

BESS Port Dundas Preliminary Ecological Appraisal



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EXECUTIVE SUMMARY

EnviroCentre Limited was commissioned by Graham & Sibbald to conduct a Preliminary Ecological Appraisal at a site referred to as BESS Port Dundas, Glasgow, to inform the proposal for the creation of a new battery storage system. The aim of the survey was to determine the ecological baseline of the site, in terms of habitats present and evidence of protected species, which may be affected by the development.

No statutory or non-statutory designated sites, or ancient/native woodland, were identified within or directly adjacent to the site during the desk study. There were, however, seven statutory designated sites identified within 5km from the site, and three non-statutory designated sites identified within 2km from the site. It is not expected that the works will impact the designated features of any of these statutory and non-statutory designated sites. However, pollution as a result of surface run-off may flow into the Forth and Clyde Canal Site of Importance for Nature Conservation (SINC) and subsequently reach Hamiltonhill Claypits Local Nature Reserve (LNR), if not appropriately managed during works and post-construction. The site is also located within a designated B-line, whereby it is within an important corridor for pollinators.

A site visit was carried out on 2nd October 2024. A UK Habitat Classification survey identified five primary habitats, including developed land, buildings, built linear features, woodland (including lines of trees), and mixed scrub, all of which are of **site importance**. The presence of invasive non-native species (INNS) was also detected, the most notable being buddleia which was abundant along the southern perimeter of the site.

No evidence was found of any protected species, but suitable habitat exists for bats, hedgehog, birds, and invertebrates on site, and within the locale. No further surveys are recommended at this time, but this may change depending on future development plans. Ecological data is considered valid for a period of 12 months.

The main potential negative impacts that may occur, without mitigation, as a result of the proposed works include:

- The spread of buddleia within and beyond the site.
- Loss of the woodland, if removed to facilitate the works.
- Reduction in foraging and commuting habitats available for bats, hedgehog, birds, and invertebrates, if removal or alteration of woodland is undertaken to facilitate the works.

Mitigation recommendations include:

- An INNS management plan should be produced in order to effectively remove the buddleia on site.
- Site important woodland should be retained and enhanced where possible.
- Appropriate compensatory planting should be provided utilising native species.
- Implementation of sensitive lighting scheme which is wildlife friendly.
- Any vegetation clearance should be scheduled to occur outside of the main nesting bird season (March to August inclusive).

Further mitigation and enhancements can be found in *Sections 5 and 6* of the report.

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1 INTRODUCTION

1.1 Terms of Reference

EnviroCentre Limited was commissioned by Graham & Sibbald to conduct a Preliminary Ecological Appraisal (PEA) at a site referred to as BESS Port Dundas.

The 'site' is defined as the area demarcated by the red line boundary, whilst the 'survey area' constitutes the area of the 'site' plus appropriate buffers, as described in Section 2, and shown in Appendix A.

The results and recommendations in this document relate to the site boundary as provided by the client at the time of the survey.

1.2 Scope of Report

The aim of the study is to provide a baseline ecological evaluation of the site to inform the creation of a battery storage system. The objectives were as follows:

- Conduct a desk study to gather previously recorded biological data relating to the site.
- Categorise and map the broad habitats present on the site.
- Search for field evidence of a range of protected or notable species which may frequent the survey area.
- Identify suitable habitat for protected or notable species in the survey area.
- Evaluate the habitats and species applicable to site against geographic levels of importance.
- Appraise the potential impacts to habitats and species should no avoidance, mitigation or compensation be applied within the proposed project.
- Make recommendations for any further survey to inform the proposed project and/or species licensing requirements.
- Suggest broad measures to avoid, minimise and compensate for the predicted negative ecological effects associated with the proposed project.
- Suggest opportunities offered by the proposed development to deliver biodiversity gain.

1.3 Site Description

The site is located in Port Dundas, in the north of the city centre of Glasgow, and centred at NS 59030 66722. The site is approximately (c.) 0.6 ha and c. 71m above sea level (asl).

The site currently comprises Breedon Glasgow Concrete Plant, with hardstanding, and small areas of vegetation at the boundaries. The immediate surroundings include industrial areas, offices, residential flats, brownfield sites, and the Forth and Clyde Canal.

1.4 Project Description

The site is proposed for the construction of a 90MW battery energy storage system plans for which are shown in the Proposed Development Plan in Appendix B.

The development would include:

- Demolition and removal of existing concrete plant
- Preparing the ground and laying infrastructure for battery storage system
- Constructing battery storage system
- Landscaping of site perimeter including tree and wildflower meadow planting

1.5 Legislation, Policy, and Guidance

Legislation, planning policies, conservation initiatives and general guidance relevant to this study include:

- The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)
- The Wildlife and Countryside Act 1981 (as amended) (WCA)
- The Nature Conservation (Scotland) Act 2004
- The Wildlife and Natural Environment (Scotland) Act 2011 (WANE)
- The Protection of Badgers Act 1992
- National Planning Framework 4
- Scottish Biodiversity Strategy to 2045
- The British Standard for Biodiversity
- Glasgow Local Development Plan¹
- Glasgow Local Biodiversity Action Plan²

A summary of protected species legislation is provided in Appendix C.

1.6 Report Usage

The information and recommendations contained within this report have been prepared in the specific context stated above and should not be utilised in any other context without prior written permission from EnviroCentre Limited.

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¹ Glasgow City Council (2017). Glasgow City Local Development Plan. [Online] Available from: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=35882&p=0> (Accessed September 2024)

² Glasgow City Council (2018-2028). Glasgow City Local Biodiversity Action Plan. [Online] Available from: <https://www.glasgow.gov.uk/CHttpHandler.ashx?id=31719&p=0> (Accessed September 2024)

2 METHOD

2.1 Desk Study

To anticipate the potential ecological sensitivities at the site, a desk study was conducted in September 2024 in advance of the field survey. The following sources were checked:

- NBN Atlas³ for data up to 2km of the site, including:
 - Notable Protected Species Records.
 - Invasive Non-Native Species (INNS).
- NatureScot SiteLink⁴ for Statutory Designated Sites, including Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Area (SPA), Ramsar Sites, National Nature Reserves (NNR), and Local Nature Reserves (LNR) up to 5km from the site.
- Glasgow Local Development Plan (LDP)¹ for non-statutory designated sites up to 2km from the site.
- The Scottish Biodiversity List⁵ for Priority Habitats and Species.
- Glasgow Local Biodiversity Action Plan (LBAP)² for Local Priority Habitats and Species.
- Scotland's Environment⁶ website for Ancient Woodland Inventory Scotland (AWIS) and Native Woodland Survey of Scotland (NWSS)⁷ for Ancient Woodland within, or adjacent to the site.
- Aerial imagery from Google Earth⁸.
- Buglife, B-Lines⁹ and Important Invertebrate Area (IIA)¹⁰ to locate '*insect pathways*', *present and* national/international places for the conservation of invertebrates and habitats upon which they rely upon.
- Saving Scotland's Red Squirrels¹¹ (SSRS) for red squirrel and grey squirrel sightings up to 2km from the site.

2.2 Field Survey

Field work was undertaken by EnviroCentre Graduate Ecologists Daniel Collier and Finn MacFarlane on 2nd October 2024. Weather conditions during the survey were sunny with an average temperature of 13°C.

The PEA survey was designed using the guidelines endorsed by NatureScot and CIEEM¹² and focussed on plants and habitats on site and the species which would most likely utilise the habitats which comprise the landscape in and around the site. Invasive Non-Native Species (INNS) and Groundwater Dependent Terrestrial Ecosystems (GWDTEs) were also considered during the survey.

³ NBN Atlas (2024). Data downloaded 25/09/2024.

