



Ecological Impact Assessment

Land adjacent to Amazon Warehouse,
Crymlyn Burrows SA1 8QX

Presented to: **DWD Property and Planning**

Issued: September 2022

Delta-Simons Project No: 22-1714.01

Report Details

Client	DWD Property and Planning
Report Title	Ecological Impact Assessment
Site Address	Land adjacent to Amazon Warehouse, Crymlyn Burrows SA1 8QX
Project No.	22-1714.01
Delta-Simons Contacts	Jennifer Britt (Jennifer.britt@deltasimons.com) Hayley Percival (hayley.percival@deltasimons.com)

Quality Assurance

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
2	Final	16 th September 2022			<i>H. Percival</i>	<i>J. Britt</i>
				Joseph Valentine Assistant Ecologist	Hayley Percival Principal Ecologist	Jennifer Britt Associate Ecologist

About us

Delta-Simons is a trusted, multidisciplinary environmental consultancy, focused on delivering the best possible project outcomes for customers. Specialising in Environment, Health & Safety and Sustainability, Delta-Simons provide support and advice within the property development, asset management, corporate and industrial markets. Operating from across the UK we employ over 180 environmental professionals, bringing experience from across the private consultancy and public sector markets.

As part of Lucion Services, our combined team of 500 in the UK has a range of specialist skill sets in over 50 environmental consultancy specialisms including asbestos, hazardous materials, ecology, air and water services, geo-environmental and sustainability amongst others.

Delta-Simons is proud to be a founder member of the Inogen Environmental Alliance, enabling us to efficiently deliver customer projects worldwide by calling upon over 5000 resources in our global network of consultants, each committed to providing superior EH&S and sustainability consulting expertise to our customers. Through Inogen we can offer our Clients more consultants, with more expertise in more countries than traditional multinational consultancy.



Delta-Simons is a 'Beyond Net-Zero' company. We have set a Science-Based Target to reduce our Scope 1 and Scope 2 carbon emissions in line with the Paris Agreement and are committed to reducing Scope 3 emissions from our supply chain. Every year we offset our residual emissions by 150% through verified carbon removal projects linked to the UN Sustainable Development Goals. Our consultancy services to you are climate positive.



DeltaSimons
Protecting people and planet



If you would like support in understanding your carbon footprint and playing your part in tackling the global climate crisis, please get in touch with your Delta-Simons contact above who will be happy to help.

Non-Technical Summary

Delta-Simons Ltd was instructed by DWD Property and Planning (the 'Client') to undertake an Ecological Impact Assessment (EclA) of an area of land adjacent to the Amazon Warehouse, Crymlyn Burrows SA1 8QX (hereafter referred to as the 'Site') to inform an application for temporary change of use of land for a heavy goods vehicle (HGV) parking area within the north-west of the Site.

This EclA addresses the potential effects of the proposals on ecology and nature conservation. The Report describes the methods used to assess the effects; the baseline conditions currently existing at the Site and within the immediate surrounding area; the mitigation measures required to prevent, reduce, or offset any significant adverse effects and the likely residual effects after these measures have been adopted. A summary of residual effects is provided in Section 6.0.

An ecological desk study undertaken in August 2022 identified one internationally designated statutory site within 6 km of the Site and five nationally designated statutory sites within 2 km of the Site. Seventeen non-statutory designated sites were identified within 2 km of the Site, of which one incorporates the Site and wider area, associated with the network of watercourses. Due to the small scale and nature of the proposals, utilising existing footprint, it is considered unlikely that any significant adverse impacts on designated sites would arise.

The habitats on Site were surveyed and assessed for their suitability to support protected/otherwise notable species by Delta-Simons on 18th August 2022. The Site covers an area of 0.38 ha and comprises predominantly bare ground and hardstanding in the north and west and predominantly dense scrub in the east and south, with patches of scattered scrub, semi-improved grassland, amenity grassland, marshy grassland, tall ruderal, and ephemeral/short perennial vegetation. There are no Habitats of Principal Importance present on Site and the habitats are widespread on both a local and national scale, with none of the habitats being considered rare. The proposals will likely result in the loss of mostly bare ground in addition to small areas of tall ruderal, ephemeral vegetation and scattered scrub, although the majority of on-Site habitat is to be retained. As such, any impact resulting from the loss of habitat on Site will be negligible and of neutral significance.

The Site was found to be suitable for the following protected/otherwise notable species.

- Bats (foraging/commuting)
- Reptiles
- Nesting birds
- Western European hedgehog

Great crested newts and badgers were considered likely to be absent from Site.

It is understood that the application is for temporary use and that no physical changes to the Site are proposed, with the existing bare ground/hard standing utilised for HGV parking/storage.

The proposed use of the Site may require the removal/management of small areas of scattered sub and ruderal vegetation, therefore precautionary measures are required to minimise impacts on nesting birds, reptiles and hedgehog which may be present. However, given the extent of proposed impacts, the residual effects are considered to be negligible. The Site is considered to be of low value for foraging/commuting bats. Dense scrub and grassland habitats are suitable for foraging/commuting bats, although it is expected to experience high levels of artificial illumination from streetlights and security lighting adjacent to the Site. Any bats that do make use of the Site are likely to be relatively light-tolerant species only. Furthermore, the existing vegetation at the Site is to be retained and any impacts of bat is considered negligible.

Japanese knotweed has been identified on Site and, therefore, appropriate mitigation is required to prevent its spread, and a management plan put in place to eradicate it from the Site.

It is concluded that provided all relevant mitigation identified within this Report is implemented, no significant adverse impacts are anticipated.

Table of Contents

1.0	INTRODUCTION	1
1.1	Purpose and Scope of the Survey.....	1
1.2	Site Description	1
1.3	Proposed Works and Site Use.....	1
2.0	LEGISLATION & POLICY SUMMARY.....	3
2.1	National Policy and Guidance	3
2.2	Local Policy and Guidance	3
3.0	METHODOLOGY.....	6
3.1	Scope of the Assessment and Zone of Influence	6
3.2	Desk Study	6
3.2.1	Data Search.....	6
3.2.2	Previous Reports	6
3.3	Preliminary Ecological Appraisal Survey	6
3.4	Survey Limitations	7
3.5	Ecological Impact Assessment Methodology.....	7
4.0	BASELINE CONDITIONS.....	8
4.1	Desk Study	8
4.1.1	Designated Sites	8
4.1.2	SSSI Impact Risk Zones.....	9
4.1.3	Priority Habitats	10
4.2	Habitats.....	10
4.3	Species	11
4.4	Summary of Important Ecological Features and Geographic Value	14
5.0	ASSESSMENT OF EFFECTS.....	15
5.1	Important Ecological Features for Which No Effect is Anticipated.....	15
5.2	Important Ecological Features and Potential Effects	15
5.2.1	Non-Statutory Designated Sites	15
5.2.2	Habitats	15
5.2.3	Reptiles.....	16
5.2.4	Birds.....	16
5.2.5	Bats	17
5.2.6	Hedgehog.....	17
5.2.7	Invasive Plants	18
6.0	CONCLUSIONS.....	19
7.0	DISCLAIMER	21

Tables

TABLE 1 - INTERNATIONAL STATUTORY DESIGNATED SITES WITHIN 6 KM OF THE SITE
TABLE 2 - LOCAL AND NATIONAL STATUTORY DESIGNATED SITES WITHIN 2 KM OF THE SITE
TABLE 3 - NON-STATUTORY DESIGNATED SITES WITHIN 2 KM OF THE SITE
TABLE 4 - BAT ROOST POTENTIAL ASSESSMENT - BUILDINGS
TABLE 5 - IDENTIFIED IMPORTANT ECOLOGICAL FEATURES
TABLE 6 - BELOW PROVIDES A SUMMARY OF RESIDUAL EFFECTS:

Figures

FIGURE 1 – SITE LOCATION PLAN
FIGURE 2 – PHASE 1 HABITAT PLAN
FIGURE 3 – TARGET NOTES
FIGURE 4 – NATURE CONSERVATION DESIGNATED SITES
FIGURE 5 – PRIORITY HABITATS

Drawings

DRAWING 1 – PROPOSED SITE PLAN

Appendices

APPENDIX A – REFERENCES
APPENDIX B – TARGET NOTES
APPENDIX C – ASSESSMENT OF STRUCTURES, TREES AND HABITATS FOR BATS
APPENDIX D – ECOLOGICAL IMPACT ASSESSMENT METHODOLOGY
APPENDIX E – SITE PHOTOGRAPHS

1.0 Introduction

1.1 Purpose and Scope of the Survey

Delta-Simons Ltd was instructed by DWD Property and Planning (the 'Client') to undertake an Ecological Impact Assessment (EclA) of an area of land adjacent to the Amazon Warehouse, Crymlyn Burrows SA1 8QX (hereafter referred to as the 'Site') to inform an application for temporary change of use of land for a heavy goods vehicle (HGV) parking area within the north-west of the Site.

