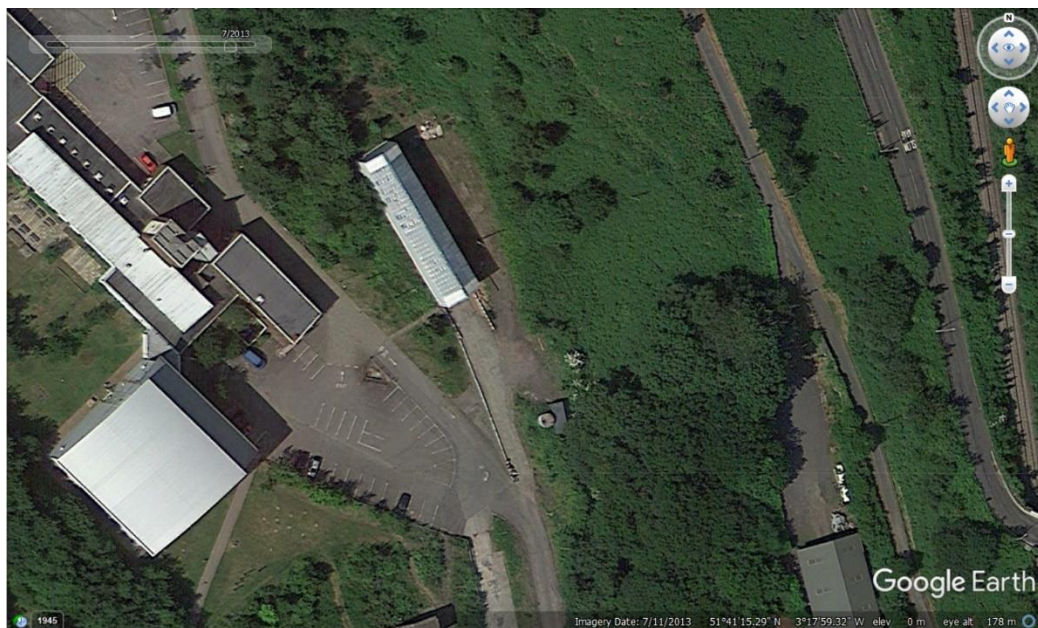
(Image courtesy of Google Earth)

Figure 3 – aerial photo of the Gibbons Coaches development site from 2001



(Image courtesy of Google Earth)

Figure 4 – location of the Gibbons Coaches development site from 2013



(Image courtesy of Google Earth)

Figure 5 – location of the Gibbons Coaches development site from 2018



(Image courtesy of Google Earth)

1.4 PROPOSED DEVELOPMENT

It is understood that the development proposal is to use the site as a parking area for coaches and that the work to create a formal hardstanding was carried out in 2013.

1.5 STUDY AREA

The field survey looked at the red line development area itself and up to 20m from the site boundaries where possible.

The biological records data search used a 2km search buffer around the central point of the site; parameters included statutorily and non-statutorily designated sites, European protected species, UK protected species and species of local conservation concern.

1.6 PREVIOUS SURVEYS

None known.

1.7 CONSTRAINTS

There may be records that remain either undigitised or unsubmitted to the local records centre. Lack of records in no way demonstrates or proves absence.

There were no other constraints to the survey.

2 REGULATORY FRAMEWORK

2.1 INTERNATIONAL

European Union legislation requires that member states designate sites for the protection of habitats and species included in the annexes of both Council Directive 92/43/EC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive) and Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). This legislation is implemented in the UK by the Conservation of Habitats and Species Regulations 2017 (as amended) (“the Habitat Regulations”). This results in sites being designated as Special Areas of Conservation (SACs) and Special Protection Areas respectively (SPAs).

Following the UK’s exit from the European Union on 31st January 2020, the law responsible for continuing to implement this legislation through the transition period is The Conservation of Habitats and Species (Amendment) (EU EXIT) Regulations 2019. All legislation within the Conservation of Habitats and Species Regulation 2017 still apply within the UK under the amendment to the 2017 regulations until otherwise notified.

2.2 NATIONAL (UK)

The Wildlife and Countryside Act 1981 (as amended) allows sites to be designated as Sites of Special Scientific Interest (SSSI) for one or all of the following categories:

- Flora;
- Fauna;
- Habitat; and
- Geological importance.

European designated sites are automatically designated as SSSIs prior to their designation.

The relevant legislation includes:

- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended);
- The Conservation of Habitats and Species Regulations 2019 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way Act 2000;
- Wild Mammals (Protection) Act 1996;
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

2.3 NATIONAL (WALES)

2.3.1 The Environment (Wales) Act 2016

The Environment (Wales) Act 2016 sets out the requirement for the ‘sustainable management of natural resources’ together with new ways of working to achieve this. Part 1 of the Environment Act sets out Wales’ approach to planning and managing natural resources at a national and local level with a general purpose linked to statutory ‘principles of sustainable management of natural resources’ defined within the Act.

Section 6 – Biodiversity and resilience of ecosystems duty

Section 6 under Part 1 of the Environment (Wales) Act 2016 introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities in the exercise of functions in relation to Wales.

The S6 duty requires that public authorities must seek to maintain and enhance biodiversity so far as consistent with the proper exercise of their functions and in so doing promote the resilience of ecosystems.

Section 7 - Biodiversity lists and duty to take steps to maintain and enhance biodiversity

This section replaces the duty in section 42 of the Natural Environment and Rural Communities Act (2006) (NERCA 2006). The Welsh Ministers will publish, review and revise lists of living organisms and types of habitat in Wales, which they consider are of key significance to sustain and improve biodiversity in relation to Wales.

The Welsh Ministers must also take all reasonable steps to maintain and enhance the living organisms and types of habitat included in any list published under this section, and encourage others to take such steps.

Part 1 of the Act, including Sections 6 and 7, came into force on May 21, 2016.

Other elements of NERCA 2006 may still apply.

2.3.2 The Wellbeing of Future Generations Act 2015

The Wellbeing of Future Generations Act became law in April 2015 and is concerned with improving the social, economic, environmental and cultural well-being of Wales.

It will make the public bodies in Wales listed in the Act think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach.

To help public bodies achieve the same vision, the Act puts in place seven well-being goals. Linked to the goals a set of National Indicators are currently under development to help measure whether we are achieving the goals including the Resilient Wales goal.

Resilient Wales' goal

'A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).'

The Well-being of Future Generations Act recognises the importance of nature and its biodiversity. The resilient Wales' goal will help with nature recovery objectives in Wales.

The Act establishes a statutory Future Generations Commissioner for Wales to support the public bodies listed in the Act to work towards achieving the well-being goals.

The Act also establishes Public Services Boards (PSBs) for each local authority area in Wales. PSBs are tasked with improving the economic, social, environmental and cultural well-being of its area by working to achieve the well-being goals.

2.3.3 Other

Planning Policy Wales (Welsh Government, 2018) and Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, September 2009) set out the protection given to wildlife (sites, habitats and species) by the planning system operational in Wales.

2.4 LOCAL AND REGIONAL

The proposed development is wholly within Merthyr Tydfil County Borough Council (MTCBC) area of responsibility. Therefore, all policies adopted by that Planning Authority will apply, including policies which may not be specific to nature conservation or the natural environment but that may apply or be relevant and should be considered during the planning process. Specifically policies:

- EnW1 Nature Conservation and Ecosystem Resilience;
- EnW2 Internationally and Nationally Protected Sites and Species;
- EnW3 Regionally Important Geological Sites, Sites of Importance for Nature Conservation, Local Nature Reserves and Priority Habitats and Species;
- EnW4 Environmental Protection; and
- EnW5 Landscape Protection.

