Leiros Parc, Bryncoch, Neath

Ecological Appraisal

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Codi Group

June 2026

Report Reference
edp8635_r002c

Document Control

DOCUMENT INFORMATION

Client	Codi Group
Report Title	Ecological Appraisal
Document Reference	edp8635_r002c

VERSION INFORMATION

	Author	**Formatted**	**Peer Review**	**Proofed by/Date**
002_DRAFT	EWi/LBT	CTi	KHe	-
002a_FINAL DRAFT	EWi/LBT	-	-	CRo 280725
002b_FINAL DRAFT	EWi/LBT	-	-	FMi 130126
002c	EWi	-	KHe	FMi 170626

DISCLAIMER TEXT

No part of this report may be copied or reproduced by any means without prior written permission from The Environmental Dimension Partnership Ltd. If you have received this report in error, please destroy all copies in your possession or control and notify The Environmental Dimension Partnership Ltd.

This report (including any enclosures and attachments) has been prepared for the exclusive use and benefit of the commissioning party and solely for the purpose for which it is provided. No other party may use, make use of or rely on the contents of the report.

We do not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report.

Opinions and information provided in the report are those of The Environmental Dimension Partnership Ltd using due skill, care and diligence in the preparation of the same and no explicit warranty is provided to their accuracy. It should be noted, and it is expressly stated that no independent verification of any of the documents or information supplied to The Environmental Dimension Partnership Ltd has been made.

Contents

Executive Summary 5
Section 1 Introduction 7
Section 2 Baseline Methodology 10
Section 3 Baseline Results 17
Section 4 Impact Assessment 38
Section 5 Mitigation and Enhancement Strategy 47
Section 6 Summary and Conclusions 58

APPENDICES

Appendix EDP 1 Illustrative Masterplan (Hammond Architectural Ltd, IMP-01, Jan 26)

Appendix EDP 2 Green Infrastructure Strategy (Tir Collective Landscape Architects, TC24246_Leiros Park_v5.dwg, 16 June 2026)

Appendix EDP 3 Extended Phase 1 Habitat Survey and Botanical Survey

Appendix EDP 4 Hedgerow Survey

Appendix EDP 5 Breeding Bird Survey

Appendix EDP 6 Bat Surveys

PLANS

Plan EDP 1: Statutory Designations
(edp8635_d001a 13 January 2026 VMS/EWi)

Plan EDP 2: Non-statutory Designations
(edp8635_d002a 13 January 2026 VMS/EWi)

Plan EDP 3: Phase 1 Habitat Plan
(edp8635_d003b 18 June 2026 VMS/EWi)

Plan EDP 4: Dormouse Tube Locations
(edp8635_d007a 13 January 2026 VMS/EWi)

Plan EDP 5: Otter and Water Vole Survey Area
(edp8635_d014a 13 January 2026 GYo/EWi)

Plan EDP 6: Breeding Bird Survey Results – Early May 2024
(edp8635_d004b 28 May 2026 VMS/EWi)

Plan EDP 7: Breeding Bird Survey Results – Late May 2024
(edp8635_d005b 28 May 2026 VMS/EWi)

Plan EDP 8: Breeding Bird Survey Results – June 2024
(edp8635_d006b 28 May 2026 VMS/EWi)

Plan EDP 9: Breeding Bird Survey Results – May 2026
(edp8635_d015 28 May 2026 VMS/EWi)

Plan EDP 10: Bat Tree Roost Assessment Survey Results
(edp8635_d010b 18 June 2026 DJo/EWi)

Plan EDP 11: Preliminary Bat Roost Inspection Survey Results and Surveyor/IR Camera Locations – 2024
(edp8635_d009b 18 June 2026 DJo/EWi)

Plan EDP 12: Surveyor/IR Camera Locations 2026
(edp8635_d016 18 June 2026 PDr/EWi)

Plan EDP 13: Nighttime Bat Walkover Survey – May 2024
(edp8635_d011a 13 January 2026 VMS/IBo)

Plan EDP 14: Nighttime Bat Walkover Survey – July 2024
(edp8635 d012a 13 January 2026 VMS/IBo)

Plan EDP 15: Nighttime Bat Walkover Survey – September 2024
(edp8635_d013a 13 January 2026 VMS/IBo)

Plan EDP 16: Automated Detector Locations
(edp8635_d008a 13 January 2026 VMS/EWi)

Executive Summary

S1 This Ecological Appraisal has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Codi Group (hereafter referred to as 'the Applicant'). This Appraisal considers the ecological implications of proposed development at land at Leiros Parc, Bryncoch, Neath (hereafter referred to as 'the Site'). In brief, the proposals relate to the development of up to 250 residential dwellings, public open space, green infrastructure, a small flexible mixed-use/community space, sustainable drainage features, access arrangements, and all associated landscaping and infrastructure works.

S2 Detailed ecological assessments of the Site were initially undertaken by EDP during 2024 and comprise a desk study, Extended Phase 1 habitat survey, botanical assessment and further detailed surveys with respect to bats, breeding birds, badger (*Meles meles*), dormouse (*Muscardinus avellanarius*), otter (*Lutra lutra*) and water vole (*Arvicola amphibius*). This was followed by an update Extended Phase I habitat survey in March 2026, together with further update survey effort with regards to roosting bats, breeding birds and badger.

S3 No part of the Site is covered by any statutory nor non-statutory designations. However, there are several such designations within the potential zone of influence of the Site, the most pertinent of which include Crymlyn Bog Ramsar Site and Special Area of Conservation (SAC), the Tennant Canal Site of Importance for Nature Conservation (SINC), Catwg Wetland SINC, Neath Estuary SINC and Neath Canal SINC. In addition, Ancient Semi-natural Woodland (ASNW) lies directly adjacent to the eastern boundary of the Site.

S4 With respect to habitats, the Site is characterised by five (**F1**–**F5**) agricultural grassland fields subdivided by mature tree lines with a sixth field within the south-eastern corner of the Site dominated by dense scrub (**F6**). Such agriculturally improved habitats are considered to be of negligible–Site level importance although field **F5** is considered to be of Local level importance given its relatively greater botanical diversity, albeit subject to intense grazing pressure and scrub encroachment. The eastern boundary of the Site is defined by broadleaved and ASNW, whilst the southern boundary is delineated by a linear band of dense scrub, woodland and scattered mature/semi-mature trees through which flows a small stream. Such features are judged to be of Local–County-level importance and are Priority Habitats for Wales, with overlapping areas of ASNW comprising an irreplaceable habitat as protected under Planning Policy Wales 12 (February 2024) (PPW). Habitats supported by the Site are of value for a breeding bird and bat assemblage of Local level importance and also provide suitable habitat for badger, common reptiles and amphibians, as well as for notable mammal species such as European hedgehog (*Erinaceus europaeus*).

S5 Accordingly, EDP has provided specific proposals for the avoidance, mitigation and compensation of any predicted impacts including, where possible, the protection of those valued features within and adjacent to the Site and creation of new habitats to compensate for proposed losses, whilst delivering new foraging, breeding and refuge opportunities for protected/notable species.

S6 Overall, given the scale of the development proposals and scope of those proposed mitigation measures in respect of habitats and protected/notable species, EDP considers that the scheme is capable of compliance with relevant wildlife legislation and planning policy for the conservation of the natural environment at all levels, whilst also delivering benefits to biodiversity and ecosystem resilience.

Section 1
Introduction

1.1 This Ecological Appraisal has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Codi Group (hereafter referred to as 'the Applicant'). This Appraisal considers the ecological implications of proposed development at Leiros Parc, Bryncoch, Neath (hereafter referred to as 'the Site').

1.2 This report has been prepared with reference to the following key guidance:

- Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal[1];
- CIEEM Guidelines for Ecological Impact Assessment[2]; and
- British Standard: Biodiversity - Code of Practice for Planning and Development[3].

1.3 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk).

SITE CONTEXT

1.4 The Site is centred approximately at Ordnance Survey Grid Reference (OSGR) SS 75297 99062. The Local Planning Authority (LPA) is Neath Port Talbot County Borough Council (NPTCBC). The Site measures 11.8 hectares (ha) and encompasses five (**F1**–**F5**) agricultural grassland fields subdivided by mature tree lines with a sixth field within the south-eastern corner of the Site dominated by dense scrub (**F6**). The eastern boundary of the Site is defined by broadleaved and Ancient Semi-natural Woodland (ASNW) whilst the southern boundary is delineated by a linear band of dense scrub, woodland and scattered mature/semi-mature trees through which flows a small stream whose source is near the corner where fields **F1**–**F3** meet. A public right of way (PRoW) travels east to west adjacent to the southern boundary of the Site. The northern boundary is, for its majority, defined by a stone wall overgrown with dense bramble (*Rubus fructinosus* agg.) scrub whilst the western boundary lies adjacent to an abandoned dwelling and group of agricultural buildings and yard.

1.5 Located on the northern edge of the settlement of Bryncoch, the wider landscape to the north and east is characterised by large expanses of agricultural pasture and woodland. Gilfach Quarry is located circa 485m north of the Site. Land to the south comprises residential housing associated with the settlement of Bryncoch. The A465 dual carriageway is located

[1] CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester

[2] CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester

[3] BSI (2013) *Biodiversity - Code of Practice for Planning and Development*. BS 42020:2013. British Standards Institute

815m south of the Site, travelling parallel to the Tennant Canal and the main railway line serving the town of Neath. The location and extents of the Site are illustrated on **Plans EDP 1–3**.

DEVELOPMENT PROPOSALS

1.6 In brief, proposals concern an outline application (with all matters reserved except for access) for the construction of up to 250 residential dwellings, public open space, green infrastructure, a small flexible mixed-use/community space, sustainable drainage features, access arrangements, and all associated landscaping and infrastructure works.

1.7 The Illustrative Masterplan is provided as **Appendix EDP 1** to this report whilst a Green Infrastructure Strategy is provided at **Appendix EDP 2**.

1.8 Of pertinence, the Site is currently allocated for housing under Policy H1/2 of the adopted Neath Port Talbot Local Development Plan.[4].

1.9 The ecological sensitivities of the Site have influenced the final layout through an iterative design process. Thus, the Illustrative Masterplan incorporates a degree of 'inherent' mitigation to avoid or reduce the severity of potential ecological impacts.

SCOPE OF THE ASSESSMENT

1.10 This Ecological Appraisal describes the current ecological interest within and around the Site, which has been identified through standard desk- and field-based investigations. It then considers the potential ecological impacts and opportunities for ecological enhancement based on the Illustrative Masterplan and Green Infrastructure Strategy (incorporating inherent mitigation) in the context of relevant legislation and planning policy. Finally, this Appraisal identifies the necessary additional measures to avoid, mitigate or provide compensation for potential impacts, and the mechanisms for securing such measures.

1.11 The remainder of this report is structured as follows:

- **Section 2** summarises the methodology employed in determining the baseline ecological conditions within and around the Site (with further details provided within Appendices and on Plans where appropriate);
- **Section 3** summarises the baseline ecological conditions (with further details also provided within Appendices and on Plans where appropriate) and identifies and evaluates any Important Ecological Features (IEF)/receptors;
- **Section 4** describes how the development design has responded to the ecological constraints and any embedded/inherent mitigation, and then considers the potential impacts of the proposals on IEFs;

[4] Neath Port Talbot County Council (2016). Local Development Plan 2011-2025. Available at: https://media.npt.gov.uk/media/ca2fbumd/ldp_written_statement_jan16.pdf?v=20240823155047 [Accessed on 27 September 2024]

- **Section 5** proposes mitigation and enhancement measures for the current and possible future planning stages, in the context of relevant legislation and planning policy, and mechanisms to secure their delivery; and

- **Section 6** summarises the Mitigation and Enhancement Strategy for the Site and provides the overall conclusions of the Appraisal.

Section 2
Baseline Methodology

2.1 This section summarises the methodologies employed in determining the baseline ecological conditions within and around the Site. This has been undertaken by appropriately qualified ecologists using relevant best practice methodology wherever possible. Reasons for any departure from best practice methodology are given and normally relate to the timing of EDP's commission and/or the availability of access to parts of the Site or wider study area. Full details of the techniques and process adopted are, where appropriate, provided within Appendices and on Plans to the rear of this report.

DESK STUDY

2.2 The desk study is an important element of undertaking an initial ecological appraisal of a site proposed for development, which entails the initial collation and review of contextual information, such as designated sites, together with known records of important habitats or species.

2.3 The desk study involved collating biodiversity information from the following sources:

- South East Wales Biological Records Centre (SEWBReC/Aderyn); and
- Multi-Agency Geographic Information for the Countryside (MAGIC) website[5].

2.4 The desk study was undertaken during June 2024 and involved obtaining the following information:

- International statutory designations (10km radius around the Site);
- National statutory designations and non-statutory local sites (2km radius around the Site);
- Annex II bat species[6] records (6km radius around the Site); and
- All other protected, priority[7] and notable[8] species records (2km radius around the Site).

2.5 These search areas are considered sufficient to cover the potential zones of influence[9] of the proposed development in relation to designated sites, habitats and species.

[5] www.magic.gov.uk

[6] Bat species listed in Annex II of the EC Habitats Directive, namely Greater horseshoe, Lesser horseshoe, Barbastelle and Bechstein's bats

[7] Species considered of key significance to sustain and improve biodiversity in Wales, as defined under Section 7 of Part 1 of the *Environment (Wales) Act* 2016.

[8] Notable species are those which are not legally protected but are formally identified as being of conservation concern.

[9] Zone of Influence - the areas and resources that may be affected by the proposed development

2.6 The adopted Neath Port Talbot Local Development Plan[10] and Biodiversity and Geodiversity Supplementary Planning Guidance (SPG)[11] were also reviewed as part of the desk study to understand local priorities with regard to protection of ecological features/biodiversity.

2.7 In addition to the above, previous survey information for the Site, collected by Bay Ecology during 2020 to inform a previous planning submission for the Site (planning reference: P2020/1020) was reviewed to obtain further contextual information.

EXTENDED PHASE I HABITAT SURVEY

2.8 The main habitats within the Site, together with their dominant/characteristic plant species, were identified by undertaking an Extended Phase 1 habitat survey on 26 April 2024, with a further update survey completed on 19 March 2026.

2.9 Full details of the habitat survey methodology are provided within **Appendix EDP 3**.

DETAILED (PHASE 2) SURVEYS

2.10 The scope of Phase 2 surveys undertaken within the Site was defined following the initial studies described above.

2.11 The surveys 'scoped in' based upon the findings of the Extended Phase 1 habitat survey are summarised in turn below, with reference to sources of further detailed information where applicable.

Detailed Botanical Survey

2.12 Following identification of an acid grassland community exhibiting relatively greater botanical diversity compared to the rest of the Site, a detailed botanical survey of field **F5** (**Plan EDP 3**) was undertaken on 21 August 2024 to provide a more robust assessment of its botanical diversity and condition.

2.13 Full details of the botanical survey methodology, and any limitations encountered, are provided within **Appendix EDP 3**.

Hedgerow Survey

2.14 Owing to the presence of a network of outgrown hedgerows within the Site, a detailed survey was undertaken to assess the value and condition of all hedgerows within the Site and to identify whether any of them qualify as 'important', with reference to the Wildlife and Landscape criteria provided in Part II of Schedule 1 of the *Hedgerows Regulations* 1997. The survey was

[10] Neath Port Talbot County Borough Council (2016). Neath Port Talbot County Borough Council Local Development Plan (2022-2016). Available at: https://media.npt.gov.uk/media/ca2fbumd/ldp_written_statement_jan16.pdf?v=20240823155047 [Accessed on 27 September 2024]

[11] Neath Port Talbot County Borough Council (2018). Biodiversity and Geodiversity Supplementary Planning Guidance. Available at: https://www.npt.gov.uk/media/9003/spg_biodiversity_geodiversity_may18.pdf [Accessed on 27 September 2024]

completed on 26 April 2024, with the results ground-truthed during an update Extended Phase I habitat survey on 19 March 2026.