The purpose of this report is to:

- Establish baseline ecological conditions at the Site.
- Detail any ecological avoidance, mitigation and/or compensation measures to be implemented during Site clearance and preparation.
- Identify any residual ecological effects after avoidance and mitigation measures have been considered.
- Identify any compensation measures required to offset residual effects.
- Provide recommendations for how mitigation and compensation may be secured and monitored.
- Provide sufficient information to determine whether the project accords with relevant nature conservation policies and legislation and, where appropriate, to allow conditions or obligations to be proposed by the relevant authority.

The Site location and the red line boundary are shown in Figure 1.

1.2 Site Description

The Site covers an area of approximately 2.97 ha and is centred at Ordnance Survey (OS) grid reference SS 71389 93416, to the east of Swansea in Wales. An area of hardstanding divides the Site in to two distinct areas at its centre. The northern and western portion of the Site is dominated by an area of bare ground with ephemeral vegetation encroaching at the margins, bordered by tall ruderal vegetation and scattered scrub. The southern and eastern half of the Site comprises dense scrub surrounding a small area of hardstanding, which is bounded by mosaic of amenity grassland, semi-improved neutral grassland, ephemeral and ruderal vegetation. A small flat-roofed structure of breezeblock construction is located at the southern Site boundary. The Site did not support standing water at the time of the survey.

The Site is immediately adjoined by dry ditches with associated vegetation including plantation broadleaved woodland and scattered trees and scrub to the north, east, south, and west, whilst immediately beyond lies a large industrial warehouse to the west and associated infrastructure including major and minor roads. The wider landscape comprises urban settlements to the east and west containing a mix of residential dwellings, commercial and industrial areas including associated infrastructure. Swansea Bay lies to the south with associated dune habitats and saltmarsh and expanses of broadleaved woodland and bog habitat to the north. A railway lines with associated broadleaved trees and scrub lies 125 m to the north, and beyond this lies Tennant Canal.

The habitats present on Site are shown in Figure 2.

1.3 Proposed Works and Site Use

It is understood from the drawing provided by the Client (Drawing 1) that the proposals for the Site will be confined to the northern and western areas of the Site, covering a total of approximately 1.5 ha, and will comprise resurfacing areas of bare ground for parking and storage of HGV's. It is understood that temporary vehicle barriers will be installed to control HGV movements.

The proposals will comprise:

- Installation of temporary vehicle barriers;
- Use for at least 55 HGV parking bays

2.0 Legislation & Policy Summary

Planning guidelines, international commitments, legislation, and planning policies relevant to the protection, conservation and enhancement of nature conservation interests are detailed below.

2.1 National Policy and Guidance

Specific habitats and species of relevance to the Site receive legal protection in the United Kingdom under various pieces of legislation, including:

- The Environment (Wales) Act 2016;
- The Conservation of Habitats and Species Regulations 2017;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities Act (NERC) 2006;
- The Hedgerow Regulations 1997; and
- The Protection of Badgers Act 1992.

Where relevant, this assessment takes account of the legislative and policy protection afforded to specific habitats and species. Delta-Simons do not purport to provide specialist legal advice and where necessary the reader should also consult the original legislation, references to which are included in Appendix A.

Planning Policy Wales (PPW)

The PPW 11 sets out that “*planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. This means that development should not cause any significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity*” (para 6.4.5 refers). This policy and subsequent policies in Chapter 6 of PPW 11 respond to the Section 6 Duty of the Environment (Wales) Act 2016

2.2 Local Policy and Guidance

Local planning policies relating to ecology are generally based national planning policy, the conservation of species protected under the above legislation and the protection of designated sites. However, relevant local policy and guidance documents are outlined below.

Swansea Local Development Plan 2010 - 2025

The principal planning policies relating to nature conservation are as follows:

“ER 6: Designated Sites of Ecological Importance

Development will not be permitted that would result in a likely significant adverse effect on the integrity of sites of international or national nature conservation importance, except in the circumstances specified in relevant legislation. Development that would adversely affect locally designated sites of nature conservation importance should maintain and enhance the nature conservation interest of the site. Where this cannot be achieved development will only be permitted where it can be demonstrated that:

- The need for the development outweighs the need to protect the site for nature conservation purposes;*
- There is no satisfactory alternative location for the development that avoids nature conservation impacts; and*

iii. Any unacceptable harm is kept to a minimum by effective avoidance measures and mitigation, or where this is not feasible, compensatory measures must be put in place to ensure that there is no overall reduction in the nature conservation value of the area."

ER 8: Habitats and Species

Development proposals that would have a significant adverse effect on the resilience of protected habitats and species will only be permitted where:

- i. The need for development outweighs the nature conservation importance of the site;*
- ii. The developer demonstrates that there is no satisfactory alternative location for the development which avoids nature conservation impacts; and*
- iii. Any unavoidable harm is minimised by effective mitigation to ensure that there is no reduction in the overall nature conservation value of the area. Where this is not feasible, compensation measures designed to conserve, enhance, manage and, where appropriate, restore natural habitats and species must be provided.*

ER 9: Ecological Networks and Features of Importance for Biodiversity

Development proposals will be expected to maintain, protect, and enhance ecological networks and features of importance for biodiversity. Particular importance will be given to maintaining and enhancing the connectivity of ecological networks which enable the dispersal and functioning of protected and priority species. Development proposals that could result in an adverse effect on the connectivity of ecological networks and features of importance for biodiversity will only be permitted where:

- i. The need for the development outweighs the nature conservation value of the site;*
- ii. It can be demonstrated that there is no satisfactory alternative location for the development;*
- iii. A functional connected element of the natural resource is retained as part of the design of the development; and*
- iv. Compensatory provision will be made of comparable or greater ecological value to that lost as a result of the development.*

ER 11: Trees, Hedgerows and Development

Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted. Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

- i. Fragmentation or loss of Ancient Woodland;*
- ii. The loss of an Ancient or Veteran Tree;*
- iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;*
- iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;*
- v. Significant alteration to the land use adjoining the Ancient Woodland;*
- vi. An increase in the likely exposure of Ancient Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;*
- vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient or Veteran Trees;*

- viii. Destruction of important connecting habitats relating to Ancient Woodland;*
- ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or*
- x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.*

3.0 Methodology

The baseline for the EclA has been established through a combination of desk study and field surveys.

3.1 Scope of the Assessment and Zone of Influence

The features considered for this assessment were designated sites, Habitats and Species of Principal Importance for conservation, and species protected by wildlife legislation.

Given the size and location of the Site and nature of the proposals, the zone of influence was taken to be the Site boundary and its immediate environs only. The exception for this was for designated sites and Great Crested Newt (GCN) *Triturus cristatus* details of the zone of influence for these features is provided in Section 3.2, below.

3.2 Desk Study

3.2.1 Data Search

In August 2022, available records of protected and notable species were collated from the local record centre, West Wales Biodiversity Information Centre, along with the non-statutory designated sites from within 2 km of the Site.

A search for internationally, nationally, and locally designated statutory sites for nature conservation was undertaken using the Multi-Agency Geographic Information for the Countryside (MAGIC) website. The search radius was 6 km from the Site boundary for internationally designated statutory sites and 2 km from the Site boundary for nationally and locally designated statutory sites. A search for non-statutory ancient woodland was undertaken within 2 km of the Site boundary, and an assessment was made regarding the location of Habitats of Principal Importance (HPIs) on or near the Site using MAGIC.

In addition, free and publicly accessible Ordnance Survey maps and aerial photographs were searched for waterbodies on, or within, 500 m of the Site boundary. This information has been used to assess the Site for its potential to support GCN the results of which are found in Section 4.3.

3.2.2 Previous Reports

Where available, previous third-party reports encompassing the Site were reviewed for any pertinent information that may be relevant to this impact assessment. The reports are:

- Barry Stewart & Associates Ecological Consultants (2017) Ecological Survey & Assessment, dated October 2017
- Thompson Environmental Consultants (2019) Extended Phase 1 Habitat Survey, Jersey Marine, dated May 2019

3.3 Preliminary Ecological Appraisal Survey

The habitats on Site, were surveyed on 18th August 2022 by a Delta-Simons principal ecologist.

The following was undertaken during the survey:

- Habitats were classified and mapped using the standard JNCC Phase 1 habitat classification and methodology (JNCC, 2010). Dominant plant species were recorded in each different habitat. The plant species nomenclature followed that of Stace (2010);
- Habitats on-Site were surveyed for the presence of, or field signs to indicate the presence of protected or notable birds, amphibians, reptiles, mammals, and widespread invasive plants. This included an external visual assessment of any trees/buildings on the Site for potential bat roost features and any

evidence of bat activity, and an assessment of the Site's suitability to support commuting and foraging bats (Appendix B), in line with Collins (2016); and

- If Habitats of Principal Importance (HPIs) under the NERC Act 2006 were found to be present these were recorded. Further, an assessment of any hedgerows at the Site, which will be adversely affected by the proposed development, was undertaken using the hedgerow criteria outlined in the Hedgerow Regulations 1997. The purpose of the assessment was to ascertain whether the hedgerows are classified as 'nationally important' and, therefore, protected under the Hedgerow Regulations 1997. The assessment involves a scoring system which relies on particular features, number of woody and floral species present within the hedgerow habitat, and the age of the hedgerow.