2.5 PLANNING FRAMEWORK

The proposed development will be undertaken wholly under the auspices of the Town and Country Planning Act 1990 (as amended).

3 DESK STUDY

3.1 SUMMARY

There are no statutorily designated sites within 2km of the proposed development site.

There are 13no. non-statutorily designated Sites of Importance for Nature Conservation (SINCs) within 2km of the site. The development site is not within or adjacent to any such site.

There are no species records from the site but there are records immediately adjacent to, and in very close proximity to, it.

3.2 BACKGROUND

A desk study provides background information on historical and current biological data which can identify ecological constraints, mitigation, and biodiversity enhancement opportunities.

3.3 METHODOLOGY

The South East Wales Biodiversity Records Centre (SEWBReC) was consulted in order to provide biological information on the presence of species and sites on or adjacent to the site.

The biological records search covered a search radius of 2000m from the centre of the development site for internationally protected sites, UK protected sites, locally notified sites, protected and priority species, other species of conservation concern and locally important species.

The Multi-Agency Geographical Information System (MAGIC) website (www.magic.gov.uk) was also consulted.

3.4 CONSTRAINTS

There were no constraints to the data search.

3.5 RESULTS

LERC Reference: 0223-118

3.5.1 Statutorily protected sites

None.

3.5.2 Non-statutory designations

There are 13no. Sites of Importance for Nature Conservation (SINCs) within 2km of the proposed development site (**Figure 3**). The development site is not within or adjacent to any such site.

All these SINCs are at a distance from the site whereby they will not be affected by the proposed development and will therefore not be considered further in this report, with the exception of the Afon Bargoed Taff SINC, and possibly the Lower Cwm Bargoed SINC.

The Afon Bargod Taff and Lower Cwm Bargod SINC, will not be directly affected by the development but could potentially be affected by indirect impacts such as point source pollution incidents. This will be considered further in this report.

The Gelligaer Common SINC, while within 150m, is uphill from the development site and will not be affected by any development or operational activities at the site and will therefore not be considered further.

3.5.3 Species: SEWReC data search

The data search contains 1549 species records within 2000m of the site including priority and protected species, species of local conservation concern, locally important species and invasive non-native species from a range of taxa including mammals, birds, amphibians, reptiles and invertebrates. .

There are no records from the development site. The closest record is of a single Daubentons bat (*Myotis daubentonii*) roost in The Summit Centre 65m to the west.

There are multiple other records of mammals, birds, reptiles amphibians reptiles and plants.

A summary list of the species found in the data search buffer is at **Appendix B**.

3.6 PREVIOUS SURVEYS

None known.

4 STATUTORILY PROTECTED SITES

Not applicable.

5 NON-STATUTORY SITES

5.1 SUMMARY

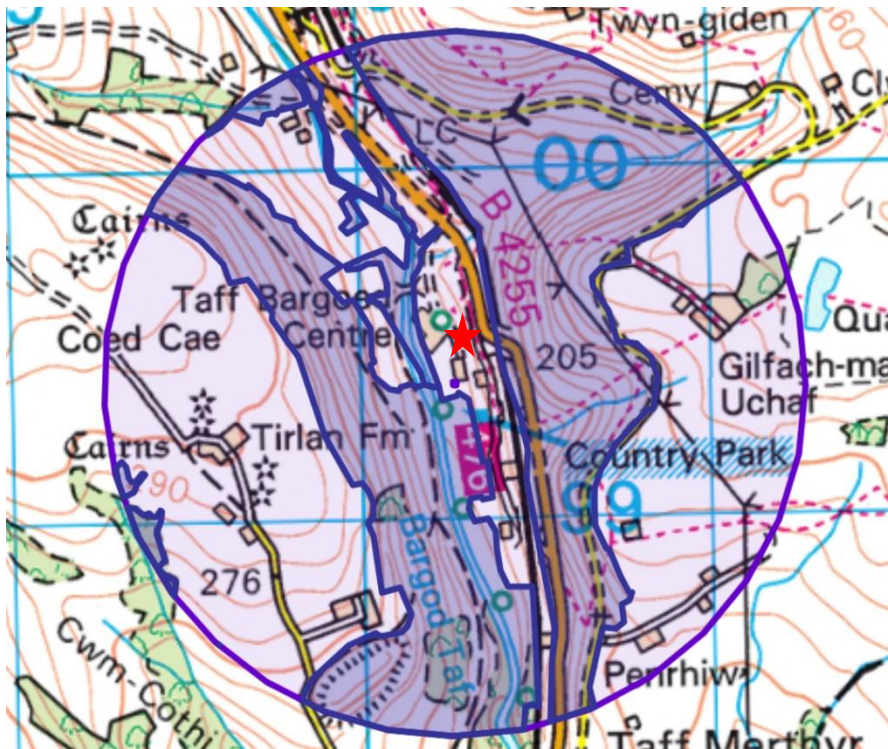
There are 13(no.) Sites of Importance for Nature Conservation (SINCs) listed within the data search results See **Table 1** & **Figure 3** for details.

Table 1 - non-statutorily designated sites within 2km of the proposed Crofty Road development site:

Site	Designation (& reference)	Reason for designation	Distance away (m)
Lower Cwm Bargod	SINC (54)	Large and diverse site on valley sides above the Afon Bargod Taff, comprising semi-natural woodland, including a large area of ancient woodland, bracken slopes, small areas of heathland, and an old colliery spoil tip supporting acid grassland. Other habitats present include small areas of neutral grassland, marshy grassland, scrub and some gritstone outcrops. Also includes a section of the Afon Bargod Taff, along with some adjacent reed beds and two lakes that form part of the Parc Taff Bargod. The spoil heap supports a diverse range of plants. Climbing corydalis occurs in the bracken slopes	22
Afon Bargoed Taff	SINC (59)	Major river system flowing through the eastern part of the County Borough. The river passes through former industrial areas in its lower reaches, and includes some sections that have been canalised. The upstream reaches, in contrast, are bordered by woodland and agricultural land. The SINC covers all sections of the Bargod Taff which do not fall in other SINCs along the route, comprising three discrete sections. Includes adjacent bankside habitats, particularly semi-natural woodland along with semi-improved neutral and acid grasslands, bracken stands and swamp. Large mature trees are frequent along the banks, and these may support roosting bats. Otter occurs throughout the length of the river which is known to be of value to a wide variety of birds, fish, bats and reptiles	41

Of these sites, the development has a potential to result in direct adverse impacts on 2(no.) of them: The two sites are The Lower Cwm Bargod SINC and the Afon Bargod Taff SINC. The development only has the potential to impact on the aquatic elements of these sites, principally the Afon Bargod Taff. This is because the habitats surrounding the development site are on third party land and will remain completely unaffected by the development. The only potential impacts could be indirect and result from pollution incidents and therefore the aquatic elements of the SINC sites, the Afon Bargod Taff, will be considered further in this report

Figure 3 – location of non-statutorily designated sites within 2km of the proposed development site (starred red)



5.2 AFON BARGOD TAF SINC

The Lower Cwm Bargoed SINC is a largely terrestrial site which has the Afon Bargoed Taff flowing through it. This latter site is a SINC in its own right. As it is anticipated that any potential impacts of the development are limited to the aquatic environment, the two sites will be discussed as one, with only the aquatic elements considered.

5.2.1 Afon Bargoed Taf SINC - evaluation

This site is a river flowing from north to south from the hills above Bedlinog to its confluence with the Afon Taff at Quakers Yard. The river channel is approximately 100m to the west of the development site. The channel is approximately 4m wide with the river being relatively shallow, approximately 0.5m; it should be noted that the river responds rapidly, increasing and reducing depth, to rainfall events. The river flows over a stone and gravel substrate.