⁴ NatureScot SiteLink (2023). Available at: <https://sitelink.nature.scot/map> (Accessed September 2024)

⁵ NatureScot SBL (2020). Available at: <https://www.nature.scot/scottish-biodiversity-list> (Accessed September 2024)

⁶ Scotland's environment. (No Date). Scotland's Environment Map. [Online] Available at: <https://www.environment.gov.scot/>

⁷ Native Woodland Survey of Scotland (2023). Available at: [Native Woodland Survey of Scotland - Data Explorer \(arcgis.com\)](https://www.nature.scot/native-woodland-survey-of-scotland)

⁸ Google Earth. Available at: <https://www.google.com/earth/> (Accessed September 2024)

⁹ Buglife, B-Lines, Available at: <https://www.buglife.org.uk/our-work/b-lines/> (Accessed September 2024)

¹⁰ Buglife, Important Invertebrate Area (IIA), Available at: <https://www.buglife.org.uk/our-work/important-invertebrate-areas/> (Accessed September 2024)

¹¹ Saving Scotland's Red Squirrels (2023). Sightings of Red and Grey Squirrels across Scotland. Available at: <https://scottishsquirrels.org.uk/squirrel-sightings/> (Accessed September 2024)

¹² CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal*. 2nd edition. Available at: <https://cieem.net/resource/guidance-on-preliminary-ecological-appraisal-gpea/> (Accessed September 2024)

Assessment of the site for a range of wildlife was undertaken. Those species listed in Table 2-1, below, are those that have potential to utilise the site and surrounding habitat. Badger (*Meles meles*), otter (*Lutra lutra*), water vole (*Arvicola amphibius*), red squirrel (*Sciurus vulgaris*), pine marten (*Martes martes*), brown hare (*Lepus europaeus*), reptiles, and amphibians have been removed from the assessment due to the absence of records and the unsuitable habitat on site, and within the surrounding area, for these species. Detailed methods regarding habitat and species surveys are provided in the relevant sections below.

Table 2-1: Survey Areas

Habitat/Species/Species Group	Survey Area
Habitats	Site
GWDTE	Site plus 250m buffer
INNS	Site plus 50m buffer
Bats (<i>Chiroptera</i> sp.)	Site plus 50m buffer
West European Hedgehog (<i>Erinaceus europaeus</i>)	Site plus 50m buffer
Birds	Site plus 50m buffer
Invertebrates	Site plus 50m buffer

2.2.1 UK Habitat Classification Survey

A UK Habitat Classification (UKHab) Survey was carried out in accordance with the user manual¹³. UKHab is a hierarchical system for rapidly recording and classifying habitat via satellite imagery and field survey. The system comprises 5 levels of Primary Habitats which include ecosystems, broad habitats, priority habitats and Annex I habitats, along with non-hierarchical secondary codes which provide information on the environment, management, and origin of Primary Habitats. The secondary codes are also used to map habitat mosaics and identify notable species features. The information collected is used to identify ecologically sensitive features and recommend mitigation and enhancement measures in connection with a proposed development.

The surveyor utilised the UKHab Professional edition with a Minimum Mapping Unit (MMU) of 25m² and aimed to categorise habitats up to level 5. Where the level 5 habitat could not be determined or is not reflective of the habitat type due to a lack of indicative species, habitats were categorised to level 4 or the broader level 3 habitat.

The information is used to identify ecologically sensitive features/habitats, inform relevant species surveys and, aid in the recommendation of mitigation and enhancement measures in connection with a proposed development.

Where applicable, alterations to UKHab symbology on maps may occur where relevant for clarity.

2.2.2 Groundwater Dependent Terrestrial Ecosystems

The Functional Wetland Typology¹⁴ was used to aid identification of wetland habitats that derive their water from groundwater and surface water. This information is useful in identifying if and where further surveys are required to identify the presence and potential sensitivity of Groundwater Dependent Terrestrial Ecosystems (GWDTEs).

¹³ UKHAB Ltd (2023). UK Habitat Classification Version 2.0 (Available at <https://www.ukhab.org>)

¹⁴ SNIFFER (2009) WFD95: A Functional Wetland Typology for Scotland - Field Survey Manual. Version 1. ISBN: 978-1-906934-22-4

To help assess ground water dependency, observations of local topography, underlying geology, and features such as springs, diffuse ground water emergence and floristic indicators of base enrichment were made.

2.2.3 Invasive Non-Native Species

The survey included a check for the presence of any invasive non-native species (INNS) including but not limited to the following:

- Japanese knotweed (*Reynoutria japonica*).
- Giant hogweed (*Heracleum mantegazzianum*).
- Himalayan balsam (*Impatiens glandulifera*).

2.2.4 Bats

An assessment was undertaken in accordance with the criteria set out by the Bat Conservation Trust (BCT)¹⁵. The suitability of roosting habitats in structures and commuting and foraging habitats was classified according to the criteria in Table 2-2 below.

Table 2-2: Suitability Classification of Roosting Habitat in Structures and Commuting and Foraging Habitats for Bats

Suitability	Roosting Features	Foraging and Commuting Habitats
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	<p>Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland.</p> <p>The site is close to and connected to known roosts.</p>
Moderate	A structure with one or more potential roost sites that could be used by bats due their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not	Habitat that could be used by small numbers of commuting bats as flight-paths such as a gappy hedgerow or unvegetated stream, but

¹⁵ Collins, J.(ed.) (2023) *Bat Surveys for professional Ecologists: Good Practice Guidelines (4th Editoin)*. The Bat Conservation Trust, London. ISBN-978-1-7395126-0-6

Suitability	Roosting Features	Foraging and Commuting Habitats
	provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).	isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
None	No habitat features on site likely to be used by any roosting bats as any time of the year (i.e. a complete absence of crevices/ suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).

The suitability of roosting habitats in trees was classified according to the criteria in Table 2-3 below.

Table 2-3: Suitability of Roosting Habitat in Trees

Suitability ¹⁶	Roosting Features
PRF	A tree with at least one PRF present
FAR	Further assessment required to establish if PRFs are present in the tree
NONE	Either no PRFs in the tree or highly unlikely to be any

2.2.5 West European Hedgehog

The suitability of the habitats for hedgehog was assessed according to guidance¹⁷. Suitable habitats include:

- Grazed pastureland separated into small fields by hedgerows.
- Deciduous woodland copses (oak, beech).
- Overgrown verges or margins.
- Suburban gardens, woodpiles, or parklands.

¹⁶ Potential Roost Feature (PRF), Further Assessment Required (FAR)

¹⁷ Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehwella, W.J., Wells, D. and Wray, S. (2012). *UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation*. The Mammal Society, Southampton

2.2.6 Birds

Habitats within the survey area were assessed for their suitability to support breeding and overwintering birds.

Observations of birds were also noted during the survey including incidental records of the following:

- Birds present – nesting or foraging on-site, flying over site, or corpses.
- Pellets/droppings.
- Nests – within trees or in ground vegetation.
- Eggs – intact/broken or within nest/below nest.
- Feathers – adult or natal down.

2.2.7 Invertebrates

In addition to the desk-based assessment, a general habitat suitability assessment was made of the site its suitability to host invertebrate species.

2.3 Constraints

2.3.1 Desk Study

Desk studies are limited by the reliability of third-party information and the geographical availability of biological and/or ecological records and data. This emphasises the need to collate up-to-date, site-specific data based on field surveys by experienced surveyors. The absence of a species from biological records cannot be taken to represent actual absence. Species distribution patterns should be interpreted with caution as they may reflect survey/reporting effort rather than actual distribution.

The Glasgow Museums Biological Records Centre (GMBRC) was closed at the time of the desk study, and so publicly available records from NBN Atlas were used to inform the assessment.

2.4 Evaluation of Ecological Features

European, national, and local governments and specialist organisations have together identified a large number of sites, habitats and species that provide the key focus for biodiversity conservation in the UK and Ireland, supported by policy and legislation. These provide an objective starting point for identifying the important ecological features that need to be considered. A geographical level of importance, as described in Appendix D, has been assigned to the designated sites, habitats and species identified on the site and in the survey area. A geographical level of importance of ornithological features, as described in Appendix E, has also been included to highlight the assessment criteria for bird species and their geographical importance. Where a feature is important at more than one level in the table, its overriding importance is that of the highest level. Usually only the highest level of legal protection is listed.