3.4 Survey Limitations

The baseline conditions described in this report were accurate at the time at which the survey was undertaken. Should at least two years pass by, and/or conditions on Site/Site usage change prior to the commencement of works, an update survey should be undertaken.

Direct access to waterbodies adjacent to the Site was not possible at the time of Survey, these habitats were surveyed from the fence line.

3.5 Ecological Impact Assessment Methodology

An ecological impact assessment has been carried out following the principles set out within the Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland; Terrestrial, Freshwater, Coastal and Marine updated by the Chartered Institute of Ecology and Environmental Management (CIEEM) in 2019, the full details of which are provided in Appendix C.

4.0 Baseline Conditions

The following section describes the baseline ecological conditions at the Site, outlining the results of the desk study and field survey findings. Current management is anticipated to remain unchanged, therefore, baseline conditions at the time of writing this Report are anticipated to reflect those at the commencement of the proposed works/change of use. The conservation importance of the features identified have been evaluated using the geographical scale outlined in the previous section.

The pertinent information from the data search is set out in section 5.1 below for designated sites, whilst data search records and any information gathered from previous reports for the species are discussed in the relevant species sections. Full results of the data searches are available to the Client on request.

4.1 Desk Study

4.1.1 Designated Sites

The results of the MAGIC data search and the West Wales Biodiversity Information Centre (WWBIC) desk search indicate:

- One internationally designated statutory site within 6 km of the Site boundary;
- Four nationally designated statutory sites within 2 km of the Site boundary;
- One locally designated statutory site within 2 km of the Site boundary;
- 17 non-statutory designated sites within 2 km of the Site boundary, all of which are Local Wildlife Sites (LWS) or Sites of Importance for Nature Conservation (SINC).

Tables 1, 2 and 3, below, set out the statutory and non-statutory designated sites identified and considered relevant to the Site. The full list of locally important non-statutory is not presented below, as due to the Site's size, nature, and location, only those shown in Table 3 were screened in for further consideration within this report.

Table 1 - International Statutory Designated Sites within 6 km of the Site

Site Name	Designation	Distance and Direction from Site Boundary	Designation Criteria Summary
Crymlyn Bog	SAC, RAMSAR	Approximately 400 m north	One of the largest valley floodplain mires in Wales, and amongst the most important in the United Kingdom, the site forms part of an extensive inter-estuarine complex. The site consists of a complex mosaic of vegetation types made up of communities' characteristic of both nutrient-rich and nutrient-poor conditions. Notable plant communities include the semi-floating fen and the nationally rare cotton-grass <i>Eriophorum gracile</i> community. The area is notable for its rich invertebrate fauna, including many nationally rare or highly localized species associated with mires and supports the nationally rare fen raft spider <i>Dolomedes plantarius</i> , one of

			three sites in the United Kingdom where the species is found.
--	--	--	---

Table 2 - Local and National Statutory Designated Sites within 2 km of the Site

Site Name	Designation	Distance and Direction from Site Boundary	Designation Criteria Summary
Crymlyn Bog	Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR)	Approximately 400 m north	As described in Table 01.
Pant-y-sais	SSSI, Local Nature Reserve (LNR), NNR	Approximately 400 m north	Similar in structure and composition to the larger nearby Crymlyn Bog.
Crymlyn Burrows	SSSI	Approximately 50 m south.	One of the last remaining sections of the Swansea Bay Coastline which has remained substantially unmodified by industrial development. Parallel sand dune ridges have developed at right angles to the River Neath, and these are continuing to accumulate at the present time. Salt water is able to gain access to the system at high tide via the river channel, with the result that the dunes are interspersed by tongues of saltmarsh. These grade westwards into wet dune slacks and carr woodland.
Earlswood Road Cutting and Ferryboat Inn Quarries	SSSI	Approximately 1.8 km north-east.	This site consists of roadside cuttings and quarry exposures located on a hillside west of the River Neath near to its mouth, between Port Talbot and Neath. Designated for its geological features.

Table 3 - Non-Statutory Designated Sites within 2 km of the Site

Site Name	Designation	Distance and Direction from Site Boundary	Designation Criteria Summary
Neath Port Talbot Watercourses	SINC	Encompasses the Site and wider area	No citation information available.

4.1.2 SSSI Impact Risk Zones

SSSI Impact Risk Zones (IRZ) are not available in Wales, however the Site is located close to several internationally/nationally designated statutory sites and likely falls within the IRZ for Crymlyn Bog (SAC, RAMSAR) and Crymlyn Burrows (SSSI). However due to its limited scale and nature of the proposals, it is considered unlikely that the proposed change of use will meet the criteria for which further consultation with

Natural Resources Wales to determine the potential impacts to SSSIs/SACs/SPAs and RAMSAR sites is required.

4.1.3 Priority Habitats

The MAGIC database does not provide information regarding Priority/HPI habitats within Wales, however a review of local record centre data found five Priority Habitats within 2km of the Site:

- Lowland Fens and Reedbeds
- Lowland Dry Acid Grassland
- Lowland Heathland
- Purple Moor Grass and Rush Pastures, and
- Traditional Orchards

The nearest of these priority habitats, is an area of Lowland Fens and Reedbeds 418m to the north of the Site. However, no priority/HPI habitat were found to occur within the Site boundary.

4.2 Habitats

A review of associated reports found habitats on Site to be largely consistent with previous ecological assessment of the Site. Figure 2 shows the extent of habitat types identified during the survey and boundary features. Descriptions of the habitat types and dominant plant species found at the Site are provided below. Habitat descriptions are by broad habitat type, as listed in the Phase 1 Habitat Survey Manual (JNCC, 2010).

Target Notes (TNs) are listed under Appendix B, whilst photographs of the Site survey are located in Appendix F.

Habitats recorded on Site are:

Dense Scrub

Dense scrub could be found along the eastern boundary and was the dominant habitat in the southern aspect of the Site, containing, bramble *Rubus fruticosus* agg. which was found to be dominant, interspersed with abundant grey willow, *Salix cinerea*. Bracken, *Pteridium aquilinum* was frequently recorded along with common gorse *Ulex europaeus* and dogwood, *Cornus sanguinea*.

Scattered Scrub

Scattered scrub was recorded predominantly along the western and northern Site boundaries, comprising frequent grey willow and introduced shrub buddleia *Buddleja davidii*.

Semi-improved Grassland

Two areas of semi-improved neutral grassland were present alongside the amenity grassland within the eastern portion of the Site. The grassland consists of abundant Yorkshire fog, *Holcus lanatus*, and cock's-foot, *Dactylus glomerata* with frequent, broadleaved dock, *Rumex obtusifolius*, red fescue *Festuca rubra* and perennial ryegrass, *Lolium perenne* and occasional ribwort plantain, *Plantago lanceolata*, white clover, *Trifolium repens*, birds foot trefoil, *Lotus corniculatus* and vipers bugloss, *Echium vulgare*.

Ephemeral/short Perennial

Minor areas of ephemeral vegetation were present at the margins of bare ground and hardstanding across the Site and comprised dominant common fleabane, *Pulicaria dysenterica*, with occasional Guernsey fleabane, *Erigeron sumatrensis*, red fescue, the ruderal common nettle, *Urtica dioica*, vipers bugloss, common Ragwort, *Senecio jacobaea*, hoary mustard *Hirschfeldia incana* and field horsehair, *Equisetum arvense*. White mullein, *Verbascum lychnitis* and hoary mullein *Verbascum pulverulentum* were recorded

within an area of ruderal vegetation bordering the central strip of hardstanding. The latter species is an ancient introduction to the United Kingdom and rare outside of East Anglia. This species and twiggy mullein *Verbascum virgatum* were recorded during the 2017 survey, however, no evidence to indicate the presence of twiggy mullein was found during the August 2022 survey though white mullein was recorded and this species was not found in 2017, whilst the Thomson Ecology 2019 survey did not identify specific mullein species.

Tall Ruderal

Tall ruderal vegetation was present at the margins of areas of bare ground and hardstanding within the Site and comprised rosebay willowherb, *Chamerion angustifolium* and common nettle, interspersed with non-ruderals comprising red campion, *Silene dioica*, wild parsnip, *Pastinaca sativa*, and wild carrot, *Daucus carota* subsp. *carota*.

Marginal vegetation

An area of marginal vegetation occurred at the drainage ditch to the northern boundary of the Site, containing great reedmace, *Typha latifoli*, water mint, *Mentha aquatica* and common fleabane, *Pulicaria dysenterica*

Marshy Grassland

Small areas of marshy grassland occur at the north-eastern area of the Site, containing occasional common reed, *Phragmites australis*, with occasional hard rush, *Juncus inflexus* and soft rush, *Juncus effusus*.

Amenity Grassland

Small areas of amenity grassland were recorded within the eastern portion of the Site. The sward comprised grassland comprising abundant cock's-foot, with frequent daisy, broadleaved dock, red fescue, and Yorkshire fog. These habitats occur alongside areas of semi-improved neutral grassland, hardstanding, ephemeral and ruderal vegetation, and the grassland forms a mosaic of habitats bordered by dense scrub at the east of the Site.