The river provides habitat to brown trout (*Salmo trutta*) amongst other fish species, otter (*Lutra lutra*) and a range of mammals, invertebrates and birds.

It is considered to be of a **high regional (county)** level ecological importance.

5.2.2 Afon Bargoed Taf SINC - impact characterisation

It is considered that there will be no direct impacts on the site from the clearance and construction phases of the development as it is separated from the it by some distance.

The most likely form of indirect adverse impacts is from pollution resulting from fuels, oils and lubricants entering the stream adjacent to the development site during the operational period.

5.2.3 Afon Bargod Taf SINC - impact assessment without mitigation

It is considered that there would be a **possible minor short term adverse** impact at a **local (site)** level as a result of pollution incidents.

5.2.4 Afon Bargod Taf SINC - mitigation measures

As the development has already been completed, mitigation will not be required.

However, it should be noted that should there be any requirement for further work to the site, mitigation may be required and will include (but not be limited to) the following measures.

- A minimum 5m buffer will be maintained between all watercourses and any clearance, construction or other development activities. This buffer will be fenced (or otherwise demarcated) to prevent access by plant, machinery and site personnel prior to any works commencing on site with evidence of the demarcation (photos and / or site plans) being supplied to the LPA prior to the works commencing
- There will be no vegetation removal within 5m of the bank of any watercourse bordering the development site; All vegetation removal and disturbance within 10m of a watercourse may only be undertaken following a check of the affected area and under ecological supervision;
- There will be no working within 5m of a watercourse without an appropriate permit to work and the appropriate statutory consents;
- All work on the proposed development site will be undertaken in accordance with relevant NRW / Environment Agency guidance on working in proximity to a watercourse;
- The free flow of water along the watercourse will be ensured at all times;
- There will be no lighting of the watercourse at all;
- Works within 5m of any the watercourses must not start any earlier than 1 hour after sunrise and must finish no later than 1 hour before sunset;
- There will be no access for personnel, plant and machinery into any watercourse unless required as part of the development; in this eventuality, access will be in accordance with an approved method statement, by permit only and strictly monitored;
- To prevent accidental discharge of sediment and other contaminants, the development site will be either bounded on its northern boundary by sediment fencing or siltation ponds (or other sediment trapping devices e.g. silt busters) will be provided at appropriate locations to prevent sediment runoff during the construction phase of the development. These will be put in place prior to any earthworks commencing;
- Designated areas will be provided for parking, washing facilities, refuelling, storage of fuels, oils, lubricants and materials e.g. cement, concrete, none of which will be within 10m of the watercourse;
- Drip trays will be placed under all stationary and parked plant, machinery and vehicles during the construction period;
- Storage of fuels and other liquids will only be in bunded (to 110% capacity) containers;
- All plant, machinery and vehicles will be inspected for leaks and malfunctions on a daily basis;
- All plant and machinery will be washed down after leaving the previous contract site and before entering the compound / work site for the first time;
- Relevant construction activities will cease during high rainfall periods to ensure mitigation measures are not overwhelmed;
- Spill kits and other pollution restricting measures e.g. hay bales will be provided along with relevant and appropriate training for personnel as necessary);
- Activity specific permits linked to risk assessments and a risk register will be required before any works which might adversely impact on watercourses;

- All watercourses will be subject of visual monitoring of water quality at least twice per day during the construction phase: at start and close of the working day; more detailed monitoring may be required should it be necessary; and
- Dust suppression measures will be employed as necessary during spells of dry weather to ensure no dust is emitted from the site.

During the operational phase of the development:

- No vehicles, plant or machinery will be stored permanently on the site;
- Should there be a requirement to store vehicles, plant &/or machinery on the site on a temporary basis, all such equipment will be provided with drip trays to prevent pollution from fuels, oils and lubricants. All trays will be checked on a minimum two day rotation and emptied as necessary with all waste oils being removed from site for recycling &/or disposal by an approved contractor;
- No skips will be stored permanently on the site;
- All skips will be washed out with all residues being removed before arrival at the site; and
- There will be no washing of skips or any other equipment on the site;

There may be a requirement for interceptors to be installed depending on risk assessments, drainage guidelines and LPA policies.

5.2.5 Afon Bargod Taf SINC - impact assessment with mitigation

It is considered that there would be a **highly unlikely minor short term adverse** impact at a **local (site)** level as a result of pollution incidents.

5.2.6 Afon Bargod Taf SINC – significance of the impact

Without mitigation:

It is anticipated that the significance of the impacts due to the development will be **slight**.

With mitigation:

It is anticipated that the significance of the impacts due to the development will be **neutral**.

6 PHASE 1 HABITAT SURVEY

6.1 SUMMARY

A number of habitats were recorded within the survey area. These included:

- Broadleaved plantation woodland;
- Scattered trees;
- Scrub;
- Semi-improved grassland;
- Bare ground; and
- Buildings

Habitats off site included:

- Watercourses

There was no potential for any protected species to be present on the site unless passing through. The surrounding land is likely to support breeding birds and reptiles.

Where present, features of interest were recorded for which there is no appropriate categorisation. These have been identified as Target Notes (TN) and numbered and noted below. (**NOTE: none recorded**).

The habitats are shown on **Figure 3** below.

6.2 BACKGROUND

The Phase 1 habitat survey was carried out to assess the existing habitats, identify any protected habitats or species that may be present, determine the impact of the proposed works on them, and identify any mitigation measures that may be necessary. This was done by undertaking both a desk study and field survey.

The survey was undertaken on the 28th September 2021.

Phase 1 habitat survey is a way of recording the basic habitat data to form a baseline level of knowledge of the ecology of a site and provide recommendations for future surveys if considered necessary.

6.3 METHODOLOGY

6.3.1 Desk study:

Refer to section 3 above.

6.3.2 Field survey:

Hugh Dixon MCIEEM BSc (Hons), an experienced surveyors from Celtic Ecology and Conservation Ltd, carried out a habitat assessment and mapping exercise in September 2021 using the Phase 1 habitat survey technique. Features of note are assigned Target Notes and referenced accordingly. Nomenclature follows Stace (1997)¹.

¹ Stace, C (1997). *New Flora of the British Isles* (2nd Ed.). Cambridge University Press

6.4 CONSTRAINTS

None.

6.5 RESULTS

6.5.1 Habitats

The following habitats were found on or adjacent to the site and are mapped at **Figure 3** below:

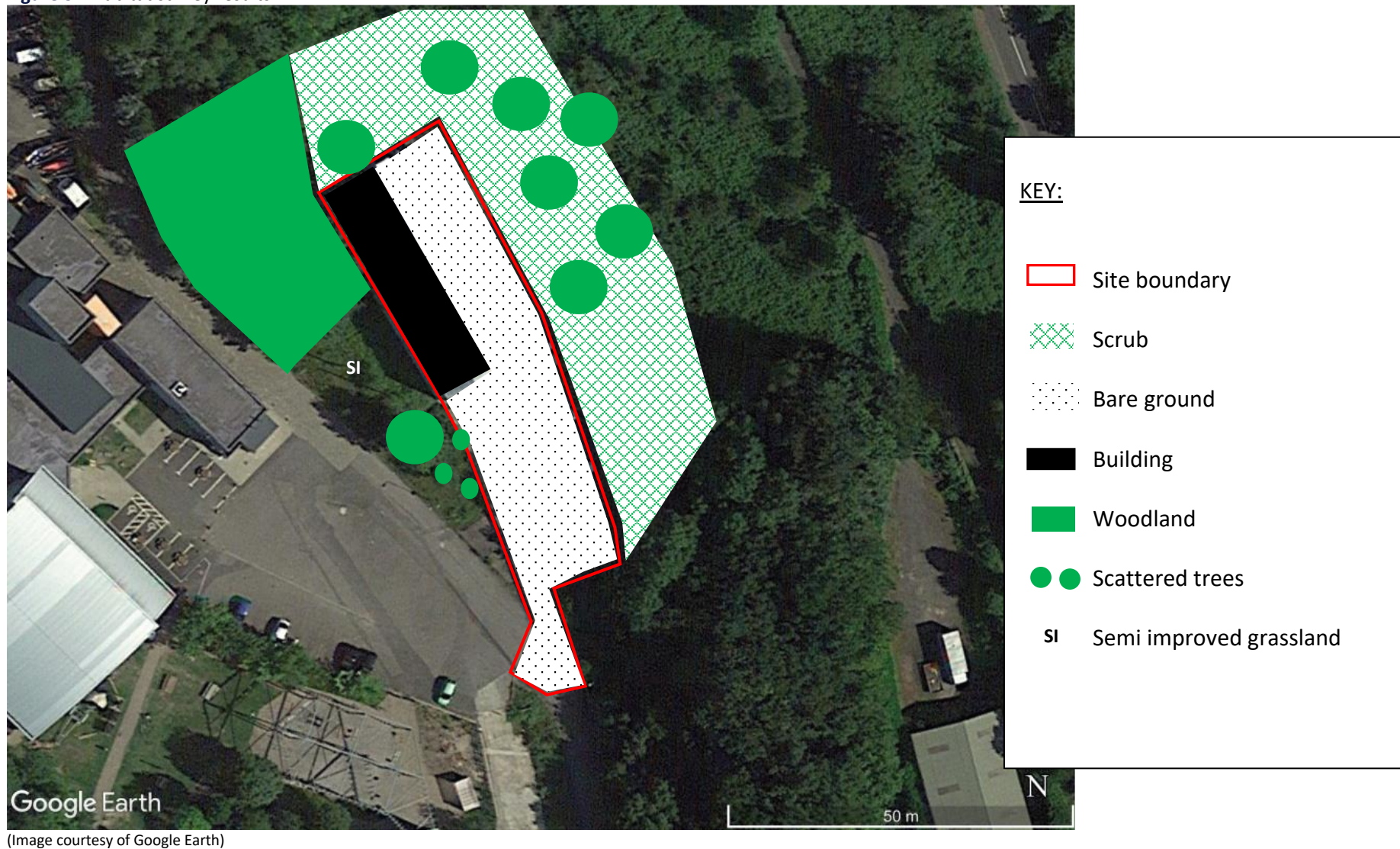
- Broadleaved plantation woodland;
- Scattered trees;
- Scrub;
- Semi-improved grassland;
- Bare ground; and
- Buildings.

Habitats off site included:

- Watercourses

Photos are at **Appendix A**.

Figure 3 – habitat survey results.



6.5.1.1 Broad leaved plantation woodland

This habitat was either created at the same time as the former Trelewis Drift Mine site was undergoing remediation as part of a landscaping scheme or has since developed naturally; it is not known for certain which is applicable. It is dominated by alder (*Alnus glutinosa*) oak (*Quercus robur*), rowan (*Sorbus aucuparia*), cherry (*Prunus avium*), hazel (*Corylus avellana*), silver birch (*Betula pendula*), sycamore (*Acer pseudoplatanus*), butterfly bush (*Buddleia davidii*), dogwood (*Cornus sanguinea*), hawthorn (*Crataegus monogyna*), and bramble.

It will be retained in its entirety, not affected by the development and will not be considered further in this report.

6.5.1.2 Scattered trees

These are trees within the scrub and bracken (*Pteridium aquilinum*) (ffridd) habitat. Most are hawthorn, butterfly bush and sycamore. None has a diameter at breast height (DBH) of over 250mm. Those closest to the bare ground / tarmac areas are under 1.8m tall and have a maximum DBH of around 5cm.

These will also be retained and not considered further in this report.

6.5.1.3 Scrub

This habitat is found around the north eastern and north western perimeters of the site. It is dominated by bramble, hawthorn and butterfly bush with occasional gorse (*Ulex europaeus*) over dense bracken. There is little in the way of ground flora, with tall ruderal species such as rosebay willowherb (*Chamerion angustifolium*) being more common. More open areas also include autumn hawkbit (*Leontodon autumnalis*), ragwort (*Senecio jacobaea*), dandelion (*Taraxacum officinale* agg.), herb Robert (*Geranium robertianum*), common cat's-ear (*Hypochaeris radicata*), common and creeping bents (*Agrostis capillaris* & *A. stolonifera* respectively) and red fescue (*Festuca rubra*).

This habitat will be retained and will therefore not be considered further in this report.

6.5.1.4 Semi-improved grassland

This habitat is dominated by bents (*Agrostis* sp.), sweet vernal grass (*Anthoxanthum odoratum*) meadow foxtail (*Alopecurus pratensis*) and red fescue with common bird's-foot trefoil (*Lotus corniculatus*) and hawkbits (*Leontodon* sp.).

This habitat is wholly outwith the development site and will not be affected in any way and will not be considered further in this report.

6.5.1.5 Bare ground

This habitat is dominated by tarmac with very small areas of concrete and crushed stone. There is no botanical interest whatsoever.

This habitat has no ecological value and will not be considered further in this report.

6.5.1.6 Buildings

This habitat is comprised of a large one and a half storey height metal shed used for workshop and storage facilities in support of the coach business located at the site. There is no ecological interest within it and it will be retained in its entirety and not form part of the development. It will not be considered further in this report.

6.5.2 Protected species assessment

6.5.2.1 Bats

The data search revealed the presence of a number of bat species in the vicinity of the development site, including a roost for individual Daubenton's bats close by.

There are no man-made structures on the site and therefore no man-made roosting sites. There are no tree roosting opportunities as the trees are all immature and of size where they do not provide potential roost features for bats.

The site will not be lit in any way.

Bats should be assumed to forage over the site.

This species group will not be adversely impacted by the development and therefore will not be considered further in this ecological assessment.

6.5.2.2 Dormouse

There are no records within the data search results for this species and therefore, despite the outwardly suitable habitat, it will not be considered further in this report.

6.5.2.3 Great crested newt

There are no records within the data search results with there being no suitable breeding habitat on the development site for this species.

Therefore, while the terrestrial habitat may be suitable for this species, as the vegetated areas will not be affected by the proposed development, it will not be considered further in this report.

6.5.2.4 Otter

There are records within the data search results (the closest being approximately 350m to the south west. Otters are known to use the Afon Bargod Taf. There is habitat on the development site that this species could use for sheltering purposes.

It is therefore likely that this species will use the Afon Bargod Taff; however the development was completed some years ago in 2013 and therefore while this species could utilise the site, it is highly unlikely given the use of the site and that it will not be adversely affected by the development. This species, therefore, will not be considered further in this report.

6.5.2.5 Badger

There are records of this species within the data search results 1km to the south. While the bare ground habitats on the development site are unsuitable for this species, the adjacent scrub could be used for sett building and the adjacent scrub for foraging purposes. However, no evidence of this species was observed on or close to the development site.

Given the lack of records and the lack of evidence from the site, it will not be considered further in this report.

6.5.2.6 Hedgehog

There were records of this species in the data search results, with the closest being from approximately 225m to the east of the site. The vegetated habitats on the site are useable by this species, for foraging and sheltering purposes. No evidence of it was observed anywhere on the site. As the habitats

surrounding the site will not be affected by the proposed development, this species will not be considered further in this report.