3 BASELINE ECOLOGICAL CONDITIONS

3.1 Designated Sites

3.1.1 Statutory Designated Sites

No statutory designated sites are located within, or directly adjacent to the site boundary. A total of seven statutory designated sites are located within 5km of the site boundary, as detailed in Table 3-1 below.

Table 3-1: Statutory Designated Sites

Site Name	Designation	Distance and Orientation	Level of Importance	Designated Features
Hamiltonhill Claypits	LNR ¹⁸	c. 0.5km northwest	County	Grassland, woodland, and pond
Possil Marsh	SSSI ¹⁹	c. 2.7km north	National (UK)	Freshwater habitat, scrub, woodland
Robroyston Park	LNR	c. 3.6km northeast	County	Freshwater habitat, grassland, scrub, woodland
Dawsholm Park	LNR	c. 4.2km northwest	County	Grassland, scrub, woodland
Malls Mire	LNR	c. 4.5km south	County	Grassland, scrub, woodland
Hogganfield Park	LNR	c. 4.8km east	County	Freshwater habitat, grassland, scrub, woodland
Cadder Wilderness	SSSI	c. 4.8km north	National (UK)	Woodland, invertebrates

Each of the statutory sites are designated for their habitats, as such none of the LNRs or SSSIs are considered to be directly ecologically connected to the site due to the habitat fragmentation as a result of the presence of numerous roads and both residential and industrial land use within the City of Glasgow.

It is not expected that the works will impact the designated features of the statutory designated sites. However, pollution as a result of surface run-off may flow into the Forth and Clyde Canal which flows to Hamilton Claypits LNR and thus may result in the indirect pollution of the habitats within the LNR, if not managed appropriately on site.

3.1.2 Non-Statutory Designated Sites

No non-statutory designated sites are located within, or directly adjacent to the site boundary. A total of three non-statutory designated sites were identified within 2km of the site boundary, as detailed in Table 3-2 below.

¹⁸ LNR – Local Nature Reserve

¹⁹ SSSI – Site of Special Scientific Interest

Table 3-2: Non-Statutory Designated Sites

Site Name	Designation	Distance and Orientation	Level of Importance	Designated Features
Forth and Clyde Canal	SINC ²⁰	c. 0.1km west	Local	Waterway with associated green corridor
River Kelvin	SINC	c. 1.6km west	Local	River corridor with associated green corridor
Necropolis	SINC	c. 1.7km southeast	Local	Grassland, woodland

As with the statutory designated sites, the non-statutory designated sites are also designated for their habitats. As such, the River Kelvin and Necropolis SINC are not considered to be ecologically connected to the site as a result of habitat fragmentation through the city of Glasgow. The Forth and Clyde Canal SINC, however, is somewhat connected to the site via treelines and the open space to the south of the site. Although, Craighall Road may act as a barrier to this connection.

It is not expected that the works will impact the designated features of the non-statutory designated sites. However, pollution as a result of surface run-off may flow into the Forth and Clyde Canal, if not appropriately managed during works and post-construction.

3.2 Ancient and Native Woodland

No ancient or native woodlands are located on site or directly adjacent.

Ancient Woodlands are given policy protection under NFP4 and so are of **national (Scotland)** importance.

3.3 Habitats

A total of five UKHab primary habitats and boundary features are present within the site boundary as summarised in Table 3-3. Where there are distinct differences within the primary habitat code classification these have been identified using secondary codes. The site Habitats Plan can be found in Appendix F and Photographs in Appendix G.

Table 3-3: On Site Habitats, Recorded October 2024

Habitat Type	Habitat	Primary Codes	Secondary Codes (*Defining codes in bold)
Urban	Developed land – sealed surface	u1b	10 – Scattered scrub 32 - Scattered trees 524 - Invasive non-native species
	Buildings	u1b5	815 – Commercial building 817 – Industrial building
	Built linear features	u1e	612 – Fence 853 – Mortared wall
Woodland	Other broadleaved woodland	w1g	33 – Line of trees
Heathland and scrub	Mixed scrub	h3h	32 – Scattered trees 524 – Invasive non-native species

²⁰ SINC – Site of Importance for Nature Conservation

3.3.1 Developed Land – Sealed Surface

The majority of the site comprised concrete paving which serves as general access to the concrete manufacturing plant (Photograph 1), with car parking areas in the southeast corner (Photograph 2) and just south of the plant (Photograph 3), and aggregate storage bays along the eastern side of the northern site perimeter (Photograph 4). There was a fenced-off mobile phone mast in the northeastern corner of the site (Photograph 5) and another in the southwestern corner to the left of the site entrance.

Along the eastern perimeter some ruderal species, such as colt's foot (*Tussilago farfara*) and creeping thistle (*Cirsium arvense*), were encroaching from beyond the site boundary onto the paving where sand and gravel had accumulated (Photograph 6). Scattered trees and scrub with some young alder (*Alnus glutinosa*), gorse (*Ulex europaeus*), buddleia (*Buddleja davidii*), and scotch broom (*Cytisus scoparius*) behind the parking area south of the plant (Photograph 7), and a small hawthorn (*Crataegus monogyna*) shrub in the northwestern corner of the site (Photograph 8) were also present.

The sealed surfaces on site are a common feature in the area, offering no unique habitat, and are therefore considered to be of **site importance**.

3.3.2 Buildings

There was a concrete manufacturing facility in the centre of the site which was c. 10m high and housed in corrugated metal roofing and side cladding extending halfway down from the roof (Photograph 9). Directly south of this was a one story, mobile cabin site office (Photograph 10) sitting close to the southern site boundary. In the northeastern corner there were four, single story mobile cabin units housing toilets, a kitchen, and storage facilities (Photograph 11).

The buildings on site are a common urban feature, offering no unique habitat, and are therefore considered to be of **site importance**. However, the flat rooves of the cabins provide nesting habitat for urban bird species such as gulls (*Larus* sp.) and even Oystercatcher (*Haematopus ostralegus*).

3.3.3 Built Linear Features

A **brick wall** extending from the site entrance for c. 60m east along the southern perimeter. At the eastern end this wall was c. 3m high (Photograph 12) but quickly reduced to c. 1m (Photograph 13) as the ground inclines into the site towards the west.

Running parallel behind the wall there was a c. 3m high **wooden site hoarding** (Photograph 14) which ran along the full extent of the southern and eastern perimeter. This hoarding seems to have been marking the neighbouring site to the south and east, and so may not be relevant to this report.

At c. 25m east from the entrance a **wooden picket fence** begins (Photograph 15) which runs parallel to, and c. 1m from the brick wall.

The wooden picket fence and brick wall continue together to the southeastern corner of the site where they are replaced with **steel palisade fencing** (Photograph 16), which continues around the remainder of the site. Steel palisade fencing also contains the mobile phone masts in the northeastern and southwestern corners of the site (Photograph 6).

There is also **metal guard rail fencing** to the south of the plant which secures a raised level parking area (Photograph 17). The same guard rail fencing surrounds the central plant machinery and the

northwestern cabins. There is also some lower guard rail fencing separating the paved roadway from the site office (Photograph 10) and the western woodland parcel (see below).

The built linear features on site are a common urban feature, offering no unique habitat, and are therefore considered to be of **site importance**.

3.3.4 Other Broadleaved Woodland

Two lines of trees and one small woodland parcel were present along sections of the site perimeter.

Along the southern edge, there was a c. 25m line of trees running east from the site entrance, along the southern perimeter wall (Photograph 18). The tree line was dominated with young alder and had occasionally occurring buddleia. The understory was abundant with mosses (Bryophyta) and had frequently occurring bramble (*Rubus fruticosus*), rosebay willowherb (*Chamaenerion angustifolium*), dandelion (*Taraxacum officinale* agg.), cock's foot (*Dactylis glomerata*), Yorkshire fog (*Holcus lanatus*), colt's foot, and wild strawberry (*Fragaria vesca*).