Introduced Shrubs

Non-native shrub buddleia *Buddleja davidii* was occasionally present on Site predominantly at the margins of bare ground and hardstanding. A stand of Japanese knotweed (TN1) (approximately 2m of above ground vegetation was visible) was present toward the eastern boundary of the Site.

Hardstanding

A strip of hardstanding in the form of a former access road runs north-east to south-west, bisecting the Site into eastern and western portions. A further square of hardstanding is located in the south-eastern section of the Site.

Bare Ground

An area of sparsely vegetated gravel dominated the western portion of the Site and at the time of survey was utilised for the storage of HGV trailers.

Buildings

A single, small flat-roofed structure constructed of breezeblock is located at the southern Site boundary.

4.3 Species

Amphibians

As part of the desk study there were 35 records of amphibians of conservation concern returned by the WWBIC within 2 km of the Site boundary, and within the last 10 years. These comprise 14 records of GCN and 21 records of common toad *Bufo bufo*. The closest GCN record was approximately 1 km north of the Site boundary in 2019, beyond the railway line.

Information available regarding granted European Protected Species Licences (EPSL) and records of positive GCN survey licence returns are currently not available in Wales. The 2017 report for the Site did not consider GCNs, whilst the 2019 report was not informed by a data search but considered terrestrial habitat (excluding hardstanding) and two ponds connected to the Site (see below) and off-Site ditches to offer suitable aquatic habitat for this species though no assessment was undertaken.

A review of aerial photographs and OS mapping identified three waterbodies within 500 m of the Site with potential to support breeding amphibians. A single pond to the north-east of the Site was found to be fragmented from it by two busy highways, which are considered likely to be a barrier to dispersal of amphibians to the Site.

Two ponds (Waterbodies 1 (TN2) and 2 (TN3), (see Figure 2) were found to be connected to the Site, and although they were not accessible at the time of survey, they were surveyed from the Site boundary. Both ponds appeared to be ephemeral in nature and function as attenuation basins for surrounding infrastructure, and as such were dry at the time of survey, such that a Habitat Suitability Index (HSI) assessment could not be completed. Given that they dry seasonally, they are not considered to offer suitable GCN breeding habitat. The Site lacks connectivity to any other suitable aquatic habitat for GCN.

Due to the localised footprint of the proposed use of the Site, and the lack of connectivity to the wider landscape and suitable breeding habitat, it is considered unlikely that GCN are present on-Site within the terrestrial habitats and, therefore, GCN are not considered to be a constraint at the Site and are not considered further within this assessment.

Reptiles

The local records centre data search returned 63 records of reptiles within 2 km of the Site boundary, comprising 30 records of grass snake *Natrix helvetica* and 33 records of common lizard *Zootoca vivipara*. The closest records are located approximately 200 m north-west of the Site boundary, associated with the Tennant Canal.

During the PEA survey undertaken on 18th August 2022 habitats within the Site were assessed for the presence of, or field signs to indicate the presence of reptiles. The mosaic of hardstanding, bare ground, grassland, and scrub within the Site represents suitable habitat for basking and foraging reptiles. The Site has connectivity to further areas of suitable reptile habitat within the local landscape to the west, however, this is limited by the presence of major roads adjacent to the north, east and south of the Site.

The Site is considered unlikely to support a permanent reptile population given its location and lack of suitable hibernation opportunities, however reptiles, if present within the immediate surrounding area, may disperse into habitats within and adjacent to the Site on an occasional basis.

The Site is considered to be of local geographic value with regards to reptiles.

Birds

There were 146 records of notable bird species of relevance to the Site returned by the records centre within 2 km of the Site and within the last 10 years. This includes 45 species listed on Schedule 1 of the WCA (1981, as amended) and 38 species listed on the Red List of BoCC (Stanbury *et al.*, 2021).

Broadleaved woodland adjacent to the Site and dense scrub within and adjacent to the Site provides potential nesting habitat. No active or disused nests were recorded at the time of the survey.

Bird species recorded at the time of the survey included magpie *Pica pica*, blue tit *Cyanistes caeruleus*, long-tailed tit *Aegithalos caudatus*, wren *Troglodytes troglodytes*, carrion crow *Corvus corone* and goldfinch

Carduelis carduelis. It should be noted that this is not a comprehensive inventory of the bird species which may be present at the Site.

Habitats within the Site are considered to be of local geographic value with regards to birds.

Bats

There were 75 records of six bat species found within 2 km of the Site within the last 10 years, of which 11 are records of confirmed roosts. The closest record was a non-roosting record of an individual common pipistrelle *pipistrellus pipistrellus* at the southern Site boundary, recorded in 2012. The most recent record was for common pipistrelle, recorded approximately 1.8 km north-west of the Site boundary in May 2022.

Information regarding granted EPSL for bats is not available within Wales.

Preliminary Roost Assessment

A preliminary roost assessment undertaken on 18th August 2022, identified a single building within the Site boundary was found to be largely exposed to the elements, and with a negligible potential to support roosting bats.

Trees adjacent to the Site did not support any potential roost features that could be utilised by bats.

A single building was identified within the Site. Descriptions of the buildings and associated BRP features are provided in Table 4.

Table 4 - Bat Roost Potential Assessment - Buildings

Building Reference	Building Description	BRP Feature	Evidence of Bats	BRP Assessment
B1	Small, disused structure of breezeblock construction with a flat, felt roof and wooden fascia boards. The structure is open fronted allowing access into the interior space. Brickwork was in good condition at the time of survey with no obvious gaps or cracks.	None	No evidence of bats was observed however a full inspection was not possible due to the presence of dense bramble scrub.	Negligible

Preliminary Commuting and Foraging Habitat Assessment

Habitats within the Site including scrub, tall ruderal vegetation and grassland are likely to support invertebrates that would provide foraging opportunities for bats. Off-Site scrub and trees adjacent to the boundaries may offer commuting opportunities since they would provide a shelter belt. However, the Site is bordered by roads to the north, east and south, with a warehouse within 50 m of the western boundary and is likely subject to light spill from adjacent roads, street and possibly security lighting. The Site has limited connectivity to areas of suitable foraging habitat within the local landscape. Habitats associated with the nearby Tennant Canal are considered to provide more favourable habitat for foraging and commuting and, therefore, it is considered unlikely that bats utilise habitats within the Site on more than an occasional basis.

Overall, the Site was assessed as being of low habitat suitability for foraging and commuting bats. Habitats within the Site are considered to be of local value with regards to bat commuting and foraging activity.

Badgers

There were 12 records of European badger *Meles meles* found within 2 km of the Site within the last 10 years, the locations of which has not been included in this report due to the sensitive nature of the species.

No evidence of badger was identified during the survey. Habitats within the Site including dense scrub and grassland provide limited foraging habitat and dry ditches found on Site offer limited opportunities for sett creation. However, the Site is poorly connected to more extensive areas of suitable habitat within the local landscape, with the surrounding roads and large warehouse to the west representing barriers to dispersal. It is considered badgers would be unlikely to venture onto the Site for the purpose of commuting or foraging/sett building.

Badgers are not considered to be a constraint at the Site.

Other Protected or Otherwise Notable Species

There are 15 records of west European hedgehogs *Erinaceous europaeus* within 2 km of the Site within the last 10 years. The closest and most recent record is approximately 180 m south-east of the Site boundary, recorded in 2021. Scrub and grassland habitats within the Site are considered suitable for west European hedgehogs, such that they may inhabit, or venture onto the Site and surrounding land to forage although accessibility is poor due to the surrounding road network.

Habitats within the Site are considered to be of local geographic value with regards to west European hedgehogs.

Invasive Species

As part of the desk study a single record of Japanese knotweed was found approximately 840 m north-east of the Site boundary in 2021.

During the field survey, a stand of Japanese knotweed approximately 2m² visible above ground, was recorded at the eastern the Site boundary.

4.4 Summary of Important Ecological Features and Geographic Value

The species scoped out as important ecological features above due to their likely absence from Site cannot experience effects from the proposed change of use and are not, therefore, considered below.

The 'important ecological features' identified above with the potential to experience effects as a result of the proposals for the Site are listed in Table 5 below, along with their geographic importance. These features will be the subject of the ecological impact assessment in Section 5.0.

Table 5 - Identified Important Ecological Features

Important Ecological Feature	Geographic Value
Designated Sites	International, National and Local
Habitats	Local
Reptiles	Local
Bats	Local
Nesting Birds	Local
West European Hedgehog	Local
Invasive Plants	n/a

5.0 Assessment of Effects

The evaluation in this section is based on the baseline information presented above, review of proposals for the Site, and reasonable assumptions regarding operation.

For purposes of the assessment, it is assumed there has been no change in the condition of the Site since the Site survey (unless otherwise stated).

5.1 Important Ecological Features for Which No Effect is Anticipated

Due to its limited scale within the existing footprint, no effects on nearby internationally or nationally designated statutory sites are anticipated as a result of the proposed change of use.