It is anticipated that while it is not required, should there be a need for close boarded fencing or other forms of solid boundaries around the site, provision for this species will be made in the form of holes 150mm high x 200mm long at no more than 10m intervals along the bottom of existing and new fences and walls to allow hedgehogs to pass through. (This will have the added benefit of allowing other fauna to move around freely as well).

6.5.2.7 Birds

There are no records from the development site, but there are multiple records for members of this group within the data search with the closest being a bullfinch (*Pyrrhula pyrrhula*) 120m to the north.

The woodland, tree and scrub vegetation within the site boundaries could be used for nesting purposes by any bird species. The bare ground habitats are small and overlooked by dense scrub and mature trees on all sides which could be used by predators thereby reducing its suitability.

As none of the suitable habitat surrounding the site will be adversely affected by the proposed development and the site is already in use, this group will not be considered further in this report.

6.5.2.1 Amphibians

There are records of common frog (*Rana temporaria*), common toad (*Bufo bufo*) within 200m of the development site and palmate newt (*Lissotriton helveticus*) within 600m. There is no suitable breeding habitat for this group on the development site although the scrub habitats might be used during the terrestrial phases of amphibians life cycles.

As the vegetated habitats will be retained in their entirety and the lack of suitable breeding habitat, this group will not be considered further in this report.

6.5.2.2 Reptiles

There were records of a common lizard (*Zootoca vivipara*) within 120m of the sites south western corner. There are further records of lizards and slow worms (*Anguis fragilis*) within the data search results. It should be assumed that adder (*Vipera berus*) and grass snake (*Natrix helvetica*) will be found in the area as the habitats are considered to be suitable.

The vegetated fringes of the bare ground on the development site provide suitable basking, foraging, sheltering and hibernation opportunities. As the vegetated areas will remain unaffected by the development, and the affected habitats are considered to be generally unsuitable, this group will therefore not be considered further in this report.

6.5.3 Other features

No evidence of any other protected species was observed on the site.

No invasive non-native species were observed on or adjacent to the development site. Japanese knotweed (*Fallopia japonica*) is known to be present within the area.

7 HABITATS - EVALUATION, IMPACT CHARACTERISATION AND ASSESSMENT

Not applicable.

8 SPECIES - EVALUATION, IMPACT CHARACTERISATION AND ASSESSMENT

Not applicable

9 CONCLUSION AND RECOMMENDATIONS

Overall the red line development boundary site is of a **negligible** ecological value at a **local level** due to its small size, the history of clearance and use and its being dominated by tarmac.

The only ecological interest is that provided by the proximity of adjacent woodland, trees and scrub areas.

The bare ground habitats present on and adjacent to the site have no ecological interest at all and do not provide any protected (or other) species with suitable habitat.

It is considered that no other or further ecological surveys are required.

It is recommended that to prevent harm to the Afon Bargod Taff, measures should be put in place to prevent any pollution incidents associated with the operation of the site, principally fuels, oils, lubricants and sediment.

None of the vegetated habitats present adjacent to the site will be removed or otherwise adversely affected. Indeed, they will be protected and allowed to develop naturally.

While these areas have been subject to clearance on repeated occasions in the past, they have largely regenerated into ffridd habitat since the last clearance in or around 2018. These areas will continue to regenerate naturally with the current habitats succeeding to broadleaved woodland. This ensures the continuation and maintenance of a locally valuable ecological resource.

The retention of all vegetated areas in their current form will also ensure that there is no disturbance to the soil that could otherwise potentially release buried pollutants.

There will be no lighting of the site, and therefore there will be no adverse impacts on nocturnal species.

10 REFERENCES

- Battersby, J. (Ed) & Tracking Mammals Partnership. (2005). UK Mammals: Species Status and Population Trends. First Report by the Tracking Mammals Partnership. JNCC/Tracking Mammals Partnership,
- Collins, J (Ed). Bat Surveys for Professional Ecologists - Good Practice Guidelines (BCT, 2016).
- Joint Nature Conservation Committee (2001) *Handbook for phase 1 habitat survey: A technique for environmental audit*. JNCC.
- Joint Nature Conservation Committee (2003). *Herpetofauna Workers' Manual* JNCC
- Mitchell-Jones, A.J. & McLeish, A.P. (2004) *The bat workers' manual* (3rd Edition). Joint Nature Conservation Committee.
- Mitchell-Jones, A.J. (2004). Bat Mitigation Guidelines. Natural England
- Planning Policy Wales (2013).
- Protection of Badgers Act (1992).
- Stace, C A (1997) *New Flora of the British Isles* (2nd Ed) Cambridge University Press
- The Conservation of Habitats and Species Regulations 2017.
- The Environment (Wales) Act 2016. (HMSO)
- The Natural Environment and Rural Communities Act (2006) (as amended) (HMSO).
- The Wildlife and Countryside Act 1981 (as amended).
- Welsh Assembly Government (2007). Planning Policy Wales Technical Advice Note 5: *Nature Conservation and Planning*.

APPENDIX A - PHOTOS

PHASE 1 HABITAT SURVEY PHOTOS

Plate 1 – Entrance to the site (looking north)



Plate 2 – Entrance (looking south)



Plate 3 – Main site area and side of building



Plate 4 – Scrub to north east



Plate 5 - Scrub to north west



Plate 6 – The site sometime between 2008 – 2010



APPENDIX B - SEWBRc DATA SEARCH SPECIES SUMMARY

LERC Reference: 0223-118

Scientific Name	Common Name	Taxon	Category
<i>Acanthis cabaret</i>	Lesser Redpoll	Birds	Priority Species
<i>Accipiter gentilis</i>	Goshawk	Birds	Priority Species
<i>Actitis hypoleucos</i>	Common Sandpiper	Birds	Species of Conservation Concern
<i>Aegithalos caudatus</i>	Long-tailed Tit	Birds	Species of Conservation Concern
<i>Alauda arvensis</i>	Eurasian Skylark	Birds	Priority Species
<i>Alcedo atthis</i>	Kingfisher	Birds	Priority Species
<i>Anas crecca</i>	Teal	Birds	Species of Conservation Concern
<i>Anas platyrhynchos</i>	Mallard	Birds	Species of Conservation Concern
<i>Anthus pratensis</i>	Meadow Pipit	Birds	Species of Conservation Concern
<i>Anthus trivialis</i>	Tree Pipit	Birds	Priority Species
<i>Apus apus</i>	Swift	Birds	Species of Conservation Concern
<i>Ardea cinerea</i>	Grey Heron	Birds	Species of Conservation Concern
<i>Asio flammeus</i>	Short-eared Owl	Birds	Species of Conservation Concern
<i>Athene noctua</i>	Little Owl	Birds	Locally Important Species
<i>Aythya fuligula</i>	Tufted Duck	Birds	Species of Conservation Concern
<i>Branta canadensis</i>	Canada Goose	Birds	Other Species
<i>Buteo buteo</i>	Buzzard	Birds	Locally Important Species
<i>Calidris alba</i>	Sanderling	Birds	Species of Conservation Concern
<i>Chloris chloris</i>	Greenfinch	Birds	Species of Conservation Concern
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	Birds	Priority Species
<i>Cinclus cinclus gularis</i>	British Dipper	Birds	Locally Important Species
<i>Cinclus cinclus</i>	Dipper	Birds	Species of Conservation Concern
<i>Circus aeruginosus</i>	Western Marsh Harrier	Birds	Priority Species
<i>Circus cyaneus</i>	Hen Harrier	Birds	Priority Species
<i>Coccothraustes coccothraustes</i>	Hawfinch	Birds	Priority Species
<i>Cuculus canorus</i>	Cuckoo	Birds	Priority Species
<i>Curruca communis</i>	Whitethroat	Birds	Species of Conservation Concern
<i>Curruca curruca</i>	Lesser Whitethroat	Birds	Locally Important Species
<i>Dryobates minor</i>	Lesser Spotted Woodpecker	Birds	Priority Species
<i>Emberiza citrinella</i>	Yellowhammer	Birds	Priority Species
<i>Emberiza schoeniclus</i>	Common Reed Bunting	Birds	Priority Species
<i>Falco columbarius</i>	Merlin	Birds	Priority Species
<i>Falco peregrinus</i>	Peregrine	Birds	Priority Species
<i>Falco subbuteo</i>	Hobby	Birds	Priority Species
<i>Falco tinnunculus</i>	Kestrel	Birds	Priority Species
<i>Ficedula hypoleuca</i>	European Pied Flycatcher	Birds	Priority Species
<i>Fringilla montifringilla</i>	Brambling	Birds	Priority Species
<i>Fulica atra</i>	Eurasian Coot	Birds	Species of Conservation Concern