2.15 Full details of the hedgerow survey methodology, and any limitations encountered, are provided in **Appendix EDP 4**.

Breeding Bird Survey

2.16 The Site contains several habitats which are suitable for nesting birds including mature tree lines and broadleaved woodland. A full breeding bird survey was therefore undertaken with reference to standard methodology, entailing a modified Common Bird Census (CBC)[12] 'territory mapping' approach. This involved the completion of three visits to the Site, undertaken monthly between April and June 2024 to coincide with the height of the breeding bird season for lowland Britain. Following delays to a planning submission, a subsequent update breeding bird survey was completed on one occasion on 15 May 2026 to confirm the validity of previous survey results.

2.17 Full details of the breeding bird survey methodology, and any limitations encountered, are provided in **Appendix EDP 5**.

Bat Surveys

2.18 During the Extended Phase 1 habitat survey, several trees and buildings present within, or immediately adjacent to the Site were identified as having potential to support roosting bats. In addition, a number of habitats present within the Site, including agricultural pasture and boundary woodland and trees lines were identified as being of moderate suitability to support foraging and commuting bats. The following surveys for bats were therefore undertaken, with reference to best practice guidelines[13].

Bat Roost Inspection Surveys – Trees

- Ground level Tree Assessment (GLTA) of trees for bat roosting suitability, undertaken on 26 April 2024;
- Aerial inspections of trees with potential roosting features likely to be impacted by the development on 28/29 August and 23/24 September 2024;
- Ground level tree assessment of **T25** on 19 March 2026 following removal of previous access constraints; and
- Aerial inspections of three additional trees (**T28-T30**) with potential roosting features identified during the update Extended Phase I habitat survey/GLTA, combined with an update aerial inspection of **T15** and **T19** likely to be impacted by the development on 12 June 2026.

[12] Marchant, J. (1983). *Common Bird Census Method*. BTO
[13] Collins, J. (ed.) (2016). *Bat Surveys: for Professional Ecologists: Good Practice Guidelines (3rd edition)*. The Bat Conservation Trust, London

Bat Roost Inspection Surveys – Buildings/Built Structures/Underground Sites

- Preliminary roost assessment of onsite buildings/structures to search for evidence of bats and determine the suitability of features to support roosting, undertaken on 03 May 2024 whilst a further site visit was completed on 30 May 2024;

- Update preliminary roost assessment (external only) of onsite buildings/structures to confirm their suitability for roosting bats, completed on 19 March 2026;

- Emergence surveys of buildings **B4** and **B7** with bat roost potential to confirm presence/likely absence of bats within undertaken between June and September 2024 (with **B6** also observed during dusk emergence surveys of **B7** given its proximity); and

- Update emergence survey of building **B7** on 10 June 2026 to determine the current presence/likely absence of roosting bats.

Bat Activity Surveys

- Nighttime bat walkover (NBW) surveys conducted monthly in May, July and September 2024; and

- Automated detector surveys conducted monthly between April and October inclusive.

2.19 Full details of the bat survey methodologies, and any limitations encountered, are provided in **Appendix EDP 6**.

Dormouse Survey

2.20 Owing to the suitability of the woodland, scrub and mature treelines within the Site for dormouse (*Muscardinus avellanarius*), a nest tube survey to determine the presence/likely absence of the species was undertaken in accordance with best practice guidelines[14].

2.21 A total of 78 standard nest tubes, each comprising a wooden tray and nesting tube made from plastic tree guard material, were deployed throughout the Site within suitable and accessible habitat at approximately 20m intervals on 29 April 2024 (see **Plan EDP 4**). Nest tubes were erected at approximately 1.5m to 2m above ground and tied to suitable branches located within the hedgerows or lower branches of trees. Tubes were left *in situ* and checked for evidence of use by dormouse during suitable weather conditions on five separate occasions between May and November 2024.

2.22 With reference to the best practice guidelines, a total survey effort score can be derived by adding together the index of probability in detecting dormouse presence within nest tubes for each of the months during which the nest tubes were deployed (assuming a minimum deployment of fifty nest tubes). These guidelines recommend that a score of at least 20 is achieved to provide a robust assessment of presence/absence. As illustrated in **Table EDP 2.1** the total survey effort score is 37, which exceeds this minimum.

[14] Bright, P.W, Morris, P.A. and Mitchell-Jones, T. (2006). *The Dormouse Conservation Handbook Second Edition*. English Nature, Peterborough.

Table EDP 2.1: Dormouse Survey Effort

Month	Index of Probability	Visit Details	Weather Conditions During Survey
April	1	Tubes deployed 29.04.24	19°C, 100% cloud cover, some showers during day
May	4	Tubes checked 30.05.24	16°C, 90% cloud cover, dry
June	2	N/A	N/A
July	2	N/A	N/A
August	5	Tubes checked 22.08.24	17°C, 80% cloud cover, dry
September	7	Tubes checked 17.09.24	19°C, 5% cloud cover, dry
October	2	Tubes checked 14.10.24	11°C, 90% cloud cover, dry
November	2	Tubes checked 27.11.24	6°C, 90% cloud cover, dry
Total Survey Effort Score	**37** (total of 24 points per 50 tubes; equivalent to 37 points for 78 tubes)		

Limitations

2.23 Due to the proliferation of dense scrub during the summer months not all deployed nest tubes could be identified during survey visits. Nevertheless, sufficient tubes were checked during each site visit to reliably confirm presence/absence of dormouse.

Otter and Water Vole Survey

2.24 An initial assessment of the Site's suitability to support otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) was undertaken during the Extended Phase 1 Habitat survey and with reference to desk study records as described above. Based on this initial habitat assessment, a detailed survey for signs of otter and water vole were subsequently undertaken of the watercourse immediately adjacent to the Site and circa 150m downstream) where access was available by an experienced surveyor on two occasions: 03 June and 18 September 2024.

2.25 Each survey was undertaken with reference to published methodologies on surveying otter[15] and water vole[16]. These took place between May and September and involved a visual inspection of the entire watercourse for characteristic signs of otter, including evidence of feeding remains, prints, tracks, spraints and resting sites including lay-ups and holts. Features considered to have the potential to be used as holts were also documented during the survey. In respect of water vole, the survey included a search for burrows, feeding stations (including grazed lawns), faeces (latrines and droppings), footprints, and possible runs. The survey area is illustrated at **Plan EDP 5**.

[15] Chanin P (2003). *Monitoring the Otter Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.
[16] Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (Mammal Society Mitigation Guidance Series) Mammal Society, London

Limitations

2.26 There was limited access to the upper 200m of the survey stretch due to dense woodland and scrub habitat; an assessment of the watercourse here was undertaken where there were breaks in the vegetation. As such, evidence of otter and water vole may have been missed. This is not, however, considered a significant constraint to an assessment with sufficient information collated to assess habitat suitability for either species and likelihood of presence.

Badger Survey

2.27 A survey to record any evidence of badger (*Meles meles*) activity within the Site and within 30m of the Site where access was permitted was undertaken on 26 April 2024 during the Extended Phase I habitat survey and during the course of remaining surveys across the Site as well as during the update survey undertaken on 19 March 2026.

2.28 During the survey, any signs of badger activity such as holes, latrines, trails, snuffle holes and hairs on fencing or vegetation were recorded. Where holes of a size and shape consistent with badgers were identified, the following signs of badger activity were searched for in order to determine whether they were currently in use:

- Fresh spoil outside entrances;
- Bedding material (typically dried grass) outside entrances;
- Holes being cleared of leaf litter/other debris;
- Badger guard hairs; and
- Footprints and fresh tracks leading to/from the holes.

Limitations

2.29 Badger surveys can be undertaken at any time of year and are, therefore, not limited by seasonal factors.

2.30 Dense scrub, prominently along the southern margins of the Site, precluded a thorough inspection for badger. This is, however, not considered a constraint to an assessment with no evidence of mammal paths or other signs visible in and out of such thickets that would suggest the presence of a sett.

ECOLOGICAL SURVEYS SCOPED OUT

2.31 **Table EDP 2.2** summarises other survey types which, whilst occasionally required to inform a planning submission for development sites, are not deemed to be necessary/appropriate in this case.

Table EDP 2.2: Ecology Surveys Scoped Out

Survey Type	Reasons for Scoping Out
Wintering Birds	Given the relatively small extent of the Site and nature of those habitats supported therein, no wintering bird surveys are recommended in this instance.
Great Crested Newt	Two waterbodies were identified north of the Site, the closest being located within c.475m. Given the distance of these waterbodies from the Site, combined with the dominance of agricultural grassland considered sub-optimal for a great crested newt (*Triturus cristatus*) population, presence of this species within the Site is considered unlikely, particularly given the Site's location near the edge of this species' range within south-west Wales.
Reptiles	Given the dominance of poor semi-improved grassland subject to agricultural management, presence of a significant reptile population is considered unlikely, such that no further survey is proposed. Presence of low numbers of common reptiles in association with field margins and boundary scrub and woodland vegetation should, however, be assumed. Precautionary measures of clearance during the pre-construction phases of development should therefore be implemented to ensure no harm/disturbance to any reptiles present.
Invertebrates	Habitats present on-site, dominated by species-poor grassland and scrub, are likely to support a limited assemblage of common and widespread invertebrate species only. No further survey is considered necessary in this instance.

Section 3
Baseline Results

3.1 This section summarises the baseline ecological conditions determined through the course of desk-based and field-based investigations described in **Section 2**. In particular, this section identifies and evaluates those ecological features/receptors that lie within the Site's potential zone of influence, and which are pertinent in the context of the proposed development. Further technical details are, where appropriate, provided within Appendices and on Plans to the rear of this report.

3.2 Where a particular ecological feature/receptor has been confirmed to be present, or presence is inferred based on habitat suitability, its ecological importance is assessed. The level of ecological importance assigned to each ecological feature is based upon established geographical value systems and the uses the following scale: International and European (highest) > National > Regional > County > District > Local > Site > Negligible (lowest).

DESIGNATED SITES

3.3 Information regarding designated sites was obtained during the desk study. Statutory designations (those receiving legal and planning policy protection) and non-statutory designations (those receiving planning policy protection only) are discussed in turn below.

Statutory Designations

3.4 Statutory designations represent the most significant ecological receptors. Internationally important statutory designations include Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar sites (including potential SPAs, possible SACs and proposed Ramsars). These designations are protected under the *Conservation of Habitats and Species Regulations* 2017 (as amended) (the *Habitats Regulations*).

3.5 Nationally important statutory designations include Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNR). NNRs are also SSSIs, both of which are protected under the *Wildlife and Countryside Act* 1981 (as amended).

3.6 The legal protection of SACs, SPAs, Ramsar Sites and SSSIs is also reflected in policies included within PPW and within Technical Advice Note 5: Nature Conservation and Planning (TAN5), which are a material consideration during the planning application process. Further consideration is afforded to the protection SSSIs within updates to Chapter 6 of PPW, published during October 2023, with increased clarity on the position for site management and exemptions for minor development necessary to maintain a 'living' landscape, and contribute to an ecologically coherent and resilient network of protected sites and linkages between these. Other development is considered unacceptable as a matter of principle.

3.7 Local level statutory designations include Local Nature Reserves (LNR) and are generally considered to be of importance at the County level or lower. LNRs are designated under the *National Parks and Access to the Countryside Act* 1949, however, protection of LNRs is given via local planning policies and/or by-laws.

3.8 Statutory designations are also recognised as key natural assets within the adopted Local Development Plan. Specifically, Strategic Policy SP15 (Biodiversity and Geodiversity) states:

"*Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:*

1. *The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection:*

   a. *Special Areas of Conservation (SACs) and Ramsar Sites;*

   b. *Sites of Special Scientific Interest (SSSIs); and*

   c. *National Nature Reserves (NNRs).*

2. *The identification and protection of sites of regional and local importance; and*

3. *The protection of important natural heritage features."*

3.9 No part of the Site is covered by any statutory designations. However, there are two internationally important designations within 10km of the Site. No nationally important nor county important designations occur within 2km of the Site. Designated sites within the Site's potential zone of influence are summarised in **Table EDP 3.1** and illustrated on **Plan EDP 1**.

Table EDP 3.1: Statutory Designations Within the Site's Potential Zone of Influence

Designation	Approx. Distance from the Site	Interest Feature(s)
Internationally Important Statutory Designated Sites (within 10km of the Site)		
Crymlyn Bog SAC	5.37km south-west	Designated for its Annex I habitats including transition mires, quaking bogs and calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (qualifying feature). Annex I habitats present as a qualifying feature, but not a reason for selection of the site, include alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*), a qualifying feature.
Crymlyn Bog Ramsar Site	5.75km south-west	Largest example of valley floodplain topogenous mire in South Wales, and one of the largest surviving fens in the west of Britain. The site supports a substantial population of the nationally rare slender cotton-grass (*Eriophorum gracile*), in addition to a further 199 vascular plant species, including regionally uncommon and one nationally rare and a rich invertebrate fauna, including many rare and highly localised species.

Non-statutory Designations

3.10 Non-statutory designations are also commonly referred to in planning policies as 'local sites', although such designations are typically considered to be of importance at a County level. In NPTCBC, such designations are termed Sites of Importance for Nature Conservation (SINC). Additional sites such as non-designated nature reserves (e.g. Wildlife Trust nature reserves) and ASNW are considered here when not covered by other designations. The importance of SINCs is recognised in PPW and in the Local Development Plan, specifically Policy NE6 (Important Biodiversity and Geodiversity Sites) which states:

"*Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where: They conserve and where possible enhance the natural heritage importance of the site; or The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site. Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable*."

3.11 No part of the Site is covered by any non-statutory designations. There are 13 SINCs located within 2km of the Site, as summarised in **Table EDP 3.2** and shown on **Plan EDP 2**.

Table EDP 3.2: Non-statutory Designations Within 2km of the Site

Designation	Approx. Distance from the Site	Interest Feature(s)
Neath Port Talbot Ancient Semi-natural Woodland	4m east	Ancient semi-natural woodland.
Tennant Canal SINC	450m south/ south-east	The Tennant canal supports exceptional aquatic and emergent flora along much of its length. Areas of wet grassland and carr woodland form adjacent habitat, together with brownfield and industrial sites. Otter are regularly seen on the canal's riparian zone. Part of the canal itself is included within the Crymlyn Bog SAC.
Catwg Wetland SINC	488m south-east	A narrow site on the floodplain of the Neath Valley. The soils comprise alluvial clay, silt, sand and gravel, which have been excavated in places resulting in flooded pits. The site provides a very effective wildlife corridor buffer between the Neath Canal and the A465.
Neath Estuary SINC	591m south	The Neath Estuary site includes a variety of wetland habitats including coastal saltmarsh, reedbeds, intertidal mudflats and flood plain grazing marsh.