5.2 Important Ecological Features and Potential Effects

5.2.1 Non-Statutory Designated Sites

The Site falls within the Neath Port Talbot Watercourses SINC, for which no information available was provided as part of the data search. There are no watercourses on-Site and, therefore, it is not known what the SINC relates to on-Site, though there are drainage features immediately off-Site that were dry at the time of the survey.

Potential Impacts and Effects

There will be no loss of aquatic habitats as a result of the proposed change of use. There is potential for pollution impacts on the off-Site drainage features as a result of runoff and dust, and accidental spillages resulting in a pollution incident. During the operational phase of works, the current bare ground, hardstanding, and small areas of scrub to be lost will be replaced with hardcore such that there is not anticipated to be a significant increase in runoff.

In the absence of avoidance and mitigation measures, any impact upon the SINC is considered to be minor adverse such that it is non-significant.

Avoidance and Mitigation

General environmental protection measures will be implemented during the resurfacing works and operation of the Site such as outlined in the Government's Pollution Prevention for Businesses guidance and Construction Industry Research and Information Association guidance (CIRIA, 2015), therefore, there are not anticipated to be any impacts on those drainage features within proximity to the Site.

Assessment of Residual Effects

Following the application of avoidance and mitigation measures, the potential residual impacts of the proposals for the Site on the SINC are considered to have a negligible effect, which is of neutral significance.

5.2.2 Habitats

Potential Impacts and Effects

The habitats present on Site are widespread on both a local and national scale, with none of the habitats being considered rare.

The proposed change of use for the Site will be largely contained within the existing areas of bare ground and hardstanding in the northern and western aspects of the Site. This will likely result in the loss/damage of small areas of vegetation encroaching at the boundaries including scattered scrub, tall ruderal, and ephemeral/perennial vegetation.

Habitats in the southern and eastern areas of the Site will be retained .

The loss/damage of habitats within the Site is considered likely to represent a minor adverse effect on local biodiversity that is unlikely to be significant in isolation.

Avoidance and Mitigation

Habitats beyond the central hardstanding in the southern and western aspects of the Site (outside the footprint of the proposed parking area) will be retained and protected during the operational use of the Site by the installation of temporary barriers..

Assessment of Residual Effects

Following the application of avoidance and mitigation measures, the potential residual impacts of the proposed development on the habitats are considered to have a negligible effect, which is of neutral significance.

5.2.3 Reptiles

Potential Impacts and Effects

In the event the proposed use of the Site requires any management of small areas of scrub, tall ruderal or ephemeral habitat, there is the potential for the killing/injuring of reptiles, if present within the Site, as a result. The removal of scrub and tall ruderal vegetation would represent a loss of potential foraging habitat, although the extent of the habitat likely to be lost is considered to be negligible compared with the overall foraging resource available within the Site.

In the absence of avoidance and mitigation, the potential effects on reptile species are considered likely to be minor-adverse and non-significant.

Avoidance and Mitigation

Clearance/management of any suitable reptile habitat will be undertaken with an awareness for the potential presence of reptiles, and under precautionary working methods. Any individuals found should be caught with gloved hands and moved to retained suitable habitat away from the proposed works, or allowed to disperse naturally into adjacent suitable habitat.

Assessment of Residual Effects

Following the application of avoidance and mitigation measures, the potential residual impacts of the proposed development on reptiles are considered to have a negligible effect, which is of neutral significance.

5.2.4 Birds

Potential Impacts and Effects

In the event the proposed use of the Site requires any management of scrub habitat suitable for breeding birds to facilitate clear access and movement, there is potential for direct adverse effects on nesting birds that are permanent in nature as a result of such clearance.

In addition, works being carried out within proximity to nesting birds may affect them indirectly, depending on the works being carried out, and the species of bird affected. Noise and vibration disturbance effects may result in birds being repeatedly flushed off nests, causing disruption to feeding activity, or even abandonment of nests. This is considered to be a temporary impact.

The extent of the habitat likely to be lost/managed is considered to be negligible compared with the overall resource available within the Site.

Any effects on bird species are considered to be minor adverse and non-significant.

Avoidance and Mitigation

Where practicable, any required scrub management at the Site will be undertaken outside of the main nesting bird season (i.e., clearance carried out between September and February inclusive).

If these works cannot be restricted to within this period, a nesting bird check will be required in advance of works and Ecological Watching Brief will be maintained during the main bird breeding season to ensure that no nesting birds are adversely affected. This will entail assessment of all suitable habitat for nesting birds due to be removed, and a buffer of at least 10 m beyond that area, by a suitably experienced ecologist prior to the commencement of works. If, during the Ecological Watching Brief, birds are found to be within the area due to be cleared or the buffer zone, measures to prevent any disturbance to breeding birds, including the cessation of and vegetation clearance or resurfacing works in areas close to breeding sites until the birds have completed breeding, will be put in place until the nest can be deemed inactive.

Assessment of Residual Effects

Following the application of avoidance and mitigation measures, the potential residual impacts of the proposals for the Site on birds are considered to have a negligible effect, which is of neutral significance.

5.2.5 Bats

Potential Impacts and Effects

The Site provides limited potential foraging and commuting habitat for local bat species across areas of scrub, ruderal vegetation, and grassland at the Site. There is limited connectivity between the Site and areas of suitable foraging habitat within the local landscape due to the road network. The Site is likely to experience high levels of artificial illumination from adjacent street and security lighting and therefore bats are considered unlikely to rely on any aspect of the Site for commuting and foraging. Any bats that do make use of the Site are likely to be light-tolerant species only.

It is understood that only very small areas of ruderal and scrub habitats are likely to be cleared/damaged/managed, which will not significantly reduce the overall foraging or commuting habitat resource within the Site. The single building and surrounding habitats are to be retained.

During the operational phase, artificial light and noise associated with vehicle movement during hours of darkness may represent a minor adverse effect on bats utilising habitats within the Site for foraging or commuting. It is understood that additional artificial lighting will not be installed as a result of the proposed use of the Site and that, with the exception of nocturnal vehicle movements, lighting within the Site will not change. It is considered unlikely that the combined effects of noise and artificial lighting during the operational phase will be significantly greater than that already experienced within the Site due to the proximity of major roads and street/security lighting.

Therefore, the proposals for the Site are considered to represent a negligible effect which is of neutral significance.

Avoidance and Mitigation

Given the negligible effects, no mitigation is required.

Assessment of Residual Effects

Proposals for the Site are considered to represent a negligible effect which is of neutral significance.

5.2.6 Hedgehog

Potential Impacts and Effects

Hedgehogs may make use of dense scrub and grassland habitats within the Site and, therefore, have potential to be killed/injured during any vegetation clearance/management works. The extent of the habitat

likely to be lost/managed is considered to be negligible compared with the overall resource available within the Site.

Without mitigation, the impacts on the species are considered likely to be minor adverse and non-significant.

Avoidance and Mitigation

Clearance of any scrub habitat will be undertaken with an awareness for the potential presence of hedgehog and under precautionary working methods, any individuals found should be caught with gloved hands and moved to an alternative suitable habitat away from the proposed works.

Assessment of Residual Effects

Following mitigation, the potential residual effects of the proposal for the Site on hedgehogs are considered likely to be negligible and of neutral significance.

5.2.7 Invasive Plants

Potential Impacts and Effects

Japanese knotweed has been recorded at the eastern boundary of the Site and, in the absence of mitigation, could be spread beyond the Site boundary (an offence under WCA 1981). This would represent a significant, moderate adverse effect.

Avoidance and Mitigation

A management plan should be applied to mitigate the risk of spreading this species, and for long-term management to eradicate Japanese knotweed from the Site.

Assessment of Residual Effects

Provided the management plan and eradication is successful, there will be no significant residual effects.

6.0 Conclusions

The habitats present on Site are widespread, in both a local and national context. It is understood that the application is for temporary use and that no physical changes to the Site are proposed, with the existing bare ground/hard standing utilised for HGV parking/storage. . It is anticipated that there will be no significant residual effects on habitats or protected species resulting from the proposed change of use for the Site.

Table 6 - Below provides a summary of residual effects:

Important Ecological Feature	Geographic Value	Characterisation of Unmitigated Impact	Significance Before Mitigation	Avoidance, Mitigation and Compensation	Residual Effect Significance
Non-Statutory Designated Site	Local	Pollution events Dust deposition	Minor adverse effect that is non-significant	Works to follow best practice pollution prevention and dust suppression measures	Negligible effect of neutral significance.
Habitats	Local	Habitat loss/management Damage to structure, roots, and health of retained habitat.	Minor adverse effect that is unlikely to be significant in isolation	Retained habitat to be protected through the installation of temporary vehicle barriers.	Negligible effect of neutral significance.
Reptiles	Local	Habitat loss/management Risk of killing/injury during Site clearance	Minor adverse effect that is non-significant	Awareness for the potential presence of the species during Site clearance/resurfacing activities	Negligible effect of neutral significance.
Birds	Local	Habitat loss/management Nest destruction/disturbance Noise and vibration	Minor adverse effect that is non-significant.	Sensitive timing of works to avoid core bird breeding season where possible. Should this be unavoidable a nesting bird check must be conducted by suitably experienced ecologist in advance of works and/or watching brief with regards to the removal of, and works within close proximity to, suitable nesting habitat	Negligible effect of neutral significance

Important Ecological Feature	Geographic Value	Characterisation of Unmitigated Impact	Significance Before Mitigation	Avoidance, Mitigation and Compensation	Residual Effect Significance
Bats	Local	Artificial lighting and noise disturbance	Negligible effect of neutral significance	n/a	Negligible effect of neutral significance
Hedgehog	Local	Habitat loss/management Risk of killing/injury during Site clearance	Minor adverse effect that is non-significant.	Awareness for the potential presence of the species during Site clearance activities	Negligible effect of neutral significance.
Invasive species	n/a	Risk of spread off-Site	Moderate adverse effect significant at a local level	Suitable management plan and eradication strategy	Negligible effect of neutral significance.