Along the entire northern boundary of the site, there was a line of trees running along the inside of the steel palisade fencing (Photographs 19 and 20). Tree species here included mostly young silver birch (*Betula pendula*), with occasional occurrences of young sycamore (*Acer pseudoplatanus*), and goat willow (*Salix caprea*). The understory was dominated with perennial ryegrass (*Lolium perenne*) and had an abundance of rosebay willowherb and bramble. Occasionally occurring species recorded were buddleia, dandelion, and colt's foot. There were rare occurrences of scotch broom and cotoneaster (*Cotoneaster spp.*), with field horsetail (*Equisetum arvense*) and wild strawberry abundant towards the western end.

Extending along the western site perimeter for c. 40m northwards from the site entrance, reaching c. 11m at its widest point, was a small woodland parcel containing early mature broadleaf trees (Photograph 21). Canopy species included goat willow and alder, with gorse, dog rose (*Rosa canina*), and buddleia in the middle layer. The understory consisted of frequently occurring bramble, rosebay willowherb, and golden oat grass (*Trisetum flavescens*).

Lines of trees and woodland parcels are relatively common within the local area and are therefore considered to be of **site importance**. However, they do provide foraging, nesting, loafing and sheltering opportunities for a range of species.

3.3.5 Mixed Scrub

There was one stretch of mixed scrub running along the southern perimeter of the site (Photograph 22). It extended from c. 25m east of the site entrance for c. 60m to the southeastern corner of the site and was situated between the brick wall and the wooden picket fence (Photograph 23). The scrub species consisted of mostly buddleia with one young goat willow and one bittersweet nightshade (*Solanum dulcamara*). The understory was bare with decaying leaf litter.

The mixed scrub on site is an urban feature comprising mostly non-native species and is considered to be of **site importance**.

3.4 Groundwater Dependent Terrestrial Ecosystems

No wetlands forming potential GWDTEs were identified during the survey on site, or within 250m of the site.

3.5 Invasive Non-Native Species

A total of nine INNS plant records²¹ were returned via the desk study from within 2km of the site, comprising American skunk cabbage (*Lysichiton americanus*), buddleia, giant hogweed, and Japanese Knotweed between 2014-2024.

There were numerous buddleia shrubs across the site boundary, with a concentration along the southern edge. One cotoneaster bush was also located towards the eastern end of the northern treeline.

INNS are of **negative** value to the site.

3.6 Fauna

3.6.1 Disclaimer

Faunal species are transient and can move between favoured habitats regularly throughout and between years. This survey provides a 'snapshot' of field signs present in the survey area on 2nd October 2024.

3.6.2 Bats

Two records of unidentified bats (*Chiroptera* sp.) located c. 2km southwest of the site were returned from the desk study via NBN Atlas²².

3.6.2.1 Buildings and Structures

No field evidence of bats was identified during the external inspection of the buildings on site. None of the buildings on site were identified to contain any PRFs, and as such were classified as '**NONE**' whereby '*no habitat features on site likely to be used by any roosting bats as any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels)*' in reference to Table 2-2.

3.6.2.2 Trees

None of the trees on site were identified to contain any PRFs, and as such were classified as '**NONE**' whereby 'either no PRFs in the tree or highly unlikely to be any' in reference to Table 2-3.

3.6.2.3 Habitats

The habitats and vegetation onsite support a range of invertebrates and thus the provision of foraging resources for bats. The site is connected to the wider environment via treelines and green open space including newly planted woodland and commercial amenity grassland.

The site was assessed as offering **moderate suitability** for foraging and commuting bats, whereby '*Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water*', in reference to Table 2-2.

²¹ Data Provider: Botanical Society of Britain and Ireland and Biological Records Centre

²² Data Provider: Bat Conservation Trust

Bats are European Protected Species (EPS) and are of **international importance**.

3.6.3 West European Hedgehog

No records of hedgehog were returned via the desk study.

The on-site habitats provide limited conditions for hedgehogs with only narrow sheltered corridors along the site boundaries which provide foraging and commuting opportunities. There are also piles of brash within the understorey of the treelines which provide further sheltering and hibernating opportunities.

Gaps within the site boundary fencing allow for connectivity to the wider environment including to residential gardens and commercial amenity grassland.

West European hedgehogs are a priority species on the SBL and therefore are of **national (Scotland) importance**.

3.6.4 Birds

A total of 712 bird records of 36 species were returned from the desk study. Species returned via the desk study that are most relevant to the site include Birds of Conservation Concern²³ (BoCC) Red List²⁴ species including House Sparrow (*Passer domesticus*) and Starling (*Sturnus vulgaris*), BoCC Amber List²⁵ species including Lesser Black-Backed Gull (*Larus fuscus*) and Woodpigeon (*Columba palumbus*) and BoCC Green²⁶ List species including Blackbird (*Turdus merula*).

Table 3-4 below details the birds observed utilising the site during the survey.

Table 3-4: Bird Species Observed on Site, October 2024

Common Name	Latin Name	SBL (Y/N)	Designation
Eurasian Wren	<i>Troglodytes troglodytes</i>	N	BoCC – Amber List
Carrion Crow	<i>Corvus corone</i>	N	BoCC – Green List
Eurasian Blue Tit	<i>Cyanistes caeruleus</i>	N	
European Robin	<i>Erithacus rubecula</i>	N	

There were also two bird's nests observed in a goat willow tree along the western treeline (Photograph 24).

The scrub, and trees on site provide foraging, commuting, loafing, and nesting resources for a range of bird species; though, this is unlikely to include ground-nesting birds due to the prevalence of urban predators, such as red fox (*Vulpes vulpes*) in the locale, as well as high use of the area by people.

²³ Birds of Conservation Concern information available at: <https://www.bto.org/sites/default/files/publications/bocc-5-a5-4pp-single-pages.pdf>.

²⁴ **Red-list criteria** - Globally threatened, historical decline in the breeding population, severe breeding population decline over 25 years/longer term, severe non-breeding population decline over 25 years/longer term, severe breeding range decline over 25 years/longer term, severe non-breeding range decline over 25 years.

²⁵ **Amber-list criteria** - Threatened in Europe, historical decline – recovery, moderate breeding population decline over 25 years/longer term, moderate non-breeding population decline over 25 years/longer term, moderate breeding range decline over 25 years/longer term, moderate non-breeding range decline over 25 years, breeding/non-breeding rarity, breeding/non-breeding localisation, breeding/non-breeding international importance.

²⁶ **Green list criteria**: naturally occurring species with self-sustaining populations meeting none of the criteria for BOCC Amber or Red list species.

Birds listed on the Green BoCC list are of **local** importance; birds on the Amber (BoCC) list are of **regional importance**; and birds on the Red (BoCC) list are of **national (UK) importance**. All wild birds are protected by the Wildlife and Countryside Act 1981.

3.6.5 Invertebrates

The site is not an IIA but does lie within a designated 'B-Line' that runs east-west across Glasgow, thereby making the site an important national network of ecologically connected habitat for pollinators.

A total of 418 records of invertebrate species, including, but not limited to, bees (*Anthophila* spp.), damselflies (*Zygoptera* spp.), dragonflies (*Anisoptera* spp.), slugs (*Gastropoda* spp.), and snails (*Gastropoda* spp.) were returned from the desk study via NBN Atlas²⁷. Of particular note, five records of red mason bee (*Osmia bicornis*) were recorded.

The scrub, woodland, and woodland understory on site provide resources for a range of invertebrates including the red mason bee. For example, flowering and fruit bearing plants provide food resources, whilst dead wood and brash provide shelter and overwinter habitats. The concrete paving within the site also provides spots for invertebrates to bask in the sun.

Invertebrates are important biodiversity indicators, and many are key pollinators. Insect pollinators (bees, flies, butterflies, moths, and beetles) are included within the LBAP² and are therefore considered to be of **county importance**. The red mason bee is on the SBL, making it of **national (Scotland) importance** if present on site. Other invertebrates on site, that are not on the SBL or LBAP, are considered to be of **site importance**.