Scientific Name	Common Name	Taxon	Category
<i>Gallinago gallinago</i>	Snipe	Birds	Species of Conservation Concern
<i>Hirundo rustica</i>	Swallow	Birds	Species of Conservation Concern
<i>Larus argentatus</i>	European Herring Gull	Birds	Priority Species
<i>Larus fuscus</i>	Lesser Black-backed Gull	Birds	Species of Conservation Concern
<i>Linaria cannabina</i>	Linnet	Birds	Priority Species
<i>Locustella naevia</i>	Grasshopper Warbler	Birds	Priority Species
<i>Loxia curvirostra</i>	Red Crossbill	Birds	Priority Species
<i>Lymnocyptes minimus</i>	Jack Snipe	Birds	Species of Conservation Concern
<i>Mareca penelope</i>	Wigeon	Birds	Species of Conservation Concern
<i>Mergus serrator</i>	Red-breasted Merganser	Birds	Species of Conservation Concern
<i>Milvus milvus</i>	Red Kite	Birds	Priority Species
<i>Motacilla cinerea</i>	Grey Wagtail	Birds	Species of Conservation Concern
<i>Muscicapa striata</i>	Spotted Flycatcher	Birds	Priority Species
<i>Numenius arquata</i>	Curlew	Birds	Priority Species
<i>Oenanthe oenanthe</i>	Wheatear	Birds	Species of Conservation Concern
<i>Pandion haliaetus</i>	Western Osprey	Birds	Priority Species
<i>Passer domesticus</i>	House Sparrow	Birds	Priority Species
<i>Perdix perdix</i>	Grey Partridge	Birds	Priority Species
<i>Phalacrocorax carbo</i>	Cormorant	Birds	Species of Conservation Concern
<i>Phoenicurus phoenicurus</i>	Redstart	Birds	Species of Conservation Concern
<i>Phylloscopus sibilatrix</i>	Wood Warbler	Birds	Priority Species
<i>Phylloscopus trochilus</i>	Willow Warbler	Birds	Species of Conservation Concern
<i>Picus viridis</i>	European Green Woodpecker	Birds	Species of Conservation Concern
<i>Pluvialis apricaria</i>	Golden Plover	Birds	Priority Species
<i>Poecile montanus</i>	Willow Tit	Birds	Priority Species
<i>Poecile palustris</i>	Marsh Tit	Birds	Priority Species
<i>Prunella modularis</i>	Dunnock	Birds	Priority Species
<i>Pyrrhula pyrrhula</i>	Eurasian Bullfinch	Birds	Priority Species
<i>Regulus regulus</i>	Goldcrest	Birds	Species of Conservation Concern
<i>Riparia riparia</i>	Sand Martin	Birds	Species of Conservation Concern
<i>Saxicola rubetra</i>	Whinchat	Birds	Species of Conservation Concern
<i>Scolopax rusticola</i>	Woodcock	Birds	Species of Conservation Concern
<i>Sturnus vulgaris</i>	Starling	Birds	Priority Species
<i>Turdus iliacus</i>	Redwing	Birds	Priority Species
<i>Turdus philomelos</i>	Song Thrush	Birds	Priority Species
<i>Turdus pilaris</i>	Fieldfare	Birds	Priority Species
<i>Turdus torquatus</i>	Ring Ouzel	Birds	Priority Species
<i>Turdus viscivorus</i>	Mistle Thrush	Birds	Species of Conservation Concern
<i>Tyto alba</i>	Western Barn Owl	Birds	Priority Species
<i>Vanellus vanellus</i>	Lapwing	Birds	Priority Species
<i>Barbilophozia floerkei</i>	Common Pawwort	Bryophytes	Locally Important Species
<i>Calliergonella lindbergii</i>	Lindberg's Plait-moss	Bryophytes	Locally Important Species
<i>Campylopus introflexus</i>	Heath Star Moss	Bryophytes	Other Species

Scientific Name	Common Name	Taxon	Category
<i>Kindbergia praelonga</i>	Common Feather-moss	Bryophytes	Locally Important Species
<i>Leucobryum juniperoideum</i>	Smaller White-moss	Bryophytes	Locally Important Species
<i>Plagiothecium curvifolium</i>	Curved Silk-moss	Bryophytes	Locally Important Species
<i>Ptilidium ciliare</i>	Ciliated Fringewort	Bryophytes	Locally Important Species
<i>Anguilla anguilla</i>	European Eel	Fish	Priority Species
<i>Barbatula barbatula</i>	Stone Loach	Fish	Locally Important Species
<i>Cottus gobio</i>	Bullhead	Fish	Locally Important Species
<i>Salmo trutta subsp. fario</i>	Brown Trout	Fish	Locally Important Species
<i>Salmo trutta</i>	Brown/Sea Trout	Fish	Priority Species
<i>Gliophorus laetus</i>	Heath Waxcap	Fungi and Slime Moulds	Locally Important Species
<i>Gliophorus psittacinus</i>	Parrot Waxcap	Fungi and Slime Moulds	Locally Important Species
<i>Hygrocybe acutoconica</i> var. <i>acutoconica</i>	Persistent Waxcap	Fungi and Slime Moulds	Locally Important Species
<i>Aeshna cyanea</i>	Southern Aeshna	Invertebrates (insect)	Locally Important Species
<i>Aeshna juncea</i>	Common Aeshna	Invertebrates (insect)	Locally Important Species
<i>Aeshna mixta</i>	Migrant Hawker	Invertebrates (insect)	Locally Important Species
<i>Anania stachydalis</i>	Woundwort Pearl	Invertebrates (insect)	Locally Important Species
<i>Anax imperator</i>	Emperor Dragonfly	Invertebrates (insect)	Locally Important Species
<i>Apamea remissa</i>	Dusky Brocade	Invertebrates (insect)	Priority Species
<i>Boloria euphrosyne</i>	Pearl-bordered Fritillary	Invertebrates (insect)	Priority Species
<i>Boloria selene</i>	Small Pearl-bordered Fritillary	Invertebrates (insect)	Priority Species
<i>Bombus hortorum</i>	Garden Bumblebee	Invertebrates (insect)	Locally Important Species
<i>Bombus humilis</i>	Brown-banded Carder-bee	Invertebrates (insect)	Priority Species
<i>Bombus lapidarius</i>	Red-tailed Bumblebee	Invertebrates (insect)	Locally Important Species
<i>Bombus lucorum</i>	White-tailed Bumblebee	Invertebrates (insect)	Locally Important Species
<i>Bombus pascuorum</i>	Common Carder Bee	Invertebrates (insect)	Locally Important Species
<i>Bombus pratorum</i>	Early Bumblebee	Invertebrates (insect)	Locally Important Species
<i>Bombus sylvestris</i>	Forest Cuckoo Bee	Invertebrates (insect)	Locally Important Species
<i>Bombus terrestris</i>	Buff-tailed Bumblebee	Invertebrates (insect)	Locally Important Species
<i>Brachinus crepitans</i>	Bombardier Beetle	Invertebrates (insect)	Species of Conservation Concern
<i>Bruchus atomarius</i>	Bruchus atomarius	Invertebrates (insect)	Species of Conservation Concern
<i>Calopteryx splendens</i>	Banded Agrion	Invertebrates (insect)	Locally Important Species
<i>Calopteryx virgo</i>	Beautiful Agrion	Invertebrates (insect)	Locally Important Species
<i>Ceramica pisi</i>	Broom Moth	Invertebrates (insect)	Priority Species
<i>Chiasmia clathrata</i>	Latticed Heath	Invertebrates (insect)	Priority Species
<i>Coenagrion puella</i>	Azure Damselfly	Invertebrates (insect)	Locally Important Species
<i>Coenonympha pamphilus</i>	Small Heath	Invertebrates (insect)	Priority Species
<i>Cordulegaster boltonii</i>	Golden-ringed Dragonfly	Invertebrates (insect)	Locally Important Species
<i>Crambus pratella</i>	Scarce Grass-veneer	Invertebrates (insect)	Species of Conservation Concern
<i>Craniophora ligustri</i>	Coronet	Invertebrates (insect)	Locally Important Species
<i>Cryptocephalus aureolus</i>	Cryptocephalus aureolus	Invertebrates (insect)	Species of Conservation Concern
<i>Cryptocephalus hypochaeridis</i>	Cryptocephalus hypochaeridis	Invertebrates (insect)	Species of Conservation Concern
<i>Diarsia rubi</i>	Small Square-spot	Invertebrates (insect)	Priority Species
<i>Ecliptopera silaceata</i>	Small Phoenix	Invertebrates (insect)	Priority Species
<i>Enallagma cyathigerum</i>	Common Blue Damselfly	Invertebrates (insect)	Locally Important Species
<i>Erynnis tages</i>	Dingy Skipper	Invertebrates (insect)	Priority Species
<i>Euphydryas aurinia</i>	Marsh Fritillary	Invertebrates (insect)	Priority Species
<i>Harmonia axyridis</i>	Harlequin Ladybird	Invertebrates (insect)	Other Species