Designation	Approx. Distance from the Site	Interest Feature(s)
Neath Canal SINC	903m south-east	The Neath Canal supports outstanding aquatic and emergent flora along much of its length. It lies, in part, adjacent to Red Jacket Fen and links to saltmarsh and the Neath Estuary. Areas of wet grassland and carr woodland form adjacent habitat, together with brownfield and industrial sites. Otter is regularly seen on the canal's riparian zone.
Ffynnon Dawel SINC	1.2km east	A south-facing grassy slope with scrub in Neath. The primary habitat is semi-improved neutral grassland, with a scrub and young woodland component. Recorded taxa include 81 vascular plants, 9 bryophytes, 4 birds, 2 lichens and 5 invertebrates.
Gnoll Country Park SINC	1.3km south-east	An area of woodland (some of which is designated on the Ancient Woodland Inventory), and several ponds, which lie within and adjacent to this country park. Several streams, some modified by canalisation and weirs, traverse the site.
Coed Bach a'r Cwm SINC	1.35km south-west	Valley woodland, established along part of the Afon Clydach and one of its tributaries. The northern part of the site is Registered Ancient Woodland. Wild service-tree (*Sorbus torminalis*) is a special feature of the site. Recorded taxa include 142 vascular plants, 39 bryophytes, 8 bird species and 19 invertebrates.
Bryncoch Farm SINC	1.35km north-west	This site comprises a large mosaic of habitats including lowland meadows and marshy grassland and Ancient Woodland. The River Clydach bisects the northern to central part of the site, then forms the western boundary.
Dyffryn Woods SINC	1.4km north-west	An Ancient Woodland site, dominated by dense thickets of birch (*Betula* sp.), willow (*Salix* sp.) and other broadleaved species. In 2012 the blue ground beetle (*Carabus intricatus*) was confirmed in the area and has been found in the wood. This is the only area in Wales where the beetle is known and comprises the most northerly population in Europe.
Roman Way Reedbed SINC	1.5km south-west	A small area of reedbed suitable for several breeding bird species including Cetti's warbler (*Cettia cetti*).
Neath Port Talbot Watercourse SINC	Closest 1.6km	Generic designation covering all watercourses that retain a generally natural form (i.e. not culverted, etc.) in Neath Port Talbot.

Designation	Approx. Distance from the Site	Interest Feature(s)
Gwlyptir Mynachlog Nedd SINC	1.8km south-west	A large flat expanse of marshy grassland, lying north of the A465 adjacent to Neath Abbey. The site is bisected east-west by Neath Canal. The north side is now almost completely reedbed with other habitats also present including rush pasture, purple moor-grass (*Molinia caerulea*), broadleaved woodland, scrub and canal.

3.12 Additionally, there are several woodland features with 2km of the site including ASNW, Restored Ancient Woodland (RAW), Plantation on Ancient Semi-natural Woodland (PAWS) and Ancient Woodland of unknown category. The closest of these is an area of ASNW which extends north to south along the eastern boundary of the Site.

HABITATS

3.13 There are several mechanisms by which habitats that lie outside of statutory and non-statutory designations are protected, or by which their importance is recognised at a national level. This includes the following:

- 'Important' hedgerows are protected from removal (out with the planning process) by the *Hedgerows Regulations* 1997;
- Certain habitats are listed Priority Habitats, which public authorities in Wales must seek to maintain and enhance (to promote ecosystem resilience) as part of policy or decision making under Section 6 of the *Environment (Wales) Act* 2016; and in so doing, deliver net benefits to biodiversity in accordance with Chapter 6 of PPW through adoption of a step-wise approach by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort, compensated for. Enhancement must be secured by delivering a biodiversity benefit primarily on a site or immediately adjacent to the site, over and above that required to mitigate or compensate for any negative impact;
- Planning Policy Wales 12 includes a presumption against development which results in significant harm to biodiversity and ecosystem functioning, or results in the loss of irreplaceable habitat[17]. PPW 12 also sets out how planning authorities should fulfil their 'Biodiversity and Resilience of Ecosystems Duty' as required by the *Environment (Wales) Act* 2016. Pertinent to this, Chapter 6 of PPW 12 also affords further consideration to the protection of trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial green infrastructure function;
- Chapter 6 of PPW 12 places further emphasis on adopting a proactive approach to integration of green infrastructure within development plans/proposals, adopting building

[17] Irreplaceable habitats are technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed. Habitats noted as irreplaceable within PPW are ancient woodland, semi-natural woodland, and ancient, veteran and heritage trees.

with nature standards and in so doing, supporting the delivery of ecosystem services and net benefits to biodiversity across site boundaries; and

- The importance of protecting habitats, and networks of habitats, is reflected in the Local Development Plan, including Policy PN7 (Important Natural Features) which states:

  "*Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows/field boundaries, watercourses or ponds will only be permitted where:*

  1. *Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or*

  2. *The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed."*

3.14 Further details are provided within the Biodiversity and Geodiversity Supplementary Planning Guidance for Neath Port Talbot. which seeks to provide further information and guidance to development proposals to protect, conserve, enhance and manage important habitats, species and sites of geological interest.

3.15 The distribution of different habitat types within the Site is illustrated on **Plan EDP 3**. The habitats are further described in **Appendix EDP 3** alongside illustrative photographs and species list. A summary and qualitative assessment of these habitats is provided in **Table EDP 3.3**.

Table EDP 3.3: Summary of Habitats Within the Site

Habitat Type	Distribution	Intrinsic Ecological Importance*
Poor Semi-improved Grassland	Fields **F1**–**F4**.	**Site**, owing to low botanical and structural diversity.
Semi-improved Neutral/Acid Grassland	Field **F5**.	**Local**, being relatively herb-rich with some uncommon species.
Semi-natural Broadleaved Woodland	Adjacent to the eastern boundary of fields **F1** and **F2** overlapping with an ASNW designation, with woodland also present along the southern boundary.	**Local-County**, Priority Habitat for Wales.
Dense and Scattered Scrub	Field **F6** and along field margins across the Site.	**Negligible**, owing to poor botanical and structural diversity.
Native Hedgerows	**H1**, **H2**, **H7** and **H9**.	**Local**, Priority Habitat for Wales.
Line of Trees	**H3**-**H6** and **H8**.	**Local**, Priority Habitat for Wales.
Running Water	Adjacent to southern boundary of the Site, flowing westwards.	**Local**, Priority Habitat for Wales.

Habitat Type	Distribution	Intrinsic Ecological Importance*
Buildings	Disused outbuildings within woodland on southern boundary of field **F4**.	**Negligible**, owing to low distinctiveness.
Other Features	Man-made boundary features including fence lines and walls associated with discrete patches of tall ruderal vegetation.	**Negligible**, Owing to low distinctiveness and/or limited extent.

*Importance irrespective of any protected, priority or other notable species, which may be present.

3.16 As noted within **Table EDP 3.3**, the majority of the Site is made up of habitats which are of less than Local, or negligible, intrinsic importance including agricultural fields comprising a poor semi-improved grassland sward and dense scrub communities. However, boundary features including woodland, hedgerows, mature tree lines and a watercourse are judged to be of Local-County level importance and are Priority Habitats for Wales with overlapping areas of ASNW comprising an irreplaceable habitat, as protected under PPW. Semi-improved neutral/acid grassland are similarly considered to be of Local level importance, albeit small in extent and in poor condition due to scrub encroachment and intense horse grazing.

3.17 Of further pertinence, hedgerow **H9** qualifies as 'important' under the *Hedgerows Regulations* (1997) criteria owing to its species-richness, ground flora community with woodland indictors, and associated hedgerow features including a bank, watercourse and a PRoW. Furthermore, a number of the habitats, including those which are of limited intrinsic importance, also require consideration in relation to their importance in maintaining populations of protected, priority or other notable species. This is discussed further below.

PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

3.18 Certain species receive legal protection in the UK and are commonly known as 'protected species'. In reality, the level of protection for different species varies considerably, from protection solely against 'killing and injury' to full protection of the species and their places of refuge. Where pertinent, details of legal protection afforded to species/species-groups are provided below.

3.19 In addition to protected species there are other species/species-groups that do not receive legal protection, but which are notable owing to their conservation status. This includes Priority Species, which public authorities in Wales must seek to maintain and enhance as part of policy or decision making under Section 7 of the *Environment (Wales) Act* 2016. PPW recognises species as an important component of biodiversity.

3.20 The likelihood of presence, or confirmed presence, of protected, priority or other notable[18] wildlife species within the Site is summarised below with reference to desk study records, habitat suitability and detailed surveys where relevant. Further details are made available within the Appendices and Plans where referenced.

[18] Notable species are those which are not legally protected but are formally identified as being of conservation concern

Breeding and Wintering Birds

3.21 All wild birds, their nests and eggs are protected under the *Wildlife and Countryside Act* 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while it is in use or being built;
- Take, damage or destroy the egg of any wild bird; or
- To have in one's possession or control any wild bird (dead or alive) or egg, or any part of a wild bird or egg.

3.22 In addition, further protection is afforded to those wild bird species listed on Schedule 1 of the *Wildlife and Countryside Act* 1981 (as amended), prohibiting any intentional or reckless disturbance to these species while it is nest building, or at a nest containing eggs or young, or to recklessly disturb the dependent young of such a bird. A number of species are also included as Priority Species.

3.23 Wintering birds do not receive direct legal protection; however, they may form part of a protected assemblage originating from a statutory designation in the vicinity.

3.24 A large number of records of bird species were retrieved during the desk study, including records of *Wildlife and Countryside Act* 1981 (as amended) Schedule 1 species, Priority Species and species included on the latest Red and Amber lists of Birds of Conservation Concern in Wales[19]. The vast majority of records received relate to species that would not normally breed in habitats found within the Site including waders and wildfowl associated with the Neath Estuary and adjacent Tennant Canal and Neath Canal. The Site also does not offer suitable foraging habitat capable of supporting significant populations of such species during the winter.

3.25 Records of the Schedule 1 species which typically utilise those habitats within the Site for nesting, foraging or roosting include barn owl (*Tyto alba*), peregrine (*Falco peregrinus*), osprey (*Pandion haliaetus*), merlin (*Falco columbarius*), red kite (*Milvus milvus*), Mediterranean gull (*Ichthyaetus malanocephalus*), fieldfare (*Turdus pilaris*), redwing (*Turdus iliacus*), goshawk (*Accipiter gentilis*), brambling (*Fringilla montifringilla*) and hobby (*Falco subbuteo*).

3.26 Species included on the Red list of Birds of Conservation Concern, which may utilise the habitats within the Site include cuckoo (*Cuculus caronus*), wood warbler (*Phylloscopus sibilatrix*), grey wagtail (*Montacilla cinerea*), herring gull (*Larus argentatus*), hooded crow (*Corvus cornix*), house sparrow (*Passer domesticus*), lesser spotted woodpecker (*Dryobates minor*), linnet (Linaria cannabina), starling (*Sturnus vulgaris*), tree pipit (*Anthus trivialis*), whitethroat (*Sylvia communis*), greenfinch (*Chloris chloris*), goldcrest (*Regulus regulus*), spotted flycatcher (*Muscicapa striata*), lesser spotted woodpecker (*Dryobates minor*), marsh tit (*Poecile palustris*), willow tit (*Poecile montanus*) and grasshopper warbler (*Locustella naevia*).

[19] Johnstone, I.G., Hughes, J., Balmer, D.E., Brenchley, A., Facey, R.J., Lindley, P.J., Noble, D.G. & Taylor, R.C. 2022. *Birds of Conservation Concern Wales 4: the population status of birds in Wales*. Milvus 2:1.

3.27 Records for species included on the Amber list of Birds of Conservation Concern include black-headed gull (*Chroicephalus ribundundus*), bullfinch (*Pyrrhula pyrrhula*), mistle thrush (*Turdus viscivorus*), common gull (*Larus canus*), dunnock (*Prunella modularis*), great black-backed gull (*Larus marinus*), kestrel (*Falco tinnunculus*), lesser black-backed gull (*Larus fuscus*), willow warbler (*Phylloscopus trochilus*), meadow pipit (*Anthus pratensis*), swift (*Apus apus*), lesser redpoll (*Acanthis cabaret*) and green woodpecker (*Picus viridis*).

3.28 The full results of the breeding bird survey completed during 2024 are provided in **Appendix EDP 5** and on **Plans EDP 6**–**8**. The results of update breeding bird survey completed on 15 May 2026 are similarly provided in **Appendix EDP 5** and on **Plan EDP 9**.

3.29 A total of 30 bird species were recorded during the surveys, of which six were confirmed as breeding on or immediately adjacent to the Site, seven were recorded as probably breeding, and seven were recorded as possibly breeding. Of these, 29 bird species were recorded during 2024, with a survey undertaken during May 2026 recording a total of 17 species, including tawny owl (*Strix aluco*) which was not previously recorded during 2024. Full details of each species recorded, including their breeding status on-site and their conservation status, are provided in **Table EDP A5.3**.

3.30 Of the 13 bird species that were recorded as breeding or probably breeding on-site, five are species of nature conservation importance, namely being listed on Schedule 1 of the *Wildlife and Conservation Act* 1981 (as amended), being a priority species and/or being species included on the latest Red and Amber lists of Birds of Conservation Concern.

3.31 Overall, the abundance and diversity of bird species recorded on-site was consistent with the extent and diversity of nesting habitats present, perhaps relatively lower than other greenfield sites, albeit not unexpected given the dominance of defunct tree lines subdividing agricultural fields, replaced in areas with stone walls and post and rail fence lines. Whilst only 17 species were recorded during the update breeding bird survey in 2026, this is not unexpected given an assessment during 2026 is based on one survey only. The 2026 species assemblage is otherwise comparable to that recorded during 2024.

3.32 The majority of species were recorded in association with woodland boundaries along the eastern and southern boundaries of the Site, with adjacent residential housing also offering some nesting opportunities for house sparrow, an Amber listed priority species. There was an absence of specialist woodland species, however, with the majority of bird species recorded being garden variety species, typical of an urban edge environment. A single tawny owl was, however, recorded onsite during May 2026.

3.33 No ground nesting birds were identified within the Site, which was not unexpected given the small size of the fields themselves and the relative unsuitability of agricultural grassland for nesting, being subject to grazing and homogeneous in nature.

3.34 Gulls were occasionally recorded flying over or landing within the Site during 2024 such that it is considered of some value as a foraging resource, whilst buzzard, a Green listed species was recorded flying over woodland offsite to the east and across the Site during the first and second survey visit respectively. Overall however, no significant assemblages/populations of breeding and non-breeding birds were recorded during survey effort. The breeding bird assemblage is judged to be of no greater than Local ecological importance.

3.35 With respect to a wintering bird assemblage, the Site is considered to be of limited importance as a foraging and roosting resource being dominated by poor semi-improved grassland exhibiting low botanical and structural diversity. A wintering bird assemblage is therefore considered to be of negligible importance in the context of the Site.

Bats

3.36 All species of British bat are listed as European Protected Species (EPS) on Schedule 2 of the *Habitats Regulations*. This affords strict protection to bats and their roosts, and makes it an offence to:

- Deliberately capture, injure or kill a wild animal of an EPS;
- Deliberately disturb wild animals of an EPS wherever they are occurring, in particular, any disturbance which is likely to impair their ability to survive, to breed or reproduce, to significantly affect the local distribution or abundance of the species to which they belong, or in the case of hibernating or migratory species, to hibernate or migrate; or
- Damage or destroy a breeding site or resting place of a wild animal of an EPS.

3.37 Additional protection for bats is also afforded under the *Wildlife and Countryside Act* 1981 (as amended), making it an offence to intentionally or recklessly disturb bats whilst they are occupying a structure or place which is used for shelter or protection, or to obstruct access to this structure or place. In addition, soprano pipistrelle (*Pipistrellus pygmaeus*), brown long-eared bat (*Plecotus auritus*), greater horseshoe bat (*Rhinolophus ferrumequinum*), barbastelle bat (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), noctule (*Nyctalus noctula*), and lesser horseshoe bat (*Rhinolophus hipposideros*) are also listed as Priority Species.