7.0 Disclaimer

The recommendations contained in this report represent Delta-Simons' professional opinions, based upon the information referred to in Section 1.0 of this report, exercising the duty of care required of an experienced Ecology Consultant. Delta-Simons does not warrant or guarantee that the Site is free of bats or other protected species.

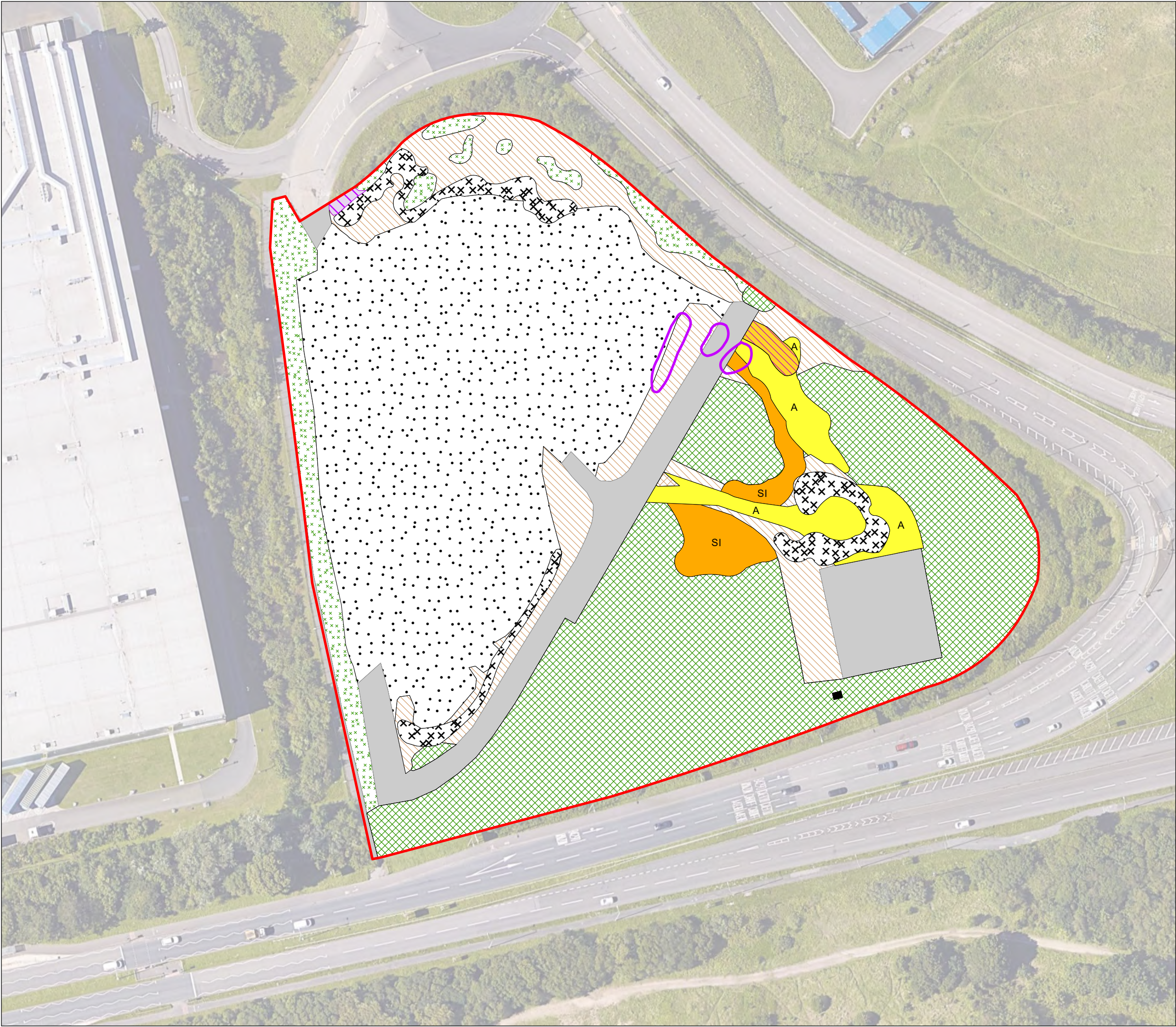
The behaviour of animals can be unpredictable and may not conform to characteristics recorded in current scientific literature. This report, therefore, cannot predict with absolute certainty that animal species will or will not occur in apparently suitable locations or habitats or that they will not occur in locations or habitats that appear unsuitable.

No part of the survey included an assessment of the materials and conditions of any buildings. No part of the survey included an asbestos assessment, nor did it represent an appraisal of other deleterious materials or hazardous substances.

This report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed as defined in Section 1.0 of this report. Nothing contained in this report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses, and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

Figure 1 – Site Location Plan

Figure 2 – Phase 1 Habitat Plan



Legend

- Site boundary
- A Amenity grassland
- Bare ground
- Buildings
- Ephemeral / short perennial
- Hardstanding
- Introduced shrub
- Marshy grassland
- SI Neutral grassland - semi-improved
- Marginal vegetation
- Scrub - dense/continuous
- Scrub - scattered
- Tall ruderal
- Hoary Mullein

0 12 24 36 48 Meters

N

Figure	Site Location Plan		
Job	Land adjacent to Amazon Warehouse (Plot C2), Ffordd Amazon, Crymlyn Burrows		
Client			
Figure No.	2	Revision	A
Drawn	KH	Checked	JB
Job No.	22-1714.01	Date	16/09/2022
		Scale	1:1,000 @ A3
		Central GR	271373E 193409N

DO NOT SCALE.
NOT FOR CONSTRUCTION.

DeltaSimons

© Crown Copyright All rights reserved. Maxar, Microsoft, Google, Imagery © 2022 Bluesky, Inforterra Ltd & COWI A/S, CNES / Airbus, Getmapping plc, Landsat / Copernicus, Maxar Technologies, Map data © 2022

Figure 3 – Target Notes



Legend

-  Site boundary
-  Target note

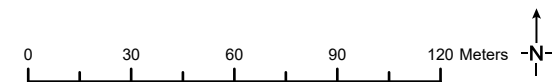


Figure	Target Notes		
Job	Land adjacent to Amazon Warehouse (Plot C2), Ffordd Amazon, Crymlyn Burrows		
Client			
Figure No.	3	Revision	A
		Date	16/09/2022
Drawn	KH	Checked	HP
		Scale	1:2,200 @ A3
Job No.	22-1714.01		Central GR 271177E 193409N



DO NOT SCALE.
NOT FOR CONSTRUCTION.