²⁷ Data Providers: Biological Records Centre, Terrestrial Heteroptera Recording Scheme, British Dragonfly Society, Caddisfly Recording Scheme, and Conchological Society of Great Britain & Ireland

4 POTENTIAL IMPACTS, FURTHER SURVEY, AND LICENCING

4.1 Potential Impacts

The following potential negative impacts may occur as a result of the proposed works if avoidance and mitigation strategies are not factored into design, construction, and operation:

- Loss of foraging, commuting, and sheltering habitats for bats, hedgehog, birds, and invertebrates, if removal or alteration of woodland, including treelines, are undertaken to facilitate the development.
- Spread of buddleia within and beyond the site.
- Disturbance of foraging and commuting nocturnal and crepuscular species such as bats and hedgehogs if artificial lighting is used during the construction period or installed permanently as part of the completed development.
- Fragmentation of B-line if vegetation removed and not compensated for within new development.

Potential positive impacts associated with the development could include:

- Providing that the development plans are inclusive of protecting existing habitats, enhancing such habitats, and potentially creating new habitats, the biodiversity on site has the potential to increase.
- Improving B-line corridors for LBAP priority pollinators through native species planting.
- Improving connectivity to LNR and SINC by providing corridors of trees, scrub, and/or hedgerows.
- Through the removal and long-term management of INNS, in conjunction with additional planting/sowing of native species, the abundance and diversity of native plant populations on site could increase.
- Increase in foraging, commuting, and sheltering provisions for mammals, birds, and invertebrate through careful landscaping.

4.2 Further Survey, Assessment and Licensing

4.2.1 Maintaining Baseline

Ecological survey data is generally valid for a period of 12 months. If works on site do not commence prior to September 2025 or the site boundary changes, a survey to update the ecological baseline of the site will be required.

4.2.2 Licensing

At present, no **Protected Species Licences from NatureScot** are currently required, this would be reviewed following any further survey.

5 RECOMMENDATIONS FOR MITIGATION

General good practice mitigation and compensation actions applicable to the project are detailed below, however more detailed recommendations may be provided following development plans being finalised.

5.1 Habitats

The following mitigation/compensation is recommended to avoid and/or minimise the above potential impacts, with recommendations to be reviewed following future development plans:

- An INNS management plan should be produced in order to effectively remove the buddleia on site. To inform this an updated site walkover, to map the extent of spread, may be required.
- Woodland (including treelines) habitat should be retained, protected, and enhanced in the design, construction, and post-construction phases where possible.
- Areas of permanent habitat loss should be compensated for through enhancement or restoration of other similar habitat at higher proportion than habitat loss in order to achieve a new biodiversity gain.
- Where habitat retention is implemented, an appropriate buffer shall be established and must be secured as part of any planning permission. Heras fencing is commonly used to protect all retained habitat from accidental damage or pollution.
- No plant or personnel should operate outside the works' footprint to avoid damage to retained vegetation. To facilitate this, the works' footprint should be clearly demarcated.
- For areas likely to be surfaced, water permeable materials that allow for water to absorb into the ground should be used to reduce the risk of localised flooding during the winter months and minimise changes to groundwater movements.

5.2 Fauna

Mitigation measures for the conservation of protected species includes:

- If pruning or felling of trees is to be undertaken, this should not be completed during the breeding bird season (March to August inclusive, although some species may breed out with this period), unless no active nests are identified during a breeding bird survey within 48hrs prior to works. Should any nesting birds be identified, an appropriate buffer zone should be maintained and works suspended until all dependent young have left the nest.
- Care must be taken during clearance/groundworks to ensure wildlife is not harmed. In the event any protected species are found, works must stop, the animal must not be handled, and the project ecologist contacted immediately.
- Any works that cause high noise or vibration levels should be limited to daylight hours to reduce disturbance to nocturnal or crepuscular species in the locale such as bats and hedgehogs.
- Any excavations created during works should not be left open for animals (specifically hedgehogs and foxes) to fall into. Appropriate covers should be fitted at the end of every working day, at the very least, a shallow sloping edge or some form of ramp should be placed in the excavations to allow any animals to climb out.
- Excavations must be managed to avoid the formation of temporary waterbodies.

- If fencing is to be erected, they should be fitted with a 13cm² hole to maintain commuting and foraging routes for hedgehog²⁸ and other wildlife.
- Any permanent lighting should be designed to be 'bat friendly' following a sensitive lighting strategy following recommendations within the 'Bats and Artificial Lighting at Night' UK guidance²⁹. Where lighting is required, mitigation options include:
 - Permanent lighting of the completed development should not illuminate bat commuting, foraging, and roosting habitats.
 - Only luminaires with an upward light ratio of 0% will be used, and low-level bollard lighting will be used where feasible to retain darkness above the luminaire.
 - All luminaires will lack UV elements and will be warm-white coloured (ideally <2700 Kelvin) to reduce blue-light components.
 - LED luminaries will be used due to sharp cut-off, lower intensity, good colour retention, and dimming capabilities.
 - Where security lighting is installed, it must be motion-activated to allow periods of darkness surrounding the development.
 - Lights will not be directed at the site boundary vegetation, or at installed bird and bat boxes.
 - Lights can be fitted with hoods, baffles, or louvres to reduce back-spill.
- As per the Glasgow Pollinator Plan³⁰ and NatureScot Pollinator Strategy³¹, and in line with the designated B-line status, the landscaping plans should aim to ensure connectivity of integrated habitat networks throughout the city. Thus, vegetation on site, particularly along the site boundaries, should be enhanced and new planting provided to ensure connectivity.
- An 'insect hotel'^{32,33} should be installed in a south-facing position within close proximity to flowering plants to provide shelter for insects which may be present. Bee Bricks³⁴ may also be placed in planted areas as standalone shelters.

²⁸ Hedgehog Street. Link your garden: Hedgehog Highways [Online]. Available at: <https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/>

²⁹ Bat Conservation Trust (2023). Bats and Artificial Lighting at Night [Online] Available at: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

³⁰ Glasgow City Council (2017-2027). Glasgow Pollinator Plan. Available at: <https://glasgow.gov.uk/httphandler.ashx?id=40410&p=0>

³¹ NatureScot (2017-2027). NatureScot Pollinator Strategy for Scotland. Available at: <https://www.nature.scot/doc/pollinator-strategy-scotland-2017-2027>

³² NHBS Limited. Available to purchase at: <https://www.nhbs.com/insect-hotel-2>

³³ NHBS Limited. Available to purchase at: <https://www.nhbs.com/bug-mansion>

³⁴ NHBS Limited. Available to purchase at: <https://www.nhbs.com/bee-brick>

6 OPPORTUNITIES FOR BIODIVERSITY GAINS

To comply with local and national planning policy and planning policy guidance, ecological enhancements have been incorporated in the design as shown in the Proposed Development Plan (Appendix B), and include:

- Sourcing vegetation of local provenance is key to achieving the best biodiversity outcome on site and native species planting should be favoured. For grassland planting within the new development, seed mixes may include Bee, Bird & Butterfly Mix³⁵, Urban Pollinator Mix³⁶, MG5 Meadow Mix³⁷, or Get Nectar-rich Quick Mix³⁸, which will be managed under a low intensity management regime.
- For any areas that are to be mown, a suitable Flowering Lawn Mix³⁹ will provide low-growing species to maintain resources for invertebrates. Wildlife friendly species such as those listed within the Royal Horticultural Societies list of Plants for Pollinators⁴⁰ may also be considered.
- Suitable tree species to be planted on site include bird cherry (*Prunus padus*), blackthorn (*Prunus spinosa*), crab apple (*Malus sylvestris*), downy birch (*Betula pubescens*), elder, goat willow, grey willow (*Salix cinerea*), hawthorn, hazel (*Corylus avellana*), lime (*Tilia x europaea*), rowan, and silver birch.
- Planting trees of local provenance from the UK and Ireland Sourced and Grown Assurance Scheme (UKISG)⁴¹ is advised. Darroch Nurseries⁴² provides local provenance trees for the central belt.
- Corridors for foraging and commuting will be maintained and enhanced through the planting of treelines/woodland and hedgerows/scrub along site boundaries. Scrub and hedgerow species may include blackthorn, broom, common dogwood, elder, gorse, hawthorn, hazel, and sweet briar rose (*Rosa rubiginosa*). Providing corridors on site can promote connectivity to Hamiltonhill Claypits LNR and the Forth and Clyde Canal SINC.
- For areas which are to be surfaced for parking, water permeable materials that allow for water to absorb into the ground and reduce the risk of localised flooding during the winter months may be used.
- To manage water on site, water butts and barrels may be installed to store rainwater which can then be used to water any planted sections within the new site.
- Bird boxes will be installed on existing trees, or on walls/fences of the new development, in positions adjacent to trees/hedgerows. The boxes must be installed at a minimum height of 2m, and may include the following:
 - Vivara Pro Seville 32mm WoodStone Nest Box⁴³
 - Eco Small Bird Box⁴⁴
 - Vivara Pro Woodstone House Sparrow nest boxes⁴⁵
- Within the new site, bat boxes will also be installed to provide permanent roosting opportunities within the new development. On retaining early/semi-mature trees, bat boxes may be installed at least 3m from the ground. Suitable boxes for tree installation include:

³⁵ Scotia Seeds Limited (2024). Available to purchase at: <https://www.scotiaseeds.co.uk/shop/bee-bird-butterfly-mix/>

³⁶ Scotia Seeds Limited (2024). Available to purchase at: <https://www.scotiaseeds.co.uk/shop/urban-pollinator-mix/>

³⁷ Scotia Seeds Limited (2024). Available to purchase at: <https://www.scotiaseeds.co.uk/shop/mg5-meadow-mix/>

³⁸ Scotia Seeds Limited (2024). Available to purchase at: <https://www.scotiaseeds.co.uk/shop/get-nectar-rich-quick-mix/>

³⁹ Scotia Seeds Limited (2024). Available to purchase at: <https://www.scotiaseeds.co.uk/shop/flowering-lawn-mix/>

⁴⁰ Royal Horticultural Society. (2019) RHS Plants for pollinators Garden Plants rhs.org.uk/plantsfor-pollinators. London, UK: RHS.

⁴¹ Woodland Trust. 'Where Do Our Trees Come From?' Available at: <https://www.woodlandtrust.org.uk/about-us/what-we-do/we-plant-trees/uk-sourced-and-grown-scheme/>

⁴² Darroch Nurseries. Available at: <https://darroch-nurseries.co.uk/>

⁴³ NHBS Limited. Available to purchase at: <https://www.nhbs.com/vivara-pro-seville-32mm-woodstone-nest-box>

⁴⁴ NHBS Limited. Available to purchase at: <https://www.nhbs.com/eco-small-bird-box>

⁴⁵ NHBS Limited. Available to purchase at: <https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>

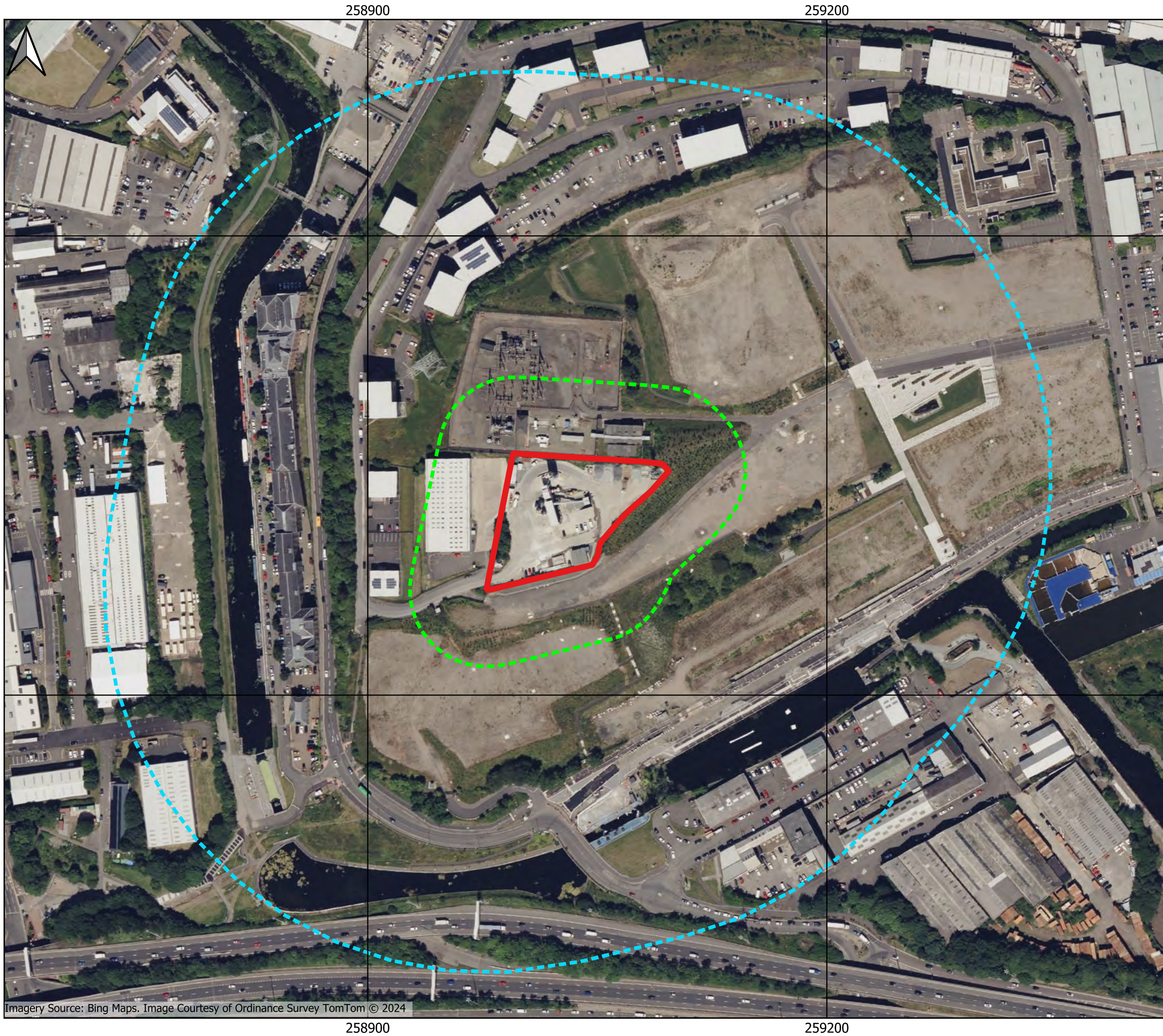
- Large Multi Chamber WoodStone Bat Box⁴⁶
- Elisa Bat Box⁴⁷

⁴⁶ NHBS Limited. Available to purchase at: <https://www.nhbs.com/large-multi-chamber-woodstone-bat-box>

⁴⁷ NHBS Limited. Available to purchase at: <https://www.nhbs.com/elisa-bat-box>


APPENDICES

A SURVEY AREA PLAN



Imagery Source: Bing Maps. Image Courtesy of Ordnance Survey TomTom © 2024

Legend

-  Site Boundary
-  50m Buffer
-  250m Buffer

Do not scale this map

Client

Graham & Sibbald

Project

BESS Port Dundas

Title

Survey Area Plan

Status

FINAL

Drawing No.