3.38 The desk study returned approximately 107 records for bats within the 2km search radius around the Site. These records relate to at least nine different species, with the closest record of confirmed bat roosting being for common pipistrelle (*Pipistrellus pipistrellus*) and soprano pipistrelle bats located approximately 150m south from the Site.

3.39 Four records of Annex II species were returned within 6km of the Site. This includes records for lesser horseshoe bats, including a roost approximately 3.6km south of the Site.

3.40 Three dusk activity surveys were previously conducted by Bay Ecology between May and August 2020 whilst automated detector surveys were also undertaken on internal hedgerows/tree lines in June, July, August and September 2020. Bat activity was recorded to be low/moderate across the Site, with relatively small numbers of bat passes recorded during the transect activity surveys, and activity levels greatest during July and August 2020. The majority of bat calls were for common pipistrelle and to a lesser extent soprano pipistrelle bats, with recordings of noctule and *Myotis* sp. (considered to be Natterer's bat) noted also. In total four species of bats were positively recorded during automated bat detector surveys including common pipistrelle, soprano pipistrelle, brown long-eared bat and noctule, along with smaller numbers of *Myotis* sp. calls and individual unidentified large bat calls. An individual greater horseshoe bat was recorded during September 2020.

3.41 Dusk emergence surveys of building **B7** were also undertaken by Bay Ecology on 13 August and 09 September 2020, with no bats identified emerging from the building.

Bat Roosting

Trees

3.42 The GLTA undertaken during 2024 identified a total of 27 trees supporting Potential Roost Features (PRFs) for bats or with potential PRFs such that a further assessment is required (FAR). Of this total, 14 trees (**T1**, **T3**, **T5**, **T7**, **T9**–**T11**, **T13**, **T15**–**T19** and **T21**) were assessed as likely to support individual bats (PRF-I trees) with seven trees (**T2**, **T4**, **T6**, **T8**, **T12**, **T14** and **T20**) supporting features with potential to support multiple bats/larger roosts (PRF-M trees). A further six trees (**T22**–**T27**) were categorised as FAR trees, being considered likely to have potential to support PRFs given their age and/or condition, albeit not identified explicitly at ground level. Further details on each of these trees are provided in **Appendix EDP 6**, with their locations are shown on **Plan EDP 10**.

3.43 All other trees were found to be of negligible suitability for roosting bats and have not been mapped/described.

3.44 Following an update GLTA during March 2026, an additional three trees (**T28-T30**) were identified along the southern boundary of field **F5**, supporting features with potential to support multiple bats (PRF-M). In addition, **T25** previously assessed as FAR but not inspected further due to dense scrub was accessible at the time of survey in March 2026 and was subsequently assessed as PRF-I.

3.45 Following further detailed inspection of those trees likely to be impacted by development during 2024, including **T1**, **T8**, **T15**, **T16**, **T18**, **T19** and **T20**–**T27** on two occasions, **T8** and **T16** were downgraded to negligible suitability for roosting bats whilst **T15** was upgraded from PRF-I to PRF-M. Following identification of an additional 3 trees with PRF-M in March 2026, **T28-T30** were subject to a detailed inspection at height on 12 June 2026, in addition to **T19** proposed for loss and **T15** (PRF-M) whose RPAs overlap with the footprint of built development.

3.46 The roosting suitability of each tree assessed following completion of both the GLTA and aerial inspections (where undertaken) during 2024 and 2026 are provided in **Table EDP A6.5** and illustrated at **Plan EDP 10**. No evidence of roosting bats was identified in any of the trees surveyed, indicating current absence of a bat roost within these trees.

Buildings/Built Structures

3.47 A total of eight buildings/structures were identified within the Site, of which building **B4** was considered to have Low suitability for roosting bats and building **B7** was considered to have high suitability for roosting bats. Full details are provided within **Appendix EDP 6** with building locations shown on **Plan EDP 11**.

3.48 Following dusk emergence surveys of building **B4** and **B7** (and **B6** given its proximity to **B7**) between June and September 2024, no evidence of emerging bats or other roost behaviour were recorded such that presence of a bat roost within either building/structure was considered unlikely. Similarly, no evidence of emerging bats with recorded during a further dusk emergence survey of **B7** on 10 June 2026.

Bat Foraging/Commuting Activity

3.49 Overall, the habitats present within the Site were assessed as being of moderate suitability for foraging and commuting bats, given its location adjacent to existing residential development, with vegetated boundaries predominantly defunct albeit with connectivity to suitable habitat to the north and east, including large expanses of semi-natural woodland.

3.50 The findings of the manual transect (NBW) and automated detector surveys are provided in detail within **Appendix EDP 6** and the approximate distribution and diversity of bat species recorded during the transect surveys are illustrated on **Plans EDP 13**–**15**. Automated detector locations are shown on **Plan EDP 16**.

3.51 During the stationary part of each NBW survey located on the southern boundary of field **F4**, bat activity was dominated by common pipistrelle with individuals predominantly originating from adjacent woodland to the south, then commuting circa east–west along the edge of the tree line here. Common pipistrelle was again the dominant species during the course of the walked part of each survey with occasional recordings of soprano pipistrelle and *Myotis* sp. On each occasion bat activity was typically greatest along the southern boundary of the Site, particularly within fields **F4** and **F5**. Bat activity along the northern and eastern boundaries of the Site were usually limited, however, with fewer recordings along internal hedgerows **H4**, **H5** and **H6** although this varied throughout the seasons, with more activity recorded along hedgerow **H4** during May 2024 and more activity recorded along hedgerows **H5** and **H6** during July 2024. During September 2024, however, bat activity was otherwise equally distributed across the Site, with a greater number of recordings along the eastern boundary of the Site where previously activity appeared limited.

3.52 With reference to the automated detector data tables, the vast majority of registrations relate to common pipistrelle bats, accounting for 80% of all calls between April and October inclusive. Soprano pipistrelle accounted for 16.5% of all calls, whilst *Myotis* sp. accounted for 2.5% of all calls. Nathusius' pipistrelle, noctule, long-eared, Leisler's and serotine bats otherwise made up a small minority of the total (typically less than 1%). Activity was largely comparable across months, with the exception of June and October representing the lowest and greatest levels of activity respectively by a notable margin. The increase in activity during October may be indicative of transitional behaviour whereby bats are utilising the Site to commute between their summer and hibernation roosts in the wider landscape.

3.53 In respect of automated detector locations, activity at Location 1 and Location 3 were comparable during April and May but greatest at Location 2. This is consistent with the results of the manual transect survey, which recorded greater activity along hedgerow **H4** (within which automated detector 2 was located), compared to the eastern woodland boundary and other internal hedgerows. Activity at all three locations during June and July was broadly more comparable but peaked at Location 1 (eastern boundary woodland) during September and October, accounting for the majority of all bat calls during these months and again indicating that the eastern boundary woodland is of some value during the transitional autumn months for bats commuting between their summer and hibernation roosts. There is, however, some anomalies in the results with no bat recordings at Location 2 during September and Locations 2 and 3 during October, despite automated detectors functioning correctly during this period.

3.54 Overall, species-poor semi-improved grassland, which dominates the Site is considered to be of limited importance to a foraging bat assemblage given its small extent and poor botanical diversity. Boundary features, including dense scrub, mature tree lines and woodland are, however, of value for dispersal of a bat assemblage across the wider landscape, with woodland in particular providing a potential foraging resource. The southern and eastern boundaries of the Site in particular are considered of value for dispersal of a bat assemblage, whilst the more fragmented nature of the northern boundary, dominated by stone walls and sparse scrub is of lesser importance. Indeed, bat activity recorded during the course of NBW and automated bat detector surveys appeared to be greatest along the southern and/or eastern boundaries of the Site, with recordings of rarer species including lesser horseshoe, Leisler's, serotine and Nathusius' pipistrelle bats associated with such boundaries. The eastern boundary woodland may be of further importance in facilitating the dispersal of a bat assemblage between their summer and hibernation roosts, with significantly greater levels of bat activity recorded along this boundary during October 2024. Such habitats, alongside derelict buildings recorded adjacent to the southern boundary of the Site, further offer suitable roosting opportunities. Whilst no roosts were identified within buildings and trees subject to detailed surveys, the presence of a roost for common and or soprano pipistrelle nearby is likely, given recordings of these species early after sunset during the course of NBW surveys.

3.55 Taking into account the diversity of bat species utilising the Site and the extent of their roosting, foraging and commuting activity, and with reference to Bat Mitigation Guidelines 2025[20], the overall bat assemblage using the Site is judged to be of County level importance.

Dormouse

3.56 Hazel dormouse is an EPS receiving strict protection under the *Habitats Regulations* as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Conservation Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a Priority Species.

3.57 No records for dormouse were returned within 2km of the Site's boundaries during the desk study.

3.58 Hedgerows and mature tree lines delineating field boundaries as well as woodland habitat along the boundaries of the Site and dense scrub are considered to comprise suitable habitat for dormouse, whilst maintaining connectivity between the Site and suitable habitats within the wider landscape. Hedgerow and mature tree lines are, however, notably defunct and species-poor, with a suitable ground flora lacking. Their potential to offer suitable opportunities for foraging, dispersal, breeding and hibernation is therefore limited. In contrast, woodland habitat along the eastern and southern boundaries of the Site is considered optimal given its greater structural diversity.

3.59 No evidence of dormouse was recorded during nest tube surveys undertaken between April and November 2024, Evidence of wood mouse (*Apodemus sylvaticus*) including nests and their

[20] Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

individuals were recorded between July and September 2024. As such, dormouse is presumed absent from the Site.

Otter and Water Vole

3.60 Otter is an EPS receiving strict protection under the *Habitats Regulations* as summarised above in respect of bats. Additional protection is also afforded to this species under the *Wildlife and Conservation Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a Priority Species.

3.61 Water vole and their burrows receive protection under Schedule 5 of the *Wildlife and Conservation Act* 1981 (as amended). This makes it an offence to:

- Intentionally kill, injure or take (capture) a water vole;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place that a water vole uses for shelter or protection; and
- Intentionally or recklessly disturb water voles while they are in a place of shelter or protection.

3.62 Water vole is also listed as a Priority Species.

3.63 Fifty-two records of otter were returned within 2km of the Site, the closest record being 455m south-west from the Site in association with the Tennant Canal, with other records returned for this stretch of watercourse in addition to the Neath Estuary located to the south and south-west, and River Clydach located 1.25km west.

3.64 A desk study also returned four records of water vole, the closest record being located c.960m south of the Site and with other records returned for the Tennant Canal, River Neath and a pond c.2km north of the Site.

3.65 An unnamed watercourse arises from within the woodland/tree line adjacent to the south-east corner of field **F3** and flows westwards adjacent to the PRoW here. At its easternmost extent, the watercourse is largely inaccessible due to dense vegetation but, where visible, is characterised by a narrow channel c.0.4m wide. Where this section holds water, this is between 1–5cm deep with a slow flow and a channel substrate dominated by silt. Being located between hedgerow **H9** delineating the northern boundary of the PRoW and dense scrub delineating the southern boundary of field **F3**, the channel is heavily shaded by overhanging mature/semi-mature trees. The banks here are largely indistinct from surrounding habitat, with bankside vegetation dominated by common ivy (*Hedera helix*) and wild garlic (*Allium ursinum*). Further west, the banks of the watercourse become more defined and steeply sloping (c.0.75m high), with water depth also increasing slightly. The watercourse is culverted under a small vehicle access track, which leads northwards to buildings **B1**–**B8** within the Site. At the opposite end of the culvert (spanning for circa 4–5m) the watercourse becomes more open, flowing directly adjacent to the PRoW with the southern bank characterised by tall ruderal vegetation and grassland species including willowherb (*Epilobium* sp.), sedge (*Carex* sp.), rush (*Juncus* sp.), creeping buttercup (*Ranunculus repens*) and bittercress (*Cardamine* sp.). Dense bramble scrub is dominant along the northern bank adjacent to woodland. The channel along this stretch is

c.1–1.5m wide with water flow starting to increase and a channel substrate comprising gravel as well as silt. At the westernmost extent of the survey area, the watercourse is culverted beneath Gilfach Road with no flow recorded on the opposite side. The majority of bankside habitat here is sparsely vegetated with tall ruderal and grassland species as well as some scrub alongside Himalayan balsam (*Impatiens glandulifera*). No aquatic vegetation was recorded within the channel throughout the survey area.

3.66 During the survey of the watercourse on two occasions (June and September 2024), no evidence of otter nor water vole were recorded. Riparian vegetation adjacent to either bank including woodland, scrub and tall ruderal vegetation provided suitable cover and resting places for otter, although to a lesser extent in the west where the watercourse directly abuts the PRoW, subject to disturbance. The unnamed watercourse is also of some value as a foraging resource, albeit limited, given low water depth, likely to support only small fish species. Given the watercourse has its source within/adjacent to the Site, any otter here are likely to be at the end of its upstream range.

3.67 In contrast, the unnamed watercourse is considered unsuitable for water vole given its limited water depth and absence of a significant macrophyte assemblage, which would be of value as a foraging resource, whilst the culverting of the watercourse beneath Gilfach Road may be considered a barrier to movement of water vole further upstream.

3.68 Overall, and based on the above, the watercourse is considered to be of no more than Site level importance to otter, and negligible importance to water vole.

Badger

3.69 Badgers and their setts are protected under the *Protection of Badgers Act* 1992, which makes it an offence (*inter-alia*) to:

- Wilfully kill, injure, take, or cruelly ill-treat a badger; and
- Damage or interfere with a sett, by doing one of the following things:
    - Damage a badger sett or any part of it;
    - Destroy a badger sett;
    - Obstruct access to, or any entrance of, a badger sett;
    - Cause a dog to enter a badger sett; or
    - Disturb a badger when it is occupying a sett.

3.70 The 1992 Act defines a badger sett as "*any structure or place which displays signs indicating current use by a badger*".

3.71 The protection afforded to badgers is primarily due to animal welfare issues and history of persecution rather than concerns over their unfavourable nature conservation status.

3.72 Seventeen records of badger were returned within 2km of the Site, the majority of which are for road mortalities along the A465 c.790m south of the Site.

3.73 No evidence of badger was identified within the Site during the badger survey undertaken in April 2024, nor during the course of subsequent site surveys. Following an update survey in March 2026 however, a mammal path was recorded within hedgerow **H6** (**TN3**) and hedgerow **H5**, with 4 dung pits recorded here in addition to badger hairs caught on the barbed wire fence line (**TN4**). A second mammal path was recorded travelling through dense scrub across **H6**. Mammal foraging pits were also recorded within the south-east corner of field **F5**. Additionally, a small excavation was recorded within an earth bank in the far north-east corner of field **F1** but was attributed to rabbit given its size and shape.

3.74 Whilst no badger setts were identified within the Site or within 30m (where access was available), use of the Site by badger for foraging and dispersal has been confirmed. Indeed, poor semi-improved grassland provides a potential foraging resource for badger, whilst semi-natural woodland and hedgerow/tree line boundaries provides suitable cover for sett building as well as additional foraging opportunities. Given their common and widespread status, badger is considered to be of Site level importance.

Other Mammal Species

3.75 Records of the following priority mammal species were returned within 2km of the Site:

- Polecat (*Mustela putorius*) – three records, the closest 990m south of the Site;
- European hedgehog (*Erinaceus europaeus*)[21] – 96 records associated with residential areas, the closest c.121m south of the Site; and
- Brown hare (*Lepus europaeus*) – five records, the closest associated with woodland c.420m east of the Site.

3.76 In addition, the desk study returned records of weasel (*Mustella nivalis*) and stoat (*Mustela erminea*), both local Biodiversity Action Plan (BAP) species for Neath Port Talbot.