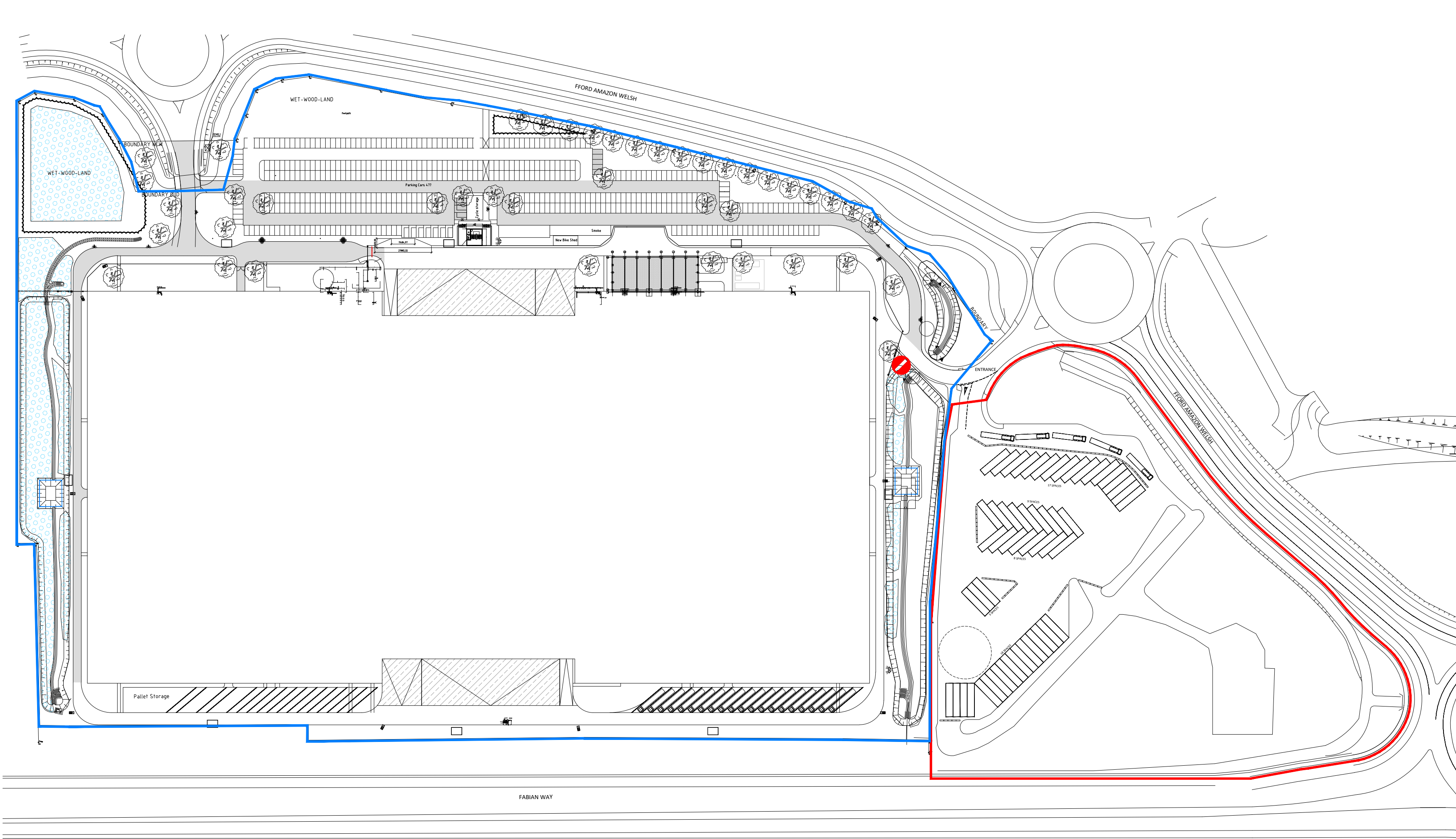


© Crown Copyright All rights reserved. Maxar, Microsoft, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA,

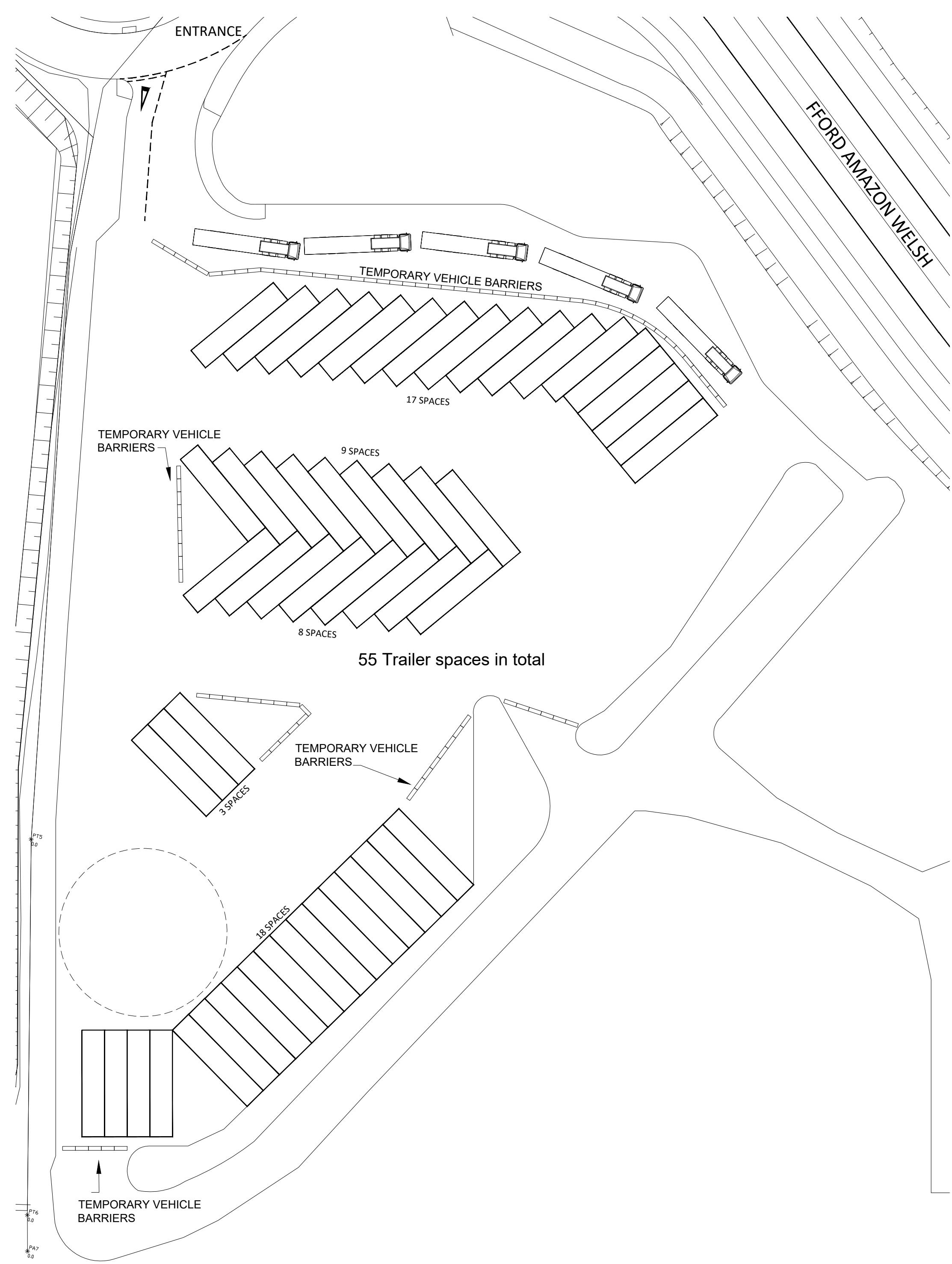
Figure 4 - Nature Conservation Designated Sites

Figure 5 - Priority Habitats

Drawing 1 - Proposed Site Plan



PROPOSED SITE PLAN
SCALE 1:1500



PROPOSED TRAILER PARKING
SCALE 1:500

Scale this drawing for planning purposes only.
Ashton Smith to be notified of discrepancies in figured dimensions.
Contractors must check all dimensions from site.
This drawing is copyright and is for use on this site only.
This drawing is to be used solely for information as existed.
For other information refer to the latest revision of any cross referenced drawing.



NOTES:

- EXISTING AMAZON SITE
- APPLICATION BOUNDARY
- TEMPORARY VEHICLE BARRIERS

P2	23/08/2022	Blue/red lines now shown solid, notes/key amended. Temporary vehicle barriers annotated
P1	12/08/2022	Initial Issue
REV	DATE	DESCRIPTION
REVISIONS		

DH
DH
RR
RR

PROJECT TITLE			
SWANSEA			
DRAWING TITLE			
PROPOSED SITE PLAN			
RIBA STAGE	STATUS	DRAWN BY	CHECKED BY
N/A	PLANNING	DH	RR
SHEET	SCALE	DATE	SUITABILITY
A1	1 : 1500/ 500	12/08/2022	SO
DRAWING NO.		REVISION	P2
22084 - ASA - 00 - ZZ.00 - D - A - P03 _ (S0 - P2)			

CLIENT	
 AshtonSmith Beyond Design	
Ashton Smith, Belvedere House, 2 Victoria Avenue, Harrogate, North Yorkshire, HG1 1EL Tel: 01423 522882 Fax: 01423 565104 www.ashtonsmith.co.uk	

JOB NO.
22084

Appendix A - References

References

BS 42020:2013 Biodiversity. Code of Practice for Planning and Development

BCT (2014) Artificial lighting and wildlife Interim Guidance: Recommendations to help minimise the impact artificial lighting

BCT and Institution of Lighting Professionals (2018). Bats and artificial lighting in the UK

Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. CIEEM, Winchester

Collins, J. (ed.) (2016) Bat surveys for Professional Ecologists: Good practice Guidelines (3rd edition). The Bat Conservation Trust, London

Eaton MA, Aebischer NJ, Brown AF, Hearn RD, Lock L, Musgrove AJ, Noble DG, Stroud DA and Gregory RD (2015) Birds of Conservation Concern 4: the population status of birds in the United Kingdom, Channel Islands and Isle of Man. British Birds 108, p 708-746

English Nature (now Natural England) (2004) Bat Mitigation Guidelines. English Nature, UK

GOV.UK. Pollution prevention for businesses [online]. Available from <https://www.gov.uk/guidance/pollution-prevention-for-businesses>

HM Government (2016) The Environment (Wales) Act
<http://www.legislation.gov.uk/anaw/2016/3/contents/enacted>

Joint Nature Conservation Committee (2010). Phase 1 habitat classification and mapping methodology. JNCC, UK