180322-GIS001

Revision

-

Date

21 Oct 2024

Drawn

DC

Checked

DK

Approved

AS

Scale

1:2,500

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40

80 m

Rev	Date	Amendment	Initials
-	-	-	-



8 Eagle Street, Craighall Business Park, Glasgow, G4 9XA.
T: 0141 341 5040 E: info@envirocentre.co.uk
W: www.envirocentre.co.uk

B PROPOSED DEVELOPMENT PLAN



Native Broadleaved Trees - 'Standard'							
No.	Code	Species	Girth	Form	Height (cm)	Grown	Breaks
1	Ac	Acer campestre	10-12	Standard	250-300	RB	4
1	Bp	Betula pendula	10-12	Standard	250-300	RB	4
1	Ps	Prunus spinosa	10-12	Standard	250-300	RB	4

Native Broadleaved Trees - 'Feathered'						
No.	Code	Species	Form	Height (cm)	Grown	Breaks
7	Ag	Alnus glutinosa (Alder)	min 5 breaks	175-200	BR	4
10	Bp	Betula pendula (Silver Birch)	min 5 breaks	175-200	BR	4
8	Qp	Quercus petraea (Sessile Oak)	min 5 breaks	175-200	BR	4
9	Sa	Sorbus aucuparia (Rowan)	min 5 breaks	175-200	BR	4

Native Mixed Hedgerow (planted in double staggered row, 5no. per linear/m in groups of 5-20no. same species)						
No.	Code	% mix	Species	Form	Height (cm)	Grown
163	Ca	10	Corylus avellana	Transplant	40-60	B 1+1
651	Cm	40	Crataegus monogyna	Transplant	40-60	B 1+1
163	la	10	Ilex aquifolium	Transplant	40-60	2L C
326	Ps	20	Prunus spinosa	Transplant	40-60	B 1+1
163	Rc	10	Rosa canina	Transplant	40-60	B 1+1
163	Sn	10	Sambucus nigra	Transplant	40-60	B 1+1

Native Wildflower Meadow			
Weight	Seed Mix	Description	Sowing rate
2.2kg	SCM11	Urban Pollinator Meadow Mix (SCM11) by Scotia Seeds, or similar	3.0g / m2

Notes: Planting Approach

Broadleaved Tree Standards to be planted in individual pits (800 x 800 x 450mm), supported via single 75mm dia untreated softwood stake, 1.5m length.

Native Mixed Hedgerow to be planted in double-staggered row, in groups of 5 - 20 of the same species. 50mm layer of bark mulch to be applied along length of hedgerow. Hedgerow to be allowed to establish and thereafter maintained at height of 3.0 - 3.5m.

For wildflower meadow and species rich grassland, prior to sowing, the ground shall be cultivated to a minimum depth of 50mm, reducing upper soil to fine tilth. Sowing to be undertaken at first available season in Spring (March to May), or Autumn (Aug to Sept). Seed to be sown at rate specified for each mixture.

For long-term maintenance and aftercare, refer to maintenance schedule within the separate Landscape Management Plan.

DRAFT

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Project Port Dundas BESS					
Title Landscape Mitigation Plan					
Date 09/10/24	Scale 1:250 @ A1	Drawn RPD	Checked GS		
Job 2226	Suitability -	No. Figure 4	Issue -	Revision -	
LI WORKSTAGE: 0/1 2 3 4 5 6					

DISCLAIMER:
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All dimensions to be verified on site prior to commencement of works.
Drawing to be read in conjunction with related TGP drawings, consultants drawings and any other relevant information.
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C SUMMARY OF PROTECTED SPECIES LEGISLATION

European Protected Species (bats)

European Protected Species (EPS) are protected under the Conservation (Natural Habitats &c.) Regulations 1994 (the “Habitat Regulations”) as amended. Under this legislation it is an offence to deliberately or recklessly:

- capture, injure or kill such an animal.
- harass an animal or group of animals.
- disturb an animal while it is occupying a structure or place used for shelter or protection.
- disturb an animal while it is rearing or otherwise caring for its young.
- obstruct access to a breeding site or resting place, or otherwise deny an animal use of a breeding site or resting place.
- disturb an animal in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species.
- disturb an animal in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.
- disturb an animal while it is migrating or hibernating.
- take or destroy its eggs (in Scotland, this is relevant to the great crested newt and natterjack toad).
- possess, control, transport, sell or exchange specimens of any animal listed on Annex IV of the Habitats Directive. This applies to living or dead specimens and to their derivatives.

It is an offence of strict liability to damage or destroy a breeding site or resting place of such an animal. These sites and places are protected even when the animal isn’t present. For example, great crested newt ponds are protected all of the time as long as it can be shown that the newts use the ponds some of the time.

A licence may be issued to permit the otherwise unlawful activities listed above if these three tests are satisfied:

- There must be a licensable purpose which includes ‘preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment;’
- There is ‘no satisfactory alternative’.
- The derogation (i.e., any permission/licence granted) is ‘not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range’.

Birds

All wild bird species in the UK are protected under the Wildlife and Countryside Act 1981 (as amended), with species listed on Schedules A1, 1 and 1A afforded additional protection.

For any wild bird species, it is an offence to intentionally or recklessly:

- kill, injure or take a bird.
- take, damage, destroy or interfere with a nest of any bird while it is in use or being built.
- obstruct or prevent any bird from using its nest.

- take or destroy an egg of any bird.
- possess or control a living or dead wild bird.
- possess or control an egg of a wild bird (or any such derivatives).

For any wild bird species listed on Schedule 1, it's an offence to disturb:

- any bird while it is building a nest.
- any bird while it is in, on, or near a nest containing eggs or young.
- any bird while lekking.
- the dependent young of any bird.

For any wild bird species listed on Schedule 1A, it's an offence to intentionally or recklessly harass any bird.

For any wild bird species listed on Schedule A1, it's an offence to intentionally or recklessly take, damage, destroy or interfere at any time with a nest habitually used by any bird.

Licences cannot be issued for the purpose of development in relation to any of the above offences.

Invertebrates

For any invertebrate that is an EPS, they are protected under the Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) which is implemented through the Conservation (Natural Habitats &c.) Regulations 1994 (the "Habitat Regulations") as amended. Three annexes in the Directive list species for which different types of protection are required. The annexes that include invertebrates are:

- Annex IIa - designation of protected areas required within the natural range of the animal species listed.
- Annex IVa - special protection required for the native animal species listed.
- Annex Va - exploitation of listed animal species to be subject to management if necessary in order to maintain their favourable conservation status.

For any invertebrate species listed on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) , it's an offence to intentionally or recklessly:

- Kill, injure, or take a protected invertebrate.
- Possess or control (live or dead animal, part or derivative).
- Take or destroy any structure or place used by a scheduled invertebrate for shelter or protection.
- Disturb protected invertebrate occupying such a structure or place.
- Obstruct access to any structure or place used for shelter or protection.
- Sell, offer for sale, possess, or transport for the purpose of sale (live or dead animal, part or derivative).
- Advertise for buying or selling live or dead animal, part or derivative.

Invasive Non-Native Species (Plants)

Under the Wildlife and Countryside Act 1981 (as amended) it is an offence to plant, or otherwise cause to grow, any plant in the wild at a location outside its native range.

'Native range' is defined in the 1981 Act as, "the locality to which the animal or plant of that type is indigenous and does not refer to any locality to which that type of animal or plant has been imported (whether intentionally or otherwise) by any person."

The Scottish Governments Non-natives Code of Practice⁴⁸ defines 'in the wild'. Just about everywhere is wild except for:

- arable and horticultural land
- improved pasture
- settlements; and
- private and public gardens.

In exceptional circumstances it may be possible to obtain a licence from NatureScot to permit the above offence.

⁴⁸ <https://www.gov.scot/publications/non-native-species-code-practice/>

D GEOGRAPHICAL LEVEL OF IMPORTANCE OF ECOLOGICAL FEATURES

Level of Importance	Sites	Habitats	Species
International	Designated, candidate or proposed Special Areas of Conservation, Special Protection Areas and Ramsar sites; UNESCO (Ecological) World Heritage Sites; UNESCO Biosphere Reserves; Biogenetic Reserves.	A viable area of habitat included in Annex I of the EC Habitats Directive; a habitat area that is critical for a part of the life cycle of an internationally important species.	A European Protected Species; an IUCN Red Data Book species that is globally Vulnerable, Endangered or Critically Endangered; a Category A internationally important bryophyte assemblage ⁴⁹ .
National (UK)	Sites of Special Scientific Interest/Areas of Special Scientific Interest; National Nature Reserves; Nature Conservation Review Sites; Marine Conservation Zones (UK offshore).	An area of habitat fulfilling the criteria for designation as an SSSI/ASSI or MCZ; a habitat area that is critical for a part of the life cycle of a nationally important species; ancient woodland.	An IUCN Red Data Book species that is Vulnerable, Endangered or Critically Endangered in the UK; a species that is Rare in the UK (<15 10km grid squares); a Schedule 5 ⁵⁰ (animal) or Schedule 8 (plant) species included in the Wildlife and Countryside Act 1981; any species protected under national (UK) legislation where there is the potential for a breach of the legislation; a Category A nationally important bryophyte assemblage ⁵¹ ; a species that is Vulnerable, Endangered or Critically Endangered in The Vascular Plant Red Data List for Great Britain ⁵² .
National (Scotland)	National Parks ; Marine Protected Areas (Scotland offshore); Marine Consultation Areas (Scotland);	Habitats of principal importance for biodiversity in the relevant countries ⁵³ , including; Scottish Biodiversity List (SBL) Priority Habitats and Priority Marine Features (PMFs) ⁵⁴	Species of principal importance for biodiversity in the relevant countries ⁵⁵ , including; SBL Priority Species and PMFs (Scotland);