3.77 The Site encompasses a range of suitable foraging and breeding habitats for these species, with scrub and woodland in particular providing habitat for breeding and hibernation, whilst poor semi-improved grassland provides an additional foraging resource. There is a reasonable likelihood that these species are present on-site given their widespread distribution and presence of desk study records. The populations of these species potentially occurring on the Site are considered to be of Site level importance.

Great Crested Newt and Other Amphibian Species

3.78 Great crested newt is an EPS receiving strict protection under the *Habitats Regulations* as summarised above in respect of bats. Additional protection is also afforded to this species

[21] Hedgehogs are also protected from capture or killing by specific methods under Schedule 6 of the *Wildlife and Conservation Act* 1981 (as amended)

under the *Wildlife and Conservation Act* 1981 (as amended) as summarised above in respect of bats. This species is also listed as a Priority Species.

3.79 Other legally protected amphibians are rare and have a very restricted distribution, however, common toad (*Bufo bufo*) is a widespread species, which is listed as a Priority Species.

3.80 No records of great crested newt were returned within 2km of the Site. The desk study did, however, return multiple records of common frog (*Rana temporaria*), common toad, smooth newt (*Lissotriton vulgaris*) and palmate newt (*Lissotriton helveticus*), the closest being for common frog 440m east of the Site in association with woodland habitat.

3.81 Following a review of online resources, two waterbodies were identified north of the Site, the closest within 475m, whilst the Tennant Canal is located c.440m south-west of the Site. No waterbodies suitable for great crest newt were recorded within the Site.

3.82 With respect to terrestrial habitats, poor semi-improved grassland is considered sub-optimal for a great crested newt population, being homogeneous in structure and subject to grazing/cutting. Dense scrub, woodland, and tree line boundaries are likely to offer more suitable, albeit limited, opportunities for foraging, hibernation and dispersal. Nevertheless, great crested newt is at the edge of its western range within Swansea/Neath Port Talbot. Combined with the distance of off-site waterbodies from the Site and dominance of agricultural grassland considered sub-optimal terrestrial habitat for a great crested newt population, presence of this species within the Site is considered unlikely.

Reptiles

3.83 All species of common reptile, namely common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), grass snake (*Natrix helvetica*) and adder (*Vipera berus*), receive at least limited protection from harm under the *Wildlife and Conservation Act* 1981 (as amended), making it an offence to cause intentional killing and injuring of these species. In addition, these species are also listed as Priority Species.

3.84 Thirty-four reptile records were returned within 2km of the Site. This includes 2 records for slow worm, the closest record being located c.675m south of the Site; 28 records of grass snake, the closest record occurring 1.1km north-east; a single record of adder returned from a 1km square c.3km west of the Site; and two records of common lizard, located c.1.1km south-east.

3.85 A former Ecological Impact Assessment prepared for the Site by Bay Ecology to inform a previous planning application reported the completion of reptile surveys across habitat surrounding the buildings on the southern boundary of the site in 2016, with no evidence of reptiles recorded.

3.86 Poor semi-improved grassland, which dominates the Site is considered sub-optimal for a reptile population given its poor botanical and structural diversity, although its potential to provide some cover from predators increased over the summer months when left uncut. Hedgerow boundaries, in addition to patches of dense scrub and broadleaved woodland are, however, considered more optimal habitat for a common reptile population, providing more diverse opportunities for foraging and refuge whilst also facilitating dispersal of a population across the Site and wider landscape.

3.87 Particularly given the proximity of desk study records, presence of a common reptile population is presumed, albeit likely present in low numbers within the Site and confined to more suitable habitat along its boundaries. A common reptile population on-site is thus considered to be of Site level importance.

Invertebrates

3.88 The desk study returned multiple records of notable invertebrate species within 2km of the Site, dominated by priority or locally important species. Several of these records are associated with continuous areas of semi-natural woodland extending north-east from the eastern boundary of the Site (the closest within c.280m), including small phoenix (*Ecliptopera silaceata*), small square spot (*Diarsia rubi*), dusky brocade (*Apamea remissa*), broom moth (*Ceramica pisi*), buff ermine (*Spilosoma lutea*), white ermine (Spilo*soma lubricipeda*) and dark-barred twin spot carpet (*Xanthorhoe ferrugata*).

3.89 This is in addition to records of species listed under Schedule 5 of the *Wildlife and Countryside Act* 1981 (as amended) typically associated with woodland to the east of the Site or riparian vegetation along the Tennant canal, including small blue (*Cupido minimus*), wood white (*Leptidea sinapis*), marsh fritillary (*Euphydryas aurinia*) and pearl bordered fritillary (*Boloria Euphrosyne*). Records of Red Data Book species in proximity to the Site (woodland habitat to the east) include wall (*Lasiommata megera*) and the beetle (*Athous campyloide*s).

3.90 Species-poor grassland, which dominates the Site and dense scrub is considered of limited importance for an invertebrate assemblage given its poor botanical and structural diversity. Even those areas of comparative species-richness, limited to acid grassland across field **F5**, is considered of limited importance, being heavily grazed by horses, which has suppressed growth of flowering species. Broadleaved woodland is likely to support a more diverse assemblage, although presence of significant populations of notable species, particularly given its small extent within the Site, is unlikely.

3.91 Based on the above, the invertebrate assemblage present within the Site is considered to be of Site level importance in the context of proposed development.

Rare/Scarce Plant Species

3.92 A desk study returned multiple records of notable plant species largely dominated by species of local interest characteristic of wetland and riverine habitats associated with the Tennant Canal and River Neath. Of more pertinence to those habitats present within/adjacent to the Site was the return of records for Red Data Book and locally important species associated with woodland habitat, the closest of which were returned for an area c.420m east. These include records of mare's-tail (*Hippuris vulgaris*), bay willow (*Salix pentandra*), charlock (*Sinapis arvensis*), spreading hedge-parsley (*Torilis arvensis*), bearded fescue (*Vulpia ciliata*), Welsh poppy (*Meconopsis cambrica*) and royal fern (*Osmunda regalis*). This in is addition to multiple records of bluebell (*Hyacinthoides non-scripta*), listed under Schedule 8 of the *Wildlife and Countryside Act* 1981, as amended), across woodland habitat within the wider landscape.

3.93 A desk study also returned several records of notable bryophyte species, the most pertinent of which, due to their proximity and habitat connectivity to the Site (c.300m–1km) include the Red Data Book common pocket-moss (*Fissidens taxifolius*), creeping feather moss

(*Amblystegium serpens*), Curnow's pocket moss (*Fissidens bryoides var. caespitans*), notched rustwort (*Marsupella emarginata*) and transparent fork-moss (*Dichodontium pellucidum*).

3.94 No notable species were, however, identified within the Site with the exception of bluebell, which was occasionally recorded in association with boundary hedgerows/treelines, woodland habitat and bracken communities along the northern boundary of the Site.

3.95 In addition, records of invasive non-native species listed under Schedule 9 of the *Wildlife and Countryside Act* 1981 (as amended) returned within 2km of the Site include Japanese knotweed (*Fallopia japonica*), Himalayan balsam, rhododendron (*Rhododendron ponticum*), *Lamiastrum galeobdolon subsp. montanum*, *Monbretia* sp., entire-leaved cotoneaster (*Cotoneaster integrifolius*), false virginia-creeper (*Parthenocissus inserta*), Himalyan cotoneaster (*Cotoneaster simonsii*), Japanese rose (*Rosa rugosa*), three-cornered garlic (*Allium triquetrum*), Virginia creeper (*Parthenocissus quinquefolia*) and wall cotoneaster (*Cotoneaster horizontalis*). During the Extended Phase 1 Habitat surveys, Himalayan balsam was recorded within woodland habitat along the southern boundary of the Site, in association with scrub communities along the northern boundary of field **F2** as well as in association with the unnamed watercourse, which flows adjacent to this boundary. Seedlings of Himalayan balsam were also recorded in some abundance during the update Extended Phase I habitat survey within the south-east corner of field **F5** where some bracken had been previously cleared.

3.96 Overall, a notable plant assemblage is considered to be of negligible importance in the context of the Site, particularly given the dominance of predominantly species-poor habitats.

SUMMARY OF KEY SURVEY FINDINGS

3.97 Based on the results of the detailed baseline investigations described above, a number of Important Ecological Features have been identified for the purposes of assessing potentially significant effects in this Ecological Appraisal. These are made up of: two designated sites; eight non-designated sites; five habitats; and five species/species assemblages.

3.98 These features, identified on the basis of being of Local level ecological importance or greater (or subject to legal protection), are summarised in **Table EDP 3.4**.

Table EDP 3.4: Summary of Important Ecological Features

Feature	Key Attributes	Ecological Importance
Statutory Designated Sites		
Crymlyn Bog SAC	5.37km south-west. Designated for its Annex I habitats including transition mires, quaking bogs and calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* (qualifying feature). Annex I habitats present as a qualifying feature but not a reason for selection of the site includes alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*), a qualifying feature.	International.
Crymlyn Bog Ramsar Site	5.75km south-west. Largest example of valley floodplain topogenous mire in South Wales, and one of the largest surviving fens in the west of Britain. The site supports a substantial population of the nationally rare slender cotton-grass (*Eriophorum gracile*), in addition to a further 199 vascular plant species including regionally uncommon and one nationally rare, and a rich invertebrate fauna including many rare and highly localised species.	International.
Non-Statutory Designated Sites		
Neath Port Talbot Ancient Semi-natural Woodland	4m east. Ancient semi-natural woodland.	County.
Tennant Canal SINC	450m south/south-east. The Tennant canal supports exceptional aquatic and emergent flora along much of its length with populations of otter.	County.
Catwg Wetland SINC	488m south-east. A narrow site on the floodplain of the Neath Valley.	County.
Neath Estuary SINC	591m south. The Neath Estuary site includes a variety of wetland habitats including coastal saltmarsh, reedbeds, intertidal mudflats and flood plain grazing marsh.	County.
Neath Canal SINC	903m south-east. The Neath Canal supports outstanding aquatic and emergent flora along much of its length. Otter is regularly along the canal's riparian zone.	County.
Gnoll Country Park SINC	1.3km south-east. An area of woodland (some of which is designated on the Ancient Woodland Inventory), and several ponds which lie within and adjacent to the country park. Several streams, some modified by canalisation and weirs, traverse the site.	County.
Coed Bach a'r Cwm SINC	1.35km south-west. Valley woodland, established along part of the Afon Clydach and one of its tributaries.	County.

Feature	Key Attributes	Ecological Importance
Gwlyptir Mynachlog Nedd SINC	1.8km south-west. A large flat expanse of marshy grassland, lying north of the A465 adjacent to Neath Abbey.	County.
Habitats		
Semi-improved Neutral/Acid Grassland	Field **F5**.	Local.
Semi-natural Broadleaved Woodland	Adjacent to eastern boundary of fields **F1** and **F2** overlapping with a ASNW designation, with woodland also present along southern boundary.	Local–County.
Native Hedgerows	**H1**, **H2**, **H7** and **H9**.	Local.
Line of Trees	**H3**–**H6** and **H8**.	Local.
Running Water	Adjacent to southern boundary of the Site flowing westwards.	Local.
Species		
Breeding Birds	Scrub, hedgerow and woodland habitat supports predominantly common and widespread species, albeit including some species of conservation concern.	Local.
Bats	Buildings **B4** and **B7** with low and high suitability to support roosting bats respectively although no roosts were found present. Twenty-five trees (**T1**–**T7**, **T9**–**T15** and **T17**–**T27**) present onsite confirmed to support potential roosting features for bats. Suitable habitats for a foraging/commuting bat assemblage with eastern and southern boundary woodland of importance for their dispersal across the Site and wider landscape.	Local.
Badger	Site provides suitable foraging habitat and cover for sett building.	Site.
Notable Mammals: European hedgehog, polecat and brown hare	Suitable habitats present across the Site.	Site.
Reptiles	Field margins and site boundaries likely to support low numbers of common reptile species.	Site.

Section 4
Impact Assessment

4.1 This section of the Ecological Appraisal first considers any avoidance/mitigation which is embedded within development design, as represented by the Illustrative Masterplan and Green Infrastructure Strategy provided as **Appendix EDP 1** and **Appendix EDP 2** respectively. It then considers the likely impacts of the development proposals on the pertinent ecological features identified in **Section 3** in the absence of additional mitigation.

EMBEDDED MITIGATION

4.2 EDP has provided input throughout the iterative design process, so the development layout reflects some important measures to avoid, mitigate or compensate for ecological impacts as well as other measures designed to provide long-term ecological enhancements. In so doing, a site-wide mitigation strategy has been developed with reference to the 'Mitigation Hierarchy' described within CIEEM Guidelines for Ecological Impact Assessment, the principles of which are further adopted within PPW's 'step-wise approach' and NPTCBC Biodiversity and Geodiversity Supplementary Planning Guidance[22]. These principles include:

- First, avoidance and minimisation of adverse impacts to ecological receptors through e.g. retention of habitat, connectivity and populations of protected/notable species;
- Next, mitigation for any unavoidable impacts including loss/fragmentation of habitats and/or harm to protected/notable species;
- Where residual impacts remain following avoidance and mitigation, provide appropriate compensation such as the creation of new/alternative habitat and opportunities; and
- In addition to avoidance, mitigation and compensation, the inclusion of measures for the enhancement of biodiversity and ecological resilience and their long-term resilience.

4.3 Embedded mitigation comprises the following:

- The retention of the majority of the hedgerow/treeline network on-site, with impacts limited to the creation of a break in the Site's southern boundary (impacting hedgerow **H9**), linking an Active Travel Route to Leiros Parc Drive, and within internal hedgerows/treelines **H2**, **H4**, **H5** and **H6** necessary to accommodate access roads through the development whilst also enabling connections to adjacent residential development via Daphne Road;
- The retention of the majority of trees considered to support potential roosting features for bats, including trees **T1**–**T7**, **T9**–**T15**,**T17**–**T18**, **T20**-**T24** and **T26** - **30** with losses limited to the proposed removal of **T19** and **T25**, whilst the root protection area of **T15** will overlap with the development footprint;

[22] Neath Port Talbot County Borough Council (2018). Biodiversity and Geodiversity Supplementary Planning Guidance. Available at: https://www.npt.gov.uk/media/9003/spg_biodiversity_geodiversity_may18.pdf [Accessed on 27 September 2024]

- Protection of ASNW/SINC located off-site to the immediate east, through retention of on-site broadleaved semi-natural woodland located adjacent, together with the provision of a significant habitat buffer measuring between circa 15m and 30m wide further offsetting the development footprint from ASNW/SINC;

- The offsetting of development away from other vegetated boundaries of the Site through the provision of further significant habitat buffers measuring, on average c.15mwide where adjacent to the northern hedgerows/treelines (**H3**) and additional areas of broadleaved semi-natural woodland habitat located offsite; and c.10m–20m wide where adjacent to the south-western and south-eastern boundaries of the Site supporting further broadleaved semi-natural woodland;

- The inclusion of biodiverse, ecotone planting within such habitat buffers proposed, to include canopy and understorey tree and shrub planting to front the existing vegetated edge, before transitioning into lower-level shrub and grassland planting extending towards the development edge. Such ecotone planting seeks to protect the existing, mature hedgerow network to be retained, to enable its continued function as a key wildlife corridor for bats and other wildlife;

- The creation and management of new native planting within the north-west corner of the Site;

- The provision of sustainable drainage features including a bio-retention system, conveyance swales and permeable surfaces, necessary to maintain run-off rates and improve the quality of surface water prior to discharge; and

- The inclusion of significant areas of informal and formal greenspace to ensure sufficient provision of green infrastructure throughout the Site necessary to maximise biodiversity whilst providing suitably accessible areas for recreational use. This will include the provision of two central green infrastructure corridors traversing north–south through the Site, the largest of these incorporating a public route, disaggregated Locally Equipped Area of Play (LEAP) and Community Park, alongside tree and shrub planting, wildflower and amenity grassland. Additional green infrastructure provision is also intended around the full peripheries of the Site, incorporating additional tree, shrub and grassland planting, informal footpaths and landscape-based play areas.