Ministry of Housing, Communities & Local Government (2019). National Planning Policy Framework

Multi-Agency Geographic Information for the Countryside (MAGIC) [online]. Available at: www.magic.gov.uk

Stace, C. (2010). New Flora of the British Isles 3rd edition. University Press, Cambridge

Stone, E.L. (2013) Bats and lighting: Overview of current evidence and mitigation guidance

The Conservation of Habitats and Species Regulations 2017 (as amended). HMSO

The Countryside and Rights of Way Act 2000. HMSO

The Natural Environment and Rural Communities Act 2006. HMSO

The Hedgerow Regulations 1997. HMSO

The Protection of Badgers Act 1992. HMSO

Welsh Government (2021) Planning Policy Wales. Online.
<https://beta.gov.wales/sites/default/files/publications/2018-12/>

Wildlife and Countryside Act 1981 (as amended). HMSO

Appendix B – Target Notes

Target Notes

TN1 - Stand of Japanese knotweed

TN2 - Ephemeral waterbody 1

TN3 - Ephemeral waterbody 2

Appendix C - Assessment of Structures, Trees and Habitats for Bats

Assessment of Structures, Trees and Habitats for Bats

Suitability	Description	
	Roosting	Commuting and Foraging
Negligible	An inspected structure or tree which is considered to have no features of importance for roosting bats. No further constraints apply to the method or timing of proposed works.	Negligible habitat features on-Site to support commuting or foraging bats.
Low	A structure with at least one or more features suitable to support opportunistic individual bats. However, inadequate space, shelter, protection and conditions, and the low suitability of surrounding habitats means that it is unlikely to be used as a maternity or hibernation roost site. A tree of adequate age and stature to support potential roosting features, however, either no features, or only features of limited potential recorded from the ground.	Habitat with potential to support low numbers of commuting bats due to its quality and connectivity. For example, a gappy hedgerow or unvegetated stream that is isolated from the surrounding landscape. Alternatively, suitable but isolated habitats suitable to support low numbers of foraging bats such as a lone tree or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that are of adequate size, shelter and protection, with suitable conditions and surrounding habitat to support a bat roost not of high conservation status (with respect to roost type not individual species conservation status).	Linear habitat continuity connecting to the wider landscape offering potential to support commuting bats, such as rows of trees and scrub or linked back gardens. Habitat such as trees, scrub, grassland, or a waterbody with connectivity to the wider landscape offering foraging opportunities for bats.
High	A structure or tree with one or more potential roost sites that are suitable for use by large numbers of bats on a regular basis and for long periods of time due to their size, shelter, protection, conditions, and the surrounding habitat.	Continuous high-quality habitat with strong connectivity to the wider landscape that is likely to be used by commuting bats on a regular basis, such as flowing waterbodies, hedgerows, rows of trees and woodland edges. High quality habitat with strong connectivity to the wider landscape that is likely to be regularly used by foraging bats, such as broadleaved woodland, tree-lined watercourses, and grazed parkland. Site is close to, and connected to, known roost sites.

Guidance on Assessing the Potential Suitability of Development Sites to Support Bats (adapted from Collins, J. (ed)).

Appendix D - Ecological Impact Assessment Methodology

Ecological Impact Assessment Methodology

The methodology for the EclA follows the principles set out within the Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland; Terrestrial, Freshwater, Coastal and Marine updated by the Chartered Institute of Ecology and Environmental Management (CIEEM) in 2019 and comprises a staged approach to assessing the potential impacts resulting from the proposed change of use on the ecological features within the ZOI.

The EclA has involved the following stages:

- Determination of baseline conditions;
- Identification of important ecological features;
- Identification of potential impacts and effects;
- Identifying likely significant effects;
- Designing appropriate avoidance and/or mitigation for impacts and effects;
- Assessment of residual effect significance;
- Assessment of cumulative impacts and effects; and
- Identification of compensation and enhancement measures.

Baseline Conditions

Baseline conditions have been established following the methodology outlined in the above sections.

Important Ecological Features

Important ecological features have been identified based on existing statutory, policy and conservation objectives. In accordance with the CIEEM Guidelines the value or potential value of an ecological resource has been determined within a defined geographical context in line with the table below.

Potential Impacts and Effects

The potential impacts on any important ecological features are identified during, and prior to any mitigation, based on available baseline data, an assessment of design proposals and working methods, and available information on the existing conservation status of the features in question.

Impacts are then characterised in terms of the following attributes:

- Positive or negative – i.e. a change that improves or reduces the quality of the environment;
- Magnitude – i.e. the size of an impact in quantitative terms where possible;
- Extent – i.e. the area over which an impact occurs;
- Duration – i.e. the time for which an impact is expected to last;
- Reversibility – i.e. is the impact permanent or temporary; and
- Timing and frequency – e.g. related to breeding seasons.

The likely effects of potential impacts on important ecological features largely depend upon their sensitivity, whilst the level of certainty that an impact will occur as predicted is based on professional judgment. Only the impacts likely to result in significant effects have been described in detail within the report. Impacts that are either unlikely to occur, or if they did occur are unlikely to be significant have been scoped out and justification for scoping out provided.

Geographic Scale	Example Criteria for Classification at each Geographic Scale
International	Habitats meeting the criteria for Wetlands of International Importance (Ramsar), Special Area of Conservation (SAC) or Special Protection Area (SPA) site. A species present in internationally important numbers (>1% of international population). Notable species which is part of the cited interest of an SPA or SAC and which regularly occurs in internationally or nationally important numbers.
National	Habitats meeting the criteria for a Site of Special Scientific Interest, Marine Conservation Zone (MCZ), or National Nature Reserve (NNR). A species present in nationally important numbers (>1% of UK population). A species which is part of the cited interest of a SSSI and which regularly occurs in internationally or nationally important numbers. Rare breeding species (e.g. birds with <300 UK breeding pairs).
Regional	A local site with important regional habitats or significant populations of Species of Principal Importance (SPIs) under the NERC act. Species present in regionally important numbers (>1% of regional population). Species listed as priority species, which are not covered above, and which regularly occur in regionally important numbers. Sustainable populations of a species that is rare or scarce within a region. Species on the Birds of Conservation Concern (BoCC) Red or Amber List and which regularly occur in regionally important numbers.
County	A local site with a habitat that is characteristic of the county or rare on a county scale, or with significant populations of locally important species. Species present in county important numbers (>1% of county population). Species listed as priority species, which are not covered above, and which regularly occur in county important numbers. Sustainable population of a species that is rare or scarce within a county. A site designated for its county important assemblage of species. Species on the BoCC Red or Amber List and which regularly occur in county important numbers.
Local	A site which has wildlife corridors likely to be essential to allow viable movement of species or improve the biodiversity of the area. Species listed as priority species, which are not covered above, and are rare in the locality. Species present in numbers just under county importance (<1% of county population). Sustainable population of a species that is rare or scarce within the locality. A site whose designation is just under for inclusion for its county important assemblage of a particular species on site. Other species on the BoCC Red or Amber List and which are considered to regularly occur in locally important numbers.

Likely Significant Effects

In accordance with the CIEEM guidelines, an ecologically significant effect is 'an effect that either supports or undermines the biodiversity conservation objectives for 'important ecological features' or for biodiversity in general'.

Using an approach to valuing impacts that involves professional judgement and reference to available conservation objectives, neutral and minor effects are considered to be not significant, while moderate and major effects are assessed to be significant. The table below provides a comparison of the terms used.

Effect Significance	Type of Effect	Equivalent CIEEM Assessment
Significant	Major beneficial	Significant positive impact on biodiversity conservation objectives at given geographical context
	Moderate beneficial	Positive impact on biodiversity conservation objectives at given geographical context
Non-significant	Minor beneficial	Limited positive impact on biodiversity conservation objectives at given geographical context
Neutral	Negligible	No significant impact on biodiversity conservation objectives at given geographical context
Non-significant	Minor adverse	Limited adverse impact on biodiversity conservation objectives at given geographical context
Significant	Moderate adverse	Adverse impact on biodiversity conservation objectives at given geographical context
	Major adverse	Significant adverse impact on biodiversity conservation objectives at given geographical context

The evaluation of significant effects has been based on the best available scientific evidence. Where sufficient evidence is not available, the precautionary principle has been applied. Therefore, where it is not possible to robustly justify a conclusion of no significant effect, a significant effect has been assumed. Any uncertainty has been acknowledged within the report.

Avoidance and/or Mitigation

Negative impacts have been avoided and/or mitigated where possible, in line with the mitigation hierarchy as presented within the CIEEM Guidelines.

Assessment of Residual Effect Significance

Once the impacts of the proposals for the Site have been assessed, and all attempts to avoid and mitigate ecological impacts have been finalised, an assessment of the residual impacts is undertaken to determine the significance of their effects upon ecological features.

Cumulative Impact Assessment

The following types of future development within the same zone of influence have been considered as part of the cumulative impact assessment in relation to each important ecological feature:

- Proposals for which consent has been applied which are awaiting determination and are visible on the local planning portal;