Scientific Name	Common Name	Taxon	Category
<i>Hepialus humuli</i>	Ghost Moth	Invertebrates (insect)	Priority Species
<i>Hipparchia semele</i>	Grayling	Invertebrates (insect)	Priority Species
<i>Ischnura elegans</i>	Blue-tailed Damselfly	Invertebrates (insect)	Locally Important Species
<i>Ischnura pumilio</i>	Scarce Blue-tailed Damselfly	Invertebrates (insect)	Locally Important Species
<i>Lampropteryx otregiata</i>	Devon Carpet	Invertebrates (insect)	Locally Important Species
<i>Lasiommata megera</i>	Wall	Invertebrates (insect)	Priority Species
<i>Leptophyes punctatissima</i>	Speckled Bush-cricket	Invertebrates (insect)	Locally Important Species
<i>Lestes sponsa</i>	Common Emerald Damselfly	Invertebrates (insect)	Locally Important Species
<i>Leucania comma</i>	Shoulder-striped Wainscot	Invertebrates (insect)	Priority Species
<i>Libellula depressa</i>	Broad-bodied Chaser	Invertebrates (insect)	Locally Important Species
<i>Libellula quadrimaculata</i>	Four-spotted Chaser	Invertebrates (insect)	Locally Important Species
<i>Magdalis cerasi</i>	Magdalis cerasi	Invertebrates (insect)	Species of Conservation Concern
<i>Malthodes pumilus</i>	Malthodes pumilus	Invertebrates (insect)	Species of Conservation Concern
<i>Ocypus fuscatus</i>	Ocypus fuscatus	Invertebrates (insect)	Species of Conservation Concern
<i>Orthetrum cancellatum</i>	Black-tailed Skimmer	Invertebrates (insect)	Locally Important Species
<i>Psylliodes cuprea</i>	Psylliodes cuprea	Invertebrates (insect)	Species of Conservation Concern
<i>Pyrochroa coccinea</i>	Black-headed Cardinal Beetle	Invertebrates (insect)	Species of Conservation Concern
<i>Pyrrhosoma nymphula</i>	Large Red Damselfly	Invertebrates (insect)	Locally Important Species
<i>Rhagium mordax</i>	Rhagium mordax	Invertebrates (insect)	Locally Important Species
<i>Scotopteryx chenopodiata</i>	Shaded Broad-bar	Invertebrates (insect)	Priority Species
<i>Speyeria aglaja</i>	Dark Green Fritillary	Invertebrates (insect)	Locally Important Species
<i>Spilosoma lutea</i>	Buff Ermine	Invertebrates (insect)	Priority Species
<i>Sympetrum striolatum</i>	Common Darter	Invertebrates (insect)	Locally Important Species
<i>Trypocopriss vernalis</i>	Spring Dumbledor	Invertebrates (insect)	Species of Conservation Concern
<i>Tyria jacobaeae</i>	Cinnabar	Invertebrates (insect)	Priority Species
<i>Xanthorhoe ferrugata</i>	Dark-barred Twin-spot Carpet	Invertebrates (insect)	Priority Species
<i>Zophomyia temula</i>	Zophomyia temula	Invertebrates (insect)	Species of Conservation Concern
<i>Malacolimax tenellus</i>	Slender Slug	Invertebrates (other, marine or freshwater)	Species of Conservation Concern
<i>Physella acuta</i>	Physella acuta	Invertebrates (other, marine or freshwater)	Other Species
<i>Potamopyrgus antipodarum</i>	Jenkins' Spire Snail	Invertebrates (other, marine or freshwater)	Other Species
<i>Ramalina calicaris</i>	Ramalina calicaris	Lichens	Locally Important Species
<i>Arvicola amphibius</i>	European Water Vole	Mammals (terrestrial)	Priority Species
<i>Chiroptera</i>	Bats	Mammals (terrestrial)	Priority Species
<i>Eptesicus serotinus</i>	Serotine	Mammals (terrestrial)	Priority Species
<i>Erinaceus europaeus</i>	West European Hedgehog	Mammals (terrestrial)	Priority Species
<i>Lepus europaeus</i>	Brown Hare	Mammals (terrestrial)	Priority Species
<i>Lutra lutra</i>	European Otter	Mammals (terrestrial)	Priority Species
<i>Meles meles</i>	Eurasian Badger	Mammals (terrestrial)	Priority Species
<i>Mustela erminea</i>	Stoat	Mammals (terrestrial)	Priority Species
<i>Mustela putorius</i>	Polecat	Mammals (terrestrial)	Priority Species
<i>Myotis daubentonii</i>	Daubenton's Bat	Mammals (terrestrial)	Priority Species
<i>Myotis</i>	Unidentified Bat	Mammals (terrestrial)	Priority Species
<i>Neovison vison</i>	American Mink	Mammals (terrestrial)	Other Species
<i>Nyctalus noctula</i>	Noctule Bat	Mammals (terrestrial)	Priority Species
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle	Mammals (terrestrial)	Priority Species
<i>Pipistrellus pipistrellus</i>	Pipistrelle	Mammals (terrestrial)	Priority Species