IMPACTS ON DESIGNATED SITES

Statutory Designations

4.4 As described in **Section 3**, there are two statutory designations within the potential zone of influence of the Site. The potential impacts on these designations, in the absence of additional mitigation, are discussed below.

International Designations

4.5 In accordance with Part 6 of the *Habitats Regulations*, a Habitat Regulations Assessment (HRA) is required where a plan or project may give rise to significant effects upon any European site designated to conserve natural habitats and species that are rare, endangered, vulnerable or

endemic within the European Community. This includes SACs designated for their habitats and/or species of European importance, and SPAs classified for rare, vulnerable and regularly occurring migratory bird species. Such requirements also apply to those sites going through the formal designation process, including candidate SACs (cSAC) and Sites of Community Importance (SCI). Additionally, Government policy also affords the same level of protection to internationally important wetlands (Ramsar sites), potential SPAs (pSPA), possible SACs (pSAC) and proposed Ramsar Sites, requiring such sites to also be treated as European sites for planning purposes.

4.6 NPTCBC Local Development Plan (LDP) was previously subject to an HRA in 2012[23], which considered the likely significant effects to arise through implementation of the LDP and in particular housing allocations on European sites within the zone of influence, including Policy H1/2, which encompasses the Site.

4.7 The HRA identified several potential effects of allocated sites on the Crymlyn Bog Ramsar Site/SAC including:

- Atmospheric pollution;
- Changes in water quality;
- Changes in water quantity and hydrological regime;
- Spread of invasive species; and
- Urban pressure including increase in population and therefore recreation levels, leading to disturbance/degradation of habitats and species.

4.8 In particular, it was noted that habitats associated with these designated sites are sensitive to increased atmospheric pollution arising from traffic, heating emissions, point sources of pollution and/or contaminated surface water runoff in addition to changes in water level following increase discharge of surface water runoff from new development and/or water abstraction, particularly from the Tennant Canal.

4.9 Overall, however, the HRA report determined that there would be no likely significant effects on the above designated sites subject to implementation of development in accordance with those policies of the LDP.

4.10 At the Site level, the Crymlyn Bog Ramsar Site and SAC is considered sufficiently distant and spatially separated from the Site, such that no direct or indirect effects, associated with physical loss/damage, the spread of invasive species and disturbance from increased lighting/noise will arise, whilst the potential for effects upon water quality and hydrology can be ruled out given the absence of any apparent hydrological connectivity between the Site and these designations. Furthermore, traffic generated during the construction and operational phase of proposed development will be localised and unlikely to impact roads within 200m of the Crymlyn Bog

[23] NPTCBC (2013). Local Development Plan 2011-2026: Habitats Regulations Assessment. Available at https://www.npt.gov.uk/PDF/ldp_hra_august13.pdf [Accessed on 06 November 2024]

(limited to Fabian Way in and out of Swansea city centre, c.9km south-west of the Site), such that negative effects upon qualifying habitats associated with air quality can be scoped out.

4.11 There is, however, the potential for indirect effects to arise upon with the Crymlyn Bog Ramsar Site and SAC associated with an increase in recreational pressure following occupation of the proposed development, although such effects are likely to be reduced given the distance of the Site from this designation, with the availability of alternative areas of open space, such as Gnoll Country Park in closer proximity.

Non-statutory Designations

4.12 As described in **Section 3**, there are 13 non-statutory designations within the potential zone of influence of the Site. The potential impacts on these designations, in the absence of additional mitigation, are discussed below.

4.13 In respect of Ffynnon Dawel SINC, Bryncoch Farm SINC and Dyffryn Woods SINC, these are considered sufficiently distant from the Site such that no direct effects are anticipated whilst there are no pathways along which indirect effects would occur.

4.14 Neath Port Talbot ASNW is, however, located adjacent to the eastern boundary of the Site. Although such habitat, located offsite, will be retained there is the potential for damage/degradation of this habitat due to the proximity of proposed built development combined with increased levels of disturbance through use of lighting and noise generated during both the construction and operation phase of the proposed development. Of further consideration is the potential for air quality impacts to arise upon Neath Port Talbot ASNW during the construction phase of development, given its proximity to the construction footprint. An increase in surface water runoff during construction and operational phases, may also result in changes to the underlying hydrology and thus the woodland community supported by Neath Port Talbot ASNW, with further potential for soil erosion given the steeply sloping ground levels present here.

4.15 There also remains the potential for indirect impacts upon sensitive habitat features associated with Neath Port Talbot ASNW arising from an increase in recreational pressure, although this is likely to be localised to PRoW, with steep levels precluding access to much of this ASNW designation. Recreational effects may similarly arise upon accessible non-statutory designations in the wider area, including Gnoll Country Park SINC, although this area is managed and maintained for recreational access.

4.16 There is, furthermore, the potential for impacts to arise upon Tennant Canal SINC, Catwg Wetland SINC, Neath Estuary SINC, Neath Canal SINC, Coed Bach a'r Cwm SINC and Gwlyptir Mynachlog Nedd SINC, associated with a deterioration in water quality and an increase in suspended solids during construction and operational phases of development, given potential hydrological connectivity between the Site and these waterbodies/wetland habitats. Pollution incidents could also arise as a result of leaks and spills from construction activities, resulting in the introduction of hydrocarbons and other contaminants from demolition activities, site plant, or of sediment loads arising from dust deposition or spoil movement.

IMPACTS ON HABITATS

4.17 Habitats within the Site have been assessed through an Extended Phase 1 habitat survey. The Site is dominated by poor semi-improved grassland with patches of dense scrub, predominantly along some site/field boundaries. Such habitats are considered to have negligible or Site-level ecological importance. Proposed habitat loss is largely confined to these features, the loss of which is not considered significant on ecological grounds. There will, however, be some loss/erosion of semi-improved neutral and acid grassland across field **F5** which are comparatively more species-rich than the rest of the Site. Such habitat is, however, in very poor condition being subject to horse grazing and significant scrub and bracken encroachment. Combined with the small extent of these habitats within the Site, with the northern and southern margins of this field to be retained, such losses are similarly not considered significant.

4.18 Boundary hedgerows, mature/semi-mature tree lines, woodland and watercourses are, however, considered to be of greater ecological importance. For the most part, such features will be retained and offset from the proposed development footprint. The eastern boundary of the Site in particular is defined by semi-natural broadleaved woodland, some of which is designated as ASNW, and will be retained (with the exception of discrete and undesignated tree groups on its south-eastern edge) with the development footprint offset from the ASNW boundary by 15m and 30m and also between 15m and 30m in respect of the northernmost extent of semi-natural broadleaved woodland delineating the eastern boundary of field **F2**.

4.19 There will, however, be partial loss of hedgerow **H2** (c.20m)), combined with fragmentation of the semi-mature/mature tree line associated with **H4**, **H5** and **H6** to facilitate construction of access roads to each development parcel and **H9** to facilitate construction of an Active Travel Route. Whilst proposed access roads will breach these**,** the route has been designed to exploit existing gaps between mature vegetation, minimising individual tree losses as far as possible. This is, however, in addition to erosion of scrub and woodland habitat along the southern boundary of field **F4** to facilitate construction of residential plots. In total, erosion of such habitats will require the removal of c.20m of hedgerow habitat and 55 trees (26 individual trees and 29 trees within tree groups). Of those trees identified for removal, 48 are low/poor quality trees C/U category). Additionally, there will be minor loss of bankside habitat along the unnamed watercourse to facilitate creation of an Active Travel Route linking to Parc Leiros Drive, and the erosion of further dense scrub of negligible ecological importance to the south of field **F1**, to facilitate connectivity to adjacent residential development, via Daphne Road.

4.20 Notwithstanding the above, there also remains the potential for physical damage and/or indirect degradation of retained features to occur during construction, given the proximity of built development and/or proposed landscaping works. Retained trees/hedgerows may be further subject to indirect impacts, such as soil compaction, erosion and pollution (including air pollution). Indirect effects associated with increased levels of disturbance will likely occur during the construction phase, through the use of lighting and increased levels of vehicular traffic, machinery use and plant movement. Given that the majority of the works will be undertaken during daylight hours, the usage of artificial lighting will likely be limited to the early morning and early evening hours, with greater requirements for artificial lighting during the winter months. In the absence of additional mitigation, impacts associated with disturbance and lighting may persist during the operational phase.

4.21 As discussed above in relation to non-statutory designations, there is also the potential for impacts upon water quality within the unnamed watercourse, associated with increased surface water runoff from the Site during the construction and operational phase of proposed development.

IMPACTS ON PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

4.22 The loss of potential bird nesting habitat following development of the Site will primarily be limited to partial loss of hedgerow **H2** (totalling c.20m), combined with formal breaks within semi mature/mature treelines associated with hedgerow **H4, H5, H6 and H9** (with loss of associated individual trees/tree groups) to facilitate construction of access roads to each development parcel.

4.23 The majority of hedgerow and woodland habitat within and immediately adjacent to the Site will be retained, with the loss of woodland, scrub, scattered trees and hedgerow associated with the Site considered overall to be negligible, given the relatively small extent of loss. Loss of the majority of poor semi-improved grassland associated within fields **F1** to **F4** is also considered to be negligible given the small size of the fields themselves and the relative unsuitability of agricultural grassland for ground nesting birds, being subject to grazing and homogeneous in nature. Habitat loss is not therefore considered to be significant.

4.24 Whilst the majority of suitable nesting bird habitat will be retained, disturbance through light spill, noise, visual and human disturbance during the construction and operational phase could arise.

4.25 There is, furthermore, the potential for clearance of vegetation to result in direct harm/injury to nesting birds, if present. However, the legal protection afforded to birds and their nests (their eggs and young) and the requirement to avoid commencement of works during the breeding bird season is considered inherent mitigation to ensure no effects relating to direct harm/injury arise in respect of the breeding bird assemblage. Therefore, negligible impacts are predicted.

Bats

Impacts on Roosting Bats

4.26 Trees with the potential to support roosting bats occur along the boundary of ASNW to the east, further woodland to the south and associated with hedgerow **H4**, and to the west of field **F2**. The boundary of the ASNW to the east has been offset from the development footprint (between 15m and 30m), and trees within further woodland to the south, and associated with hedgerow **H4**, are to be retained. As such, no impacts to roosting bats associated with loss, nor physical damage and disturbance to these trees is anticipated.

4.27 The majority of trees with potential to support roosting bats will be retained. This is, however, with the exception of **T25** located adjacent to the southern boundary of the Site and **T19** located within hedgerow **H4** whilst the root protection area of **T15** overlaps with the development footprint although the tree itself will be retained. In the absence of roosting bats, impacts are considered negligible. Nevertheless, the removal of **T25** and **T19** will reduce roosting

opportunities across the Site whilst there remains the potential for bats to establish a roost in future with impacts associated with loss, modification and/or disturbance to a roost likely to arise in such instance.

4.28 Buildings with the potential to support roosting bats are present within woodland to the south of the Site, including building **B7**, which is considered to have high suitability, and **B4**, which is considered to have low suitability. Neither were confirmed to support bat roosts, however, following the further detailed emergence surveys. As such, impacts to roosting bats is considered unlikely.

Impacts on Foraging/Commuting Bats

4.29 Overall, species-poor semi-improved grassland which dominates the Site is considered to be of limited importance to a foraging bat assemblage given its small extent and poor botanical diversity. Boundary features including dense scrub, mature tree lines and woodland are, however, of value for dispersal of a bat assemblage across the wider landscape, with woodland in particular providing a potential foraging resource. The southern and eastern boundaries of the Site in particular are considered of value for dispersal of a bat assemblage whilst the more fragmented nature of the northern boundary, dominated by stone walls and sometimes sparse scrub, is of lesser importance.

4.30 Although the majority of the woodland and hedgerow habitats within the Site are to be retained, limited sections of hedgerows **H2** (totalling c.20m) will be removed to accommodate access roads within the development combined with fragmentation of vegetation associated with **H4**, **H5**, **H6** and **H9** requiring removal of individual trees/tree groups here. There is also the potential for physical damage/degradation to arise upon the hedgerow network and woodland located within, and along, the boundaries of the Site, which are of value for a commuting bat assemblage. This is in addition to an increase in noise and lighting, and subsequent disturbance during the construction and operational phase.

4.31 In addition, increased amounts of traffic movement by vehicles, machinery and plant throughout the construction phase could increase the potential risk of road casualties upon the local bat assemblage, particularly when constructing access roads and removing vegetation across which species disperse and forage. However, given that such activities will most likely be confined to daylight hours when bats are unlikely to be present, no significant negative effects are considered likely to arise.

Otter

4.32 An unnamed watercourse arises from within woodland/tree line adjacent to the south-east corner of field **F3** and flows westwards adjacent to the PRoW here. No evidence of otter (including holts/resting places) or water vole (including latrines/foraging signs) were identified following a search for evidence of these species during the Extended Phase 1 habitat survey. Combined with the minor extent of habitats likely subject to loss/or degradation to facilitate an Active Travel Route through **H9**, to the south of field **F3**, and access to development parcels between all five fields, no significant impacts are anticipated.

4.33 Indirect disturbance (particularly light spill) upon riparian habitats may also arise during construction, resulting in short-term changes in behaviours and distribution of otter and water

vole if utilising the watercourse for dispersal at the time of construction, or (for otter) if found to be occupying adjacent woodland for resting/breeding. Such impacts may continue long-term arising from increased human presence, vehicular noise and light originating from residential dwellings.

4.34 In the absence of mitigation, there is the potential for more frequent use of the Site and occupation by new residents to increase the level of contaminated surface water run-off to the watercourse with subsequent negative effects to the water quality of the watercourse. Such impacts would give rise to adverse effects on the freshwater ecosystem more generally with the potential for fish kills to occur, and a subsequent reduction in the foraging resource available to otter. Inherent within development proposals is the inclusion of sensitive drainage features to manage surface water run-off from the Site.

4.35 There remains the potential for indirect effects associated with a deterioration in water quality and an increase in suspended solids during the construction phase and operation, as a result of the discharge of contaminated run-off and deposition of material following periods of heavy rainfall into the watercourse. Pollution incidents could also arise as a result of leaks and spills from construction activities and will require additional mitigation.

Badger

4.36 With respect to badger, species-poor grassland within the Site provides a seasonal foraging resource, whilst hedgerow and woodland boundaries offer suitable sett building and dispersal opportunities to individuals accessing more suitable grassland and woodland habitat adjacent to the Site and within the wider landscape, which offer year-round foraging opportunities.

4.37 Loss of species-poor grassland will result in a reduction in the overall foraging resource, albeit limited seasonally. In addition, development may also result in potential harm/injury to this species resulting from an increase in the movement of construction traffic and entrapment within open excavations during construction.