⁴⁹ Averis, A.B.G, Genney, D.R, Hodgetts, N.G, Rothero, G.P. & Bainbridge, I.P. 2012. Bryological assessment for hydroelectric schemes in the west highlands – 2nd edition. Scottish Natural Heritage Commissioned Report No. 449b

⁵⁰ <https://www.legislation.gov.uk/ukpga/1981/69/schedule/5/enacted>

⁵¹ Averis, A.B.G, Genney, D.R, Hodgetts, N.G, Rothero, G.P. & Bainbridge, I.P. 2012. Bryological assessment for hydroelectric schemes in the west highlands – 2nd edition. Scottish Natural Heritage Commissioned Report No. 449b

⁵² Cheffings, C.M. & Farrell, L. (eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J., Taylor, I. (2005) *The Vascular Plant Red Data List for Great Britain. Species Status No. 7*. JNCC, Peterborough. Available at: <https://hub.jncc.gov.uk/assets/cc1e96f8-b105-4dd0-bd87-4a4f60449907>

⁵³ These are all the habitats that were identified as requiring action in the UK Biodiversity Action Plan and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework, including any additions.

⁵⁴ In July 2014, Scottish Ministers adopted a list of 81 priority marine features (PMFs) – many of which are features characteristic of the Scottish marine environment. Most are on other conservation status lists so may be valued higher than this.

⁵⁵ These are all the species that were identified as requiring action in the UKBAP and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework, including any additions.

Level of Importance	Sites	Habitats	Species
		(Scotland);	
Regional	Regional Parks (Scotland).	Regional Local Biodiversity Action Plan habitats noted as requiring protection.	A species that is Nationally Scarce in the UK (present in 16-100 10km grid squares); a species that is included in the Regional LBAP; an assemblage of regionally scarce species.
County / Metropolitan	Local Nature Reserves; Woodland Trust Sites; Royal Society for the Protection of Birds Sites; Local Wildlife Sites (Scotland).	County LBAP habitats noted as requiring protection.	A species that is included in the County LBAP; an assemblage of species that are scarce at the county level.
Local		Semi-natural, ancient woodland <0.25ha in extent; semi-natural habitats that are unique or important in the local area;.	Species as defined by Local Authority lists (if available).
Site		Common and widespread habitats not covered above.	Common and widespread species not covered above.
Negative			An Invasive Non-Native Species (INNS) as defined by the GB Non-Native Species Secretariat (NNSS) and supported by the GB Invasive Non-native Species Strategy (2015); legally controlled species under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended by the relevant country legislation).

E GEOGRAPHICAL LEVEL OF IMPORTANCE OF ORNITHOLOGICAL FEATURES











Level of Importance	Assessment Criteria		
	Legal Protection	Conservation Status	Population Size
International	Any species within Annex 1 of the EU Birds Directive	Any species which is listed as Critically Endangered or Endangered on the IUCN Red List	Supporting greater than 1% of the EC population
National (UK)	Any species within Schedule 1 of the Wildlife and Countryside Act	Any species on the BoCC Red List	Supporting greater than 1% of the UK population
National (Scotland)		Any species on the Scottish Biodiversity List	Supporting greater than 5% of the Scottish population
Regional		Any species on the BoCC Amber List	Supporting greater than 0.5% of the UK population
County		Any species that is listed as a Priority Species in the LBAP	Supporting greater than 0.05% of the UK population
Local		BoCC Green List; or species with no conservation concern; common and widespread throughout the UK	Supporting less than 0.05% of the UK population

F HABITATS PLAN



Imagery Source: Bing Maps. Image Courtesy of Ordnance Survey TomTom © 2024

Legend

-  Site Boundary
-  w1g - other broadleaved woodland
-  h3h - mixed scrub (524-invasive non-native species)
-  u1b - developed land. sealed surface
-  u1b5 - buildings
-  u1e - built linear feature (853-mortared wall)
-  u1e - built linear feature (612-fence; guard rail)
-  u1e - built linear feature (612-fence; hoarding)
-  u1e - built linear feature (612-fence; palisade)
-  u1e - built linear feature (612-fence; picket)

Secondary Codes:

- 10 - scattered scrub
- 32 - scattered trees
- 33 - line of trees

Do not scale this map

Client

Graham & Sibbald

Project

BESS Port Dundas

Title

Habitats Plan

Status

FINAL

Drawing No.	Revision	Date
180322-GIS002	-	21 Oct 2024
Drawn	Checked	Approved
DC	DK	AS

Scale 1:450 @ A3 0 5 10 m

Rev	Date	Amendment	Initials
-	-	-	-



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G PHOTOGRAPHIC RECORDS



Photograph 1: Concrete paving / access.



Photograph 2: Southeastern car park.



Photograph 3: Central car park.



Photograph 4: Aggregate storage bays.



Photograph 5: Mobile phone mast area.



Photograph 6: Eastern ruderal strip.



Photograph 7: Scattered trees and scrub behind central car park.



Photograph 8: Hawthorn shrub in northwestern corner.



Photograph 9: Concrete manufacturing plant.



Photograph 10: Site office.



Photograph 11: Northwestern cabins.



Photograph 12: High end of brick wall.



Photograph 13: Low side of brick wall.



Photograph 14: Hoarding wall.



Photograph 15: Wooden picket fence.



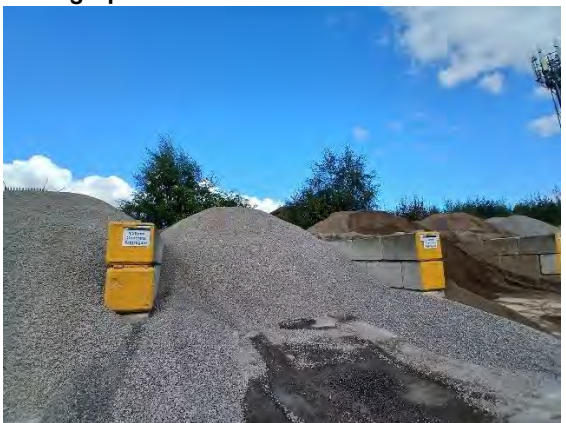
Photograph 16: Steel palisade fence.



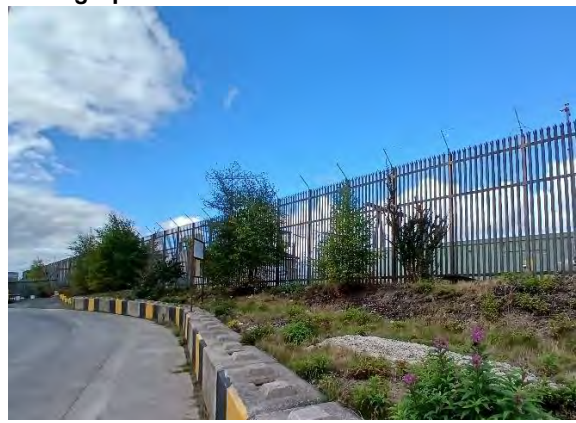
Photograph 17: Guard rail fence.



Photograph 18: Southern line of trees.



Photograph 19: Northern line of trees (eastern side).



Photograph 20: Northern line of trees (western side).



Photograph 21: Western line of trees.



Photograph 22: Stretch of mixed scrub



Photograph 23: Mixed scrub between fence and wall.



Photograph 24: Birds' nests in western line of trees.