Scientific Name	Common Name	Taxon	Category
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle	Mammals (terrestrial)	Priority Species
<i>Pipistrellus</i>	Pipistrelle	Mammals (terrestrial)	Priority Species
<i>Plecotus auritus</i>	Brown Long-eared Bat	Mammals (terrestrial)	Priority Species
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	Mammals (terrestrial)	Priority Species
<i>Sciurus carolinensis</i>	Eastern Grey Squirrel	Mammals (terrestrial)	Other Species
<i>Anguis fragilis</i>	Slow-worm	Reptiles and Amphibians	Priority Species
<i>Bufo bufo</i>	Common Toad	Reptiles and Amphibians	Priority Species
<i>Lissotriton helveticus</i>	Palmate Newt	Reptiles and Amphibians	Priority Species
<i>Lissotriton</i>	Lissotriton	Reptiles and Amphibians	Priority Species
<i>Rana temporaria</i>	Common Frog	Reptiles and Amphibians	Priority Species
<i>Zootoca vivipara</i>	Common Lizard	Reptiles and Amphibians	Priority Species
<i>Adiantum capillus-veneris</i>	Maidenhair Fern	Vascular Plants	Species of Conservation Concern
<i>Agrostis curtisii</i>	Bristle Bent	Vascular Plants	Locally Important Species
<i>Ajuga pyramidalis</i>	Pyramidal Bugle	Vascular Plants	Species of Conservation Concern
<i>Anacamptis pyramidalis</i>	Pyramidal Orchid	Vascular Plants	Locally Important Species
<i>Buddleja davidii</i>	Butterfly-bush	Vascular Plants	Other Species
<i>Butomus umbellatus</i>	Flowering-rush	Vascular Plants	Species of Conservation Concern
<i>Carex lasiocarpa</i>	Slender Sedge	Vascular Plants	Locally Important Species
<i>Carex pseudocyperus</i>	Cyperus Sedge	Vascular Plants	Locally Important Species
<i>Carex riparia</i>	Greater Pond-sedge	Vascular Plants	Locally Important Species
<i>Carex viridula</i> subsp. <i>brachyrrhyncha</i>	Long-stalked Yellow-sedge	Vascular Plants	Locally Important Species
<i>Ceratocarpus claviculata</i>	Climbing Corydalis	Vascular Plants	Locally Important Species
<i>Crassula helmsii</i>	New Zealand Pigmyweed	Vascular Plants	Other Species
<i>Dactylorhiza fuchsii</i>	Common Spotted-orchid	Vascular Plants	Locally Important Species
<i>Dactylorhiza maculata</i> subsp. <i>ericetorum</i>	Heath Spotted-Orchid	Vascular Plants	Locally Important Species
<i>Dactylorhiza maculata</i>	Heath Spotted-orchid	Vascular Plants	Locally Important Species
<i>Dactylorhiza praetermissa</i>	Southern Marsh-orchid	Vascular Plants	Locally Important Species
<i>Echium vulgare</i>	Viper's-bugloss	Vascular Plants	Locally Important Species
<i>Elodea canadensis</i>	Canadian Waterweed	Vascular Plants	Other Species
<i>Elodea nuttallii</i>	Nuttall's Waterweed	Vascular Plants	Other Species
<i>Epilobium brunnescens</i>	New Zealand Willowherb	Vascular Plants	Other Species
<i>Euphorbia amygdaloides</i>	Wood Spurge	Vascular Plants	Locally Important Species
<i>Fallopia japonica</i>	Japanese Knotweed	Vascular Plants	Other Species
<i>Filago minima</i>	Small Cudweed	Vascular Plants	Locally Important Species
<i>Frangula alnus</i>	Alder Buckthorn	Vascular Plants	Locally Important Species
<i>Geranium rotundifolium</i>	Round-leaved Crane's-bill	Vascular Plants	Locally Important Species
<i>Geum rivale</i>	Water Avens	Vascular Plants	Locally Important Species
<i>Hyacinthoides non-scripta</i>	Bluebell	Vascular Plants	Priority Species
<i>Hypochaeris glabra</i>	Smooth Cat's-ear	Vascular Plants	Species of Conservation Concern
<i>Impatiens glandulifera</i>	Indian Balsam	Vascular Plants	Other Species
<i>Jacobaea erucifolia</i>	Hoary Ragwort	Vascular Plants	Locally Important Species
<i>Koeleria macrantha</i>	Crested Hair-grass	Vascular Plants	Locally Important Species

Scientific Name	Common Name	Taxon	Category
<i>Lathyrus sylvestris</i>	Narrow-leaved Everlasting-pea	Vascular Plants	Locally Important Species
<i>Lepidium campestre</i>	Field Pepperwort	Vascular Plants	Species of Conservation Concern
<i>Leycesteria formosa</i>	Himalayan Honeysuckle	Vascular Plants	Other Species
<i>Meconopsis cambrica</i>	Welsh Poppy	Vascular Plants	Species of Conservation Concern
<i>Mentha suaveolens</i>	Round-leaved Mint	Vascular Plants	Locally Important Species
<i>Mimulus guttatus</i>	Monkeyflower	Vascular Plants	Other Species
<i>Mimulus moschatus</i>	Musk	Vascular Plants	Other Species
<i>Myosotis ramosissima</i>	Early Forget-me-not	Vascular Plants	Locally Important Species
<i>Myriophyllum spicatum</i>	Spiked Water-milfoil	Vascular Plants	Locally Important Species
<i>Oenanthe aquatica</i>	Fine-leaved Water-dropwort	Vascular Plants	Locally Important Species
<i>Ophrys apifera</i>	Bee Orchid	Vascular Plants	Locally Important Species
<i>Osmunda regalis</i>	Royal Fern	Vascular Plants	Locally Important Species
<i>Phragmites australis</i>	Common Reed	Vascular Plants	Locally Important Species
<i>Polygonatum multiflorum</i>	Solomon's-seal	Vascular Plants	Locally Important Species
<i>Primula veris</i>	Cowslip	Vascular Plants	Locally Important Species
<i>Prunus laurocerasus</i>	Cherry Laurel	Vascular Plants	Other Species
<i>Prunus padus</i>	Bird Cherry	Vascular Plants	Locally Important Species
<i>Puccinellia distans</i>	Reflexed Meadow-Grass	Vascular Plants	Locally Important Species
<i>Pyrola rotundifolia</i>	Round-leaved Wintergreen	Vascular Plants	Locally Important Species
<i>Rhamnus cathartica</i>	Buckthorn	Vascular Plants	Locally Important Species
<i>Rhinanthus minor</i>	Yellow-rattle	Vascular Plants	Locally Important Species
<i>Sagittaria sagittifolia</i>	Arrowhead	Vascular Plants	Species of Conservation Concern
<i>Salix purpurea</i>	Purple Willow	Vascular Plants	Locally Important Species
<i>Silene latifolia</i> subsp. <i>alba</i>	White Campion	Vascular Plants	Locally Important Species
<i>Sinapis arvensis</i>	Charlock	Vascular Plants	Species of Conservation Concern
<i>Sparganium emersum</i>	Unbranched Bur-reed	Vascular Plants	Locally Important Species
<i>Spergularia marina</i>	Lesser Sea-spurrey	Vascular Plants	Locally Important Species
<i>Stellaria palustris</i>	Marsh Stitchwort	Vascular Plants	Priority Species
<i>Symphoricarpos albus</i>	Snowberry	Vascular Plants	Other Species
<i>Thelypteris palustris</i>	Marsh Fern	Vascular Plants	Species of Conservation Concern
<i>Torilis arvensis</i>	Spreading Hedge-parsley	Vascular Plants	Species of Conservation Concern
<i>Veronica agrestis</i>	Green Field-speedwell	Vascular Plants	Locally Important Species
<i>Viburnum lantana</i>	Wayfaring-tree	Vascular Plants	Locally Important Species

APPENDIX C – SITE LOCATION PLAN