Reptiles, Amphibians and other Notable Mammals

4.38 Hedgerow, woodland and wall habitat forming the boundaries of the Site provide opportunities for dispersal and foraging, in addition to refuge and hibernation for a common reptile and amphibian population as well as for other notable mammals. Whilst losses are predominantly confined to the poor semi-improved grassland fields, which are of little ecological value, hedgerow and tree loss will be required to facilitate development, with breaks proposed to internal hedgerows **H2**, **H4**, **H5** and **H6**, to provide access to development parcels and a single break through the southern boundary treeline **H9** to provide an Active Travel Route. Given that the majority of the hedgerow network on-site will otherwise be retained, such losses are not considered significant.

4.39 In the absence of additional mitigation, there is also the potential for damage/degradation of retained habitats of some value to reptiles, amphibians and European hedgehog, combined with the killing and injury of such species during vegetation clearance; and following increased levels of traffic movements by vehicles, machinery and plant throughout the construction and operational phase of development.

4.40 There also remains the potential for impacts upon the stream along the southern boundary, should a deterioration in water quality arise during the construction and operational phase of proposed development.

Section 5
Mitigation and Enhancement Strategy

5.1 This section of the Ecological Appraisal considers the impacts set out in **Section 4** and puts forward additional measures to firstly avoid or minimise any ecological impact, or else to mitigate unavoidable impacts arising from proposed development necessary to comply with relevant planning policy and avoid any infringement of relevant legislation.

5.2 This section also sets out proposed ecological enhancements for the Site, in line with the wording within PPW and local planning policy, specifically the requirement to deliver net benefits for biodiversity and ecosystem resilience of ecosystems by maximising those attributes of the DECCA[24] framework. Enhancements must be secured primarily on-site or immediately adjacent to the Site, over and above that required to mitigate or compensate for any negative impact.

DESIGNATED SITES

Statutory Designations

International Designations

5.3 Inherent within the Illustrative Masterplan is the provision of formal and informal open green space, spanning north to south through the centre of the development and along its peripheries. Such areas will provide alternative opportunities for recreation, reducing footfall on statutory designations within the wider landscape. The creation of new habitat features in mitigation for losses as well as to deliver biodiversity benefits, including tree, shrub and grassland planting, will further serve to integrate built development with green infrastructure provision and enhance new residents' connection with nature. This is combined with the provision of a Community Park, grow space, disaggregated LEAP, landscape-based play areas and creation of footpath links within the Site connecting to the wider network to the east and south if the Site.

5.4 Subsequently it is considered that any potential recreational-based impacts arising upon Crymlyn Bog Ramsar Site and SAC as a result of proposed development can be adequately mitigated.

Non-statutory Designations

5.5 To protect the existing water quality of Tennant Canal SINC, Catwg Wetland SINC, Neath Estuary SINC, Neath Canal SINC, Coed Bach a'r Cwm SINC and Gwlyptir Mynachlog Nedd SINC, as well as ASNW adjacent to the eastern boundary of the Site, , appropriate pollution control measures will be employed in accordance with the relevant Pollution Prevention Guidelines (PPGs) published by the Environment Agency, namely PPG1 'General Guide to the Prevention of Pollution', PPG5 'Works and Maintenance in or Near Water', PPG6 'Pollution Prevention Guidance for Working at Construction and Demolition Sites', and PPG21 'Pollution Incident Response Planning', to ensure that detrimental effects on any nearby watercourses as a result

[24] The DECCA framework comprises five key attributes which must be taken into account when demonstrating steps taken towards securing a net benefit for biodiversity, including the Diversity, Extent, Condition, Connectivity and Adaptability to change of habitats, species and ecosystems.

of surface run-off, spillage and pollution arising throughout the construction phases are avoided.

5.6 As discussed previously within **Section 4**, inherent within the Illustrative Masterplan is the provision of a sustainable drainage strategy incorporating a bio-retention system, conveyance swales and permeable surfaces to collect, remediate and manage surface water runoff from the Site.

5.7 In respect of the proximity of ASNW to the eastern boundary of the Site, the above will be combined with the adoption of dust control measures during construction to minimise potential impacts upon air quality, including restrictions on traffic movement and/or speed, appropriate storage of materials and/or use of screens and fencing as necessary.

5.8 Construction activities will, furthermore, be restricted to daylight hours as far as possible to mitigate effects of increased visual and noise disturbance upon designated woodland habitats, with the use of temporary, artificial lighting avoided during the hours between dusk and dawn, and directional and low-level lighting used away from sensitive habitat corridors to mitigate effects relating to increased use of artificial lighting.

5.9 Such measures can be secured through the provision and implementation of a Construction Environmental Management Plan (CEMP) and Ecological Construction Method Statement (ECMS) to be secured as a condition of planning.

5.10 To avoid and minimise potential impacts arising in the long-term the development has, however, been offset from the boundaries of sensitive habitats, including ASNW, through the provision of habitat buffers with ecotone planting proposed along the existing woodland edge to maintain the integrity of ASNW woodland habitat and reduce edge effects. Ecotone planting fronting the existing woodland edge combined with a sensitive planting design will further encourage the diversion of footfall from new residents towards dedicated routes and away from more sensitive habitats. New planting will be subject to sensitive management in the long-term to promote the establishment of structurally diverse ecotone habitats, with such features to be excluded from the curtilage of residential boundaries.

5.11 In addition, the scheme will implement a sensitive lighting strategy during the operational phase to ensure no/limited light spill occurs within close vicinity to newly created boundary features and retained ASNW habitat. Where lighting is required adjacent to road/pedestrian routes, lighting columns should be directed away from habitat edges to minimise disturbance and light spill. Lighting should include directional, timed and/or low-lux lighting, utilising shields and/or hoods where required.

5.12 As discussed within Section 4, there is the potential for damage/degradation of sensitive habitats associated with Gnoll Country Park SINC and ASNW following an increase in recreational pressure, given proximity to the Site. Following implementation of inherent mitigation previously discussed in relation to statutory designations, concerning the provision of alternative areas for recreation within the Site, however, it is considered that such impacts on non-statutory designations will be avoided or reduced to insignificant levels.

HABITATS

5.13 Measures will be required to protect the retained habitats described in **Section 4** from damage and disturbance during the construction phase.

5.14 To protect retained habitats during construction, protective fencing will be erected as recommended within BS 5837: 2012 Trees in Relation to Design, Demolition and Construction to physically protect retained trees and hedgerow habitats on-site, together with the with establishment of Ecological Protection Zones (EPZ). Protective fencing will incorporate the full root protection area of the feature to be retained and will be protected and maintained throughout the duration of all site-enabling and pre-construction activities.

5.15 No works (other than planting), including the storage of materials, plant and machinery, will be carried out within or immediately adjacent to all areas of protective fencing/areas marked for protection as described above, so as to ensure no detrimental impacts to sensitive features arising from physical damage and/or pollution. The digging of trenches and pits for new tree and scrub planting adjacent to areas of protective fencing, where this lies inside root protection areas, will be carried out by hand only, in accordance with best practice guidance as stipulated within BS 5837:2012.

5.16 Such measures, alongside those previously discussed in relation to pollution control, dust management and lighting, can be secured through the provision of an Arboricultural Method Statement (AMS), CEMP and ECMS comprising standard documents which are capable of being secured by condition to any forthcoming planning consent.

5.17 As discussed within **Section 4**, the development has been designed to retain those habitat features of greatest ecological importance as far as possible. This includes:

- The retention of the majority of the hedgerow/treeline network on-site, with impacts limited to the creation of a break in the Site's southern boundary (impacting **H9**), linking an Active Travel Route to Leiros Parc Drive, and within internal hedgerows/treelines **H2**, **H4**, **H5** and **H6** necessary to accommodate access roads through the development whilst also enabling connections to adjacent residential development via Daphne Road;

- The retention of the majority of trees considered to support potential roosting features for bats, including trees **T1**–**T7**, **T9**–**T15**,**T17**–**T18, T20**-**T24** and **T26**-**T30** with losses limited to potential removal of **T25** and **T19**;

- Protection of ASNW/SINC located off-site to the immediate east/south-east, retention of on-site broadleaved semi-natural woodland located adjacent, together with the provision of a significant habitat buffer measuring between 15m and 30m wide further offsetting the development footprint from ASNW/SINC; and

- The offsetting of development away from other vegetated boundaries of the Site through the provision of further significant habitat buffers measuring, on average: c.15mwide where adjacent to the northern hedgerows/treelines (**H3**) and additional areas of broadleaved semi-natural woodland habitat located off-site; and c.10m–20m wide where adjacent to the south-western and south-eastern boundaries of the Site supporting further broadleaved semi-natural woodland.

5.18 This will be combined with the creation of new habitats to compensate for the loss of hedgerow sections and trees in particular, but also to deliver net benefits to biodiversity through the provision of structurally and botanically diverse habitat features. The following habitat creation measures are proposed:

- The inclusion of biodiverse, ecotone planting within habitat buffers proposed, to include canopy and understorey tree and shrub planting to front the existing vegetated edge, before transitioning into lower-level shrub and grassland planting extending towards the development edge. Such ecotone planting seeks to protect the existing, mature hedgerow network to be retained, to enable its continued function as a key wildlife corridor for bats and other wildlife;

- The creation and management of new native planting within the north-west corner of the Site;

- The provision of sustainable drainage features including a bio-retention system, conveyance swales and permeable surfaces, necessary to maintain run-off rates and improve the quality of surface water prior to discharge;

- The inclusion of significant areas of informal and formal greenspace to ensure sufficient provision of green infrastructure throughout the Site necessary to maximise biodiversity whilst providing suitably accessible areas for recreational use; and

- The planting of native shrubs/hedgerows along the boundaries between residential plots and adjacent open green space allowing for the integration of green infrastructure with the built development whilst providing an additional breeding/foraging resource for protected/notable species.

5.19 The provision of new tree planting at a minimum 3:1 ratio to mitigate for proposed losses across the Site. Such habitat creation measures are considered sufficient to compensate for the relative small scale of habitat losses anticipated, whilst ensuring the protection and further enhancement of retained habitats to maximise habitat function and connectivity across the Site for protected and Priority Species. It is further recommended for such habitats and features to be subject to sensitive management and monitoring over the long-term to improve their condition, increase their resilience and mitigate long-term disturbance effects. Management measures aimed at promoting structural and botanical diversity and enhancing the resilience of this habitat to climatic changes may include:

- The implementation of a sensitive hay cutting regime across newly created areas of informal grassland and wildflower meadow planting, so as to promote a structurally diverse and species-rich sward, which also maximises the value of foraging, dispersal breeding and hibernation resources for protected/notable species;

- The implementation of a programme of coppicing/thinning works across areas of woodland and dense vegetation on-site combined with new planting of a diverse species mix to promote the development of succession trees, whilst also promoting the diversification and enhancement of ground flora through the creation of clearings and glades to allow light to reach the floor;

- The management of retained hedgerows and treelines to maintain their condition and promote structural diversity, including rotational cutting and the implementation of coppicing and/or traditional laying of the hedgerow where appropriate according to species, to encourage the formation of a denser and more continuous hedgerow;

- The management of newly created hedgerows and ecotone planting to achieve a continuous (<10% gaps), dense and bushy 'A' shaped structure whilst maintaining heights at no less than 3m and widths of at least 2m;

- The selective removal of scrub around establishing young trees/shrubs to facilitate natural regeneration across retained and newly created habitats;

- The selective removal of species-poor/bramble scrub, as required, along the unnamed watercourse to maintain open sections of value for maintaining in stream diversity;

- The control of any invasive species in accordance with the advice of a specialist contractor; and

- The provision of log piles and deadwood utilising arisings from tree works undertaken on site, so as to maximise habitat structure and foraging availability for protected and notable species.

5.20 Detailed specifications for new planting and other habitat creation described in **Section 4** should be provided with a detailed Soft Landscaping Scheme secured by planning condition. In addition, measures to restore and enhance existing habitats, to ensure successful establishment of new habitats, and to maintain the value of all ecological features in the long-term will be delivered through a Landscape and Ecology Management Plan (LEMP), or an equivalent document, which can be secured by planning condition.

5.21 Subject to the implementation of the measures summarised above, impacts on retained habitats will be avoided and net gains in biodiversity will be achieved in accordance with relevant planning policy.

PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

5.22 The habitat protection measures described above in relation to designated sites and habitats will avoid harm to breeding birds present within retained habitats. However, some hedgerow, scrub and tree loss is required to facilitate development.

5.23 Given the protection afforded to all breeding birds, their nests, eggs and young, sensitive vegetation clearance (and building demolition) required during the pre-construction and construction phases of development should be timed to avoid the main bird breeding season (i.e. March to August inclusive).

5.24 Should this seasonal constraint prove impracticable, then vegetation clearance outside of this period should only commence following the advice and under supervision of a suitably qualified ecologist. Pre-commencement checks for active nests will be required prior to any vegetation

clearance occurring during the main bird breeding season, with appropriate buffers marked out around active nests or nests under construction, until all eggs have hatched, and chicks fledged.

5.25 The provision of significant Green Infrastructure across the Site, incorporating ecotone planting to further buffer and strengthen existing vegetated boundaries, in addition to new tree, shrub and grassland planting and, will adequately compensate for the otherwise minor loss of suitable nesting habitat across the development footprint. In addition, the proposed creation and sensitive management of species-rich grassland habitat will provide an additional and diverse foraging resource, enhancing opportunities for an assemblage.

5.26 To further enhance bird nesting opportunities across the Site, it is recommended that bird boxes be installed upon mature trees to be retained. Bird box designs will include two of the following types: Schwegler 3S for starling; or Schwegler nos. 1B with a 32mm entrance, 26mm entrance, and/or oval entrance (or similar).

5.27 In addition, bird nesting chambers should also be installed in groups of two to three nesting chambers upon suitable residential dwellings where located adjacent to Green infrastructure. Bird nesting chambers should include two of the following types: Schwegler Lightweight Swift Box Type 1As/Manthorpe swift brick; Schwegler sparrow terrace/Woodstone house sparrow nest box; and Woodstone house martin nest or similar.

5.28 Installation should be undertaken in accordance with manufacturer's specifications and with such features sited carefully in relation to aspect, so as to be protected from strong wind, rain and sunlight (i.e. not south facing), and at suitable heights above ground level (c.3–6m above ground level).

5.29 Overall, those habitat retention and enhancement measures recommended above in relation to non-statutory designations and valued habitats, combined with the measures outlined above, are considered sufficient to minimise impacts upon the breeding bird assemblage.

Bats

Roosting Bats

Bat Trees

5.30 Prior to clearance/pruning, all mature trees to be felled/subject to tree pruning, including **T25** and **T19** with bat roost potential, will be subject to an update ground-level inspection by a suitably qualified ecologist to determine their current potential to support roosting bats.

5.31 Where trees are identified as having bat roost potential at the time of the update survey, then such trees will be subject to a further detailed aerial inspection, whereby all suitable roosting features will be checked at height for the presence of bats. Aerial surveys will be undertaken by a suitably qualified and Natural Resource Wales (NRW) bat licensed ecologist, arboricultural contractor with a NRW bat survey licence, or with experience of working with bats and under the supervision of a NRW bat survey licence holder.

5.32 If any bats are discovered during the aerial inspection, owing to the strict legal protection afforded to bats and their roosts, works are likely to require a Development Licence from NRW before works can continue.

5.33 If no evidence of roosting bats is uncovered during the aerial inspection, works may proceed without a Development Licence from NRW. However, regarding those trees identified as having potential to support roosting bats, a 'soft felling' technique' involving the sectional dismantling of the tree will be adopted, involving the following:

- Tree felling will avoid cutting through any cracks, cavities, limb/knot holes or any other potential roosting features – i.e. by cutting above and below the feature when removing sections with suitable features;
- Any sections to be cut supporting suitable roosting features are to be suitably harnessed and supported before cutting using industry-standard rigging equipment, and gently lowered to the ground once cut, to avoid violent shaking of potential roosting features; and
- Any cut sections with potential roosting features are to be retained on-site by one of the following methods:
    - Strapping to existing, retained mature trees and appropriately secured in position;
    - Retained on-site at ground level within an area of retained woodland; and
    - Retained on-site for a minimum of 48 hours, with potential entrances not blocked i.e. facing away from ground, before they are removed or chipped.

5.34 Should any bats be discovered during the felling of these or any other trees, then works will necessarily cease and a suitably qualified and NRW bat licensed ecologist contacted for further advice. It may be necessary to obtain a development licence from NRW before works can continue.

5.35 Given the potential for trees to degrade/decay over time such that their potential to support roosting bats may increase, should the felling of trees with bat potential occur more than 12 months since the previous bat roost assessment, then such trees should be subject to an update tree roost assessment by a suitably qualified and NRW bat licensed ecologist, with appropriate mitigation/precautionary measures followed.

5.36 Given the absence of bat roosts identified within buildings **B4** and **B7**, there is no requirement to obtain a development licence from NRW. Nevertheless, and given the 'Low–High' suitability of these buildings to support a roost, a precautionary approach to removal/demolition is advised. Works to the roof and any other potential roosting features of these buildings should ideally be undertaken between October to March so as to avoid the main bat roost and bird breeding seasons. Should this not be practicable, then pre-commencement checks carried out by a suitably qualified ecologist will be required immediately prior to commencement of works. In addition, should removal/demolition of buildings **B4**/**B7** occur more than 12 months since the previous bat roost assessment, then an update assessment by a suitably qualified and NRW bat licensed ecologist will be required.

5.37 Contractors carrying out the works should be warned of the possible presence of roosting bats and nesting birds and of their protected status. In the event any bats (or occupied bird nests) are found during works, then all works should cease in the affected area until advice from a suitably qualified and licensed ecologist is sought.

5.38 Prior to commencement of proposed works, bat boxes will be installed on suitable mature trees present along the retained boundaries of the Site following the advice of a suitably qualified ecologist. These will act as receptor sites for bats in the unlikely event that any individuals are found during demolition and to compensate for roost loss arising as a result of proposed activities. In addition to the bat boxes installed on trees, further compensatory measures suitable for crevice dwelling bats (soprano pipistrelle, *Myotis* sp. and brown long-eared) will be provided within new buildings. Such roosting features may include the integration of Schwegler 1F Bat Tubes, bat bricks or similar into the exteriors of new buildings.

Foraging/Commuting Bats

5.39 With respect to a foraging/commuting bat assemblage, those habitat creation measures detailed above in relation to designated sites, habitats and breeding birds will provide adequate compensation for minor losses arising across the Site.

5.40 To avoid disturbance of a foraging/commuting bat assemblage during construction, however, working at night and the use of night lighting should be avoided. Where this is not possible (i.e. for security reasons), lighting should be kept to the lowest permissible level through the use of sensitive lighting design as detailed above in respect to habitats and directed away from retained trees lines.

5.41 This should be combined with implementation of a sensitive lighting strategy during the operational phase of development to ensure that retained habitats on and adjacent to the Site used by light-sensitive species such as bats will not be adversely lit. Directional, timed or low-lux lighting should be incorporated across the development footprint. Where lighting is required along roads situated adjacent to such habitat features, it is recommended for such columns/bollards to be located within the development footprint itself and away from habitat edges to minimise disturbance and light spill.

5.42 Subject to the implementation of those key mitigation measures detailed above with respect to bats and previously with respect to habitats, no significant detrimental impacts upon the roosting and foraging/commuting bat assemblage utilising the Site are considered likely to arise. Key mitigation measures/specifications can be delivered through the LEMP.

Otter

5.43 As discussed above, the ECMS will contain measures to physically protect retained aquatic and riparian habitats outside of the construction footprint through the establishment of EPZs and implementation of construction works in accordance with relevant pollution prevention guidelines.

5.44 There does, however, remain the potential for disturbance of this species (if present) through elevated noise and lighting during the construction phase and particularly in the event a holt/resting place is identified through pre-commencement surveys. Restricted night-time working and sensitive construction lighting to minimise light spill onto retained habitats, as set

out previously, will prevent such disturbance. Where construction activities are to encroach within 10m of the watercourse and associated riparian habitats (i.e. during construction of the Active Travel Route through hedgerow **H9**, to the south of the Site), this will be preceded by a pre-commencement survey of such adjacent habitats for evidence of otter, in particular features considered to be used as resting sites or laying up.

5.45 Where evidence of a resting place or laying up site is identified, the suitably qualified ecologist will determine those additional sensitive methodologies necessary to ensure no damage or disturbance to the holt/resting place, including the establishment of additional buffers. Where such impacts cannot be avoided and given the protection afforded to this species, a licence from NRW will be required prior to development works progressing.

5.46 Subject to implementation of the above mitigation and that previously discussed in relation to habitats and other protected/notable species, likely residual effects are therefore considered negligible.

Badger

5.47 No evidence of badger was identified within the Site during the badger survey undertaken in April 2024. However, given the widespread and opportunistic nature of badger, an update walkover of the Site by a suitably qualified ecologist is recommended prior to the commencement of any development works to determine whether any badger setts have established on or adjacent to the Site during the interim period.

5.48 In the event an active sett is identified and is to be affected by development works, and owing to the strict legislation protecting active setts, a licence from NRW will be required to exclude badger from the sett (restricted to the period between July and November inclusive), with a mitigation strategy based on the following principles:

- Exclusion of badgers from setts using one-way gates, where confirmed active at the time;
- Sett monitoring of closed setts, to ensure badgers have not regained access to any setts; and
- Excavation of the badger sett with all tunnels dug back to end.

5.49 In addition to the above and in respect of the presence of badgers more generally, the following measures will apply throughout the construction phase of the Development:

- All machinery will be operated by trained personnel only;
- There will be no working at night as far as possible; and
- All trenches/excavations will be covered up overnight and a means of escape provided to avoid wildlife becoming trapped.

5.50 In addition, a sensitive lighting scheme is recommended to be adopted throughout the construction and operational phase of development in accordance with those recommendations detailed above.

5.51 Those recommended habitat creation measures discussed above in relation to habitats and other protected/notable species, including the proposed enhancement of retained habitats for incorporation within significant areas of green infrastructure supporting new woodland, tree, hedgerow shrub and grassland planting, will provide suitable foraging habitat for this species (if present), as well as maintain suitable dispersal corridors for the movement of badger and other wildlife across the Site.

Reptiles, Amphibians and Other Mammals

5.52 Given the limited potential of the Site to support low numbers of common reptiles, common amphibians and other mammals, a precautionary approach to habitat clearance is recommended to ensure no harm to these species. Clearance of any suitable vegetation should be undertaken in accordance with the following precautionary methods of working:

- Vegetation clearance should be undertaken between the late spring and early autumn months so as to avoid the main hibernation period of hedgehog and common reptiles/amphibians (typically considered to be between October and March);
- Should the above seasonal constraint be considered impracticable, then clearance works between late October and March inclusive may require pre-commencement checks and/or supervision by a suitably qualified ecologist to ensure no disruption to potential hibernacula, with the adoption of additional precautionary measures as appropriate;
- Non-woody (i.e. tall ruderal, ephemeral and grassland habitats otherwise establishing across agricultural fields or along hedgerow edges) should be subject to phased clearance, as follows:
    - A first cut should aim to reduce vegetation height to no less than 200mm and should be undertaken through the use of a hand-held strimmer or brush cutter;
    - The second cut should be undertaken thereafter and within 24 hours of the initial cut, during which the vegetation should be reduced to ground level; and
    - Both cuts should be undertaken in a direction towards retained habitats, i.e. towards the coniferous tree line or adjacent semi-natural habitat off-site, so as to allow for any wildlife present to disperse safely towards this resource.
- Any suitable refugia identified during clearance works will be subject to a finger-tip search by a suitably experienced ecologist with any species identified re-located to areas of retained vegetation. Thereafter, refugia will be dismantled by hand and relocated to areas of retained vegetation to ensure suitable refuge/hibernation opportunities are retained;
- In the event any reptiles, amphibians or European hedgehog are identified during site clearance these will be captured by hand and immediately released into retained habitat located immediately adjacent to the construction footprint; and

- More generally, and particularly in respect of hedgehog, the following precautionary measures will be adhered to during the construction phase:
    - All machinery will be operated by trained personnel only;
    - There will be no working at night;
    - All trenches/excavations will be covered up overnight and/or a means of escape provided (such as mammal ramps) to avoid wildlife becoming trapped; and
    - Any open pipework with an outside diameter of greater 120mm must be covered at the end of each working day to prevent animals entering/becoming trapped.

5.53 To facilitate the dispersal of European hedgehog across the Site during operational phases of development, it is further recommended for any proposed close board fencing marking the boundaries between development, formal landscaping features or semi-natural habitat off-site, to include a 13cm x 13cm gap at the bottom to allow hedgehogs to pass through.

5.54 Further enhancements can be achieved through the creation of hibernacula and deadwood log piles within south facing habitat and/or within the natural/informal greenspace areas.

5.55 The mitigation and enhancement measures outlined above will ensure that effects upon reptiles and common amphibians, if present in the locality, are avoided/minimised with an overall positive increase in the availability of suitable habitat across the Site.

Section 6
Summary and Conclusions

6.1 **Table EDP 6.1** provides an overview of the Mitigation and Enhancement Strategy described in **Section 5**.

Table EDP 6.1: Summary of Proposed Mitigation and Enhancement

Mitigation Type	Key Principles	Mechanism(s) to Secure Delivery
Avoid by Design	Retention of habitats with appropriate development buffers: • Retention of the majority of hedgerow network on-site, with impacts limited to creation of a break in hedgerow **H9** to link an Active Travel Route to Leiros Parc Drive, and within internal hedgerows/treelines **H2**, **H4**, **H5** and **H6**, necessary to accommodate access roads though the development whilst also enabling connections to adjacent residential development via Daphne Road; • • The retention of the majority of trees considered to support potential roosting features for bats, including trees **T1–T7**, **T9–T15**,**T17–T18, T20-T24** and **T26-**T**30.** with losses limited to potential removal of **T25** and **T19**; Protection of ASNW/SINC to the immediate east/north-east, through the retention of onsite broadleaved semi-natural woodland located adjacent, together with the provision of a significant habitat buffer measuring 15m–30m wide, further offsetting the development footprint from ASNW/SINC; • Offsetting of development from vegetated boundaries of the Site through the provision of further significant habitat buffers adjacent to Site boundaries to the north, west and south; • Inclusion of biodiverse, ecotone planting within habitat buffers to further protect the existing mature hedgerow network to be retained to enable its continued functionality as a key wildlife corridor for bats and other wildlife; • The creation and management of new woodland in the north-west of the Site; • The provision of sustainable features including a bio-retention system conveyance swales and permeable surfaces, necessary to maintain run-off rates and improve the quality of surface water prior to discharge. Permanently wet areas can also be designed into such features to further maximise the biodiversity of the Site; and • Inclusion of significant areas of green infrastructure throughout the Site including north–south corridors traversing the Site incorporating footpaths, cycle ways and sustainable drainage features, alongside tree and shrub planting, wildflower and amenity grassland. Additional green infrastructure provision is also proposed within and around the full peripheries of the Site, incorporating additional tree, shrub and grassland planting, sustainable drainage features and informal footpaths.	Habitat retention to be embedded in the Illustrative Masterplan, which will be an 'approved plan' to which future detailed designs must align.

Mitigation Type	Key Principles	Mechanism(s) to Secure Delivery
Avoid or Minimise Construction Impacts	Sensitive methods of operation during enabling and construction works: • Control of working hours; • Minimise noise and vibration; • Air quality measures/dust suppression; • Control/eradication of invasive species; • Surface water management; • Storage of fuels/chemicals; and • Sensitive lighting.	Construction Environmental Management Plan (CEMP) secured via pre-commencement planning condition.
	Protection of retained habitats: • Fencing and signage to create development exclusion zones comprising ecological protection zones and root protection areas; and • Translocation of hedgerow shrubs from construction footprint, where suitable.	Arboricultural Method Statement (AMS) and Ecological Construction Method Statement (ECMS) secured via pre-commencement planning condition.
	Methods to avoid harming individuals or interfering with breeding of protected species prior to/during habitat destruction: • Pre-commencement checks/surveys; • Avoidance of trapping animals in excavations; • Timings to avoid sensitive periods/breeding seasons; • Capture and translocation of animals from construction footprint; • Phased vegetation clearance/draining of water bodies; • Maintaining dispersal routes; • Destructive searches; and • Supervision by Ecological Clerk of Works (ECoW).	ECMS secured via pre-commencement planning condition.

Mitigation Type	Key Principles	Mechanism(s) to Secure Delivery
Mitigate or Compensate for Habitat Loss and Deliver Net Gains	Habitat enhancement: • Infill planting to further strengthen the existing hedgerow resource to be retained; • Translocation of suitable specimens from sections of hedgerow to be lost to suitable areas on-site adjacent to retained vegetation, to further strengthen the existing hedgerow network; and • Protection of vegetated boundaries through the provision of significant habitat buffers. Habitat creation: • New woodland creation; • New hedgerow and tree planting; • Inclusion of biodiverse, ecotone planting within habitat buffers proposed, to include tree, shrub and grassland planting incorporating flowering and fruiting species of local provenance and species resilient to climate change; • Provision of sustainable drainage features including a bio-retention system, conveyance swales and permeable surfaces. Permanently wet areas can also be designed within such features to further maximise the biodiversity of the Site; and • Creation of significant areas of green infrastructure designed to maximise biodiversity whilst providing suitable areas for recreational use. This will include the provision of two central corridors traversing north–south through the Site, the largest of these incorporating a public route, disaggregated Locally Equipped Area of Play (LEAP) and Community Park, alongside tree and shrub planting, wildflower and amenity grassland. Additional green infrastructure provision is also intended around the full peripheries of the Site, incorporating additional tree, shrub and grassland planting, informal footpaths and landscape-based play areas.	Space for new habitat embedded in Illustrative Masterplan, which will be an 'approved plan' to which detailed designs must align. Landscape and Ecological Management Plan (LEMP) to be secured by planning condition.
	Habitat features to be provided in suitable locations: • Bat boxes and/or bat tubes; • Bird boxes/nesting chambers; and • Reptile hibernacula.	LEMP to be secured by planning condition.

Mitigation Type	Key Principles	Mechanism(s) to Secure Delivery
	Measures to maintain or enhance habitat connectivity: • Retention of the majority of trees and hedgerow resource within the Site; • Reinforcement of hedgerow and tree boundaries through the provision of ecotone planting comprising canopy and understorey trees, shrubs and grassland; • Translocation of suitable specimens from sections of hedgerow to be lost to suitable areas on-site adjacent to retained vegetation to further strengthen the existing hedgerow network; and • Protection of vegetated boundaries through the provision of significant habitat buffers.	LEMP to be secured by planning condition. Detailed engineering designs submitted as part of reserved matters applications.
	Lighting strategy to avoiding disturbance of nocturnal species, in particular foraging/commuting bats.	Detailed lighting design to be secured by planning condition.
Maintenance, Monitoring and Management Post-construction	Habitat-specific, namely measures to: • Enhance retained habitat, and to ensure new habitat becomes established of newly created habitat, to achieve target condition, with remedial measures implemented where necessary; and • Monitor and maintain habitats in good ecological condition once enhanced/established for the long-term.	LEMP to be secured by planning condition.
	Species-specific, namely measures to: • Maintain habitat features (boxes, etc.) in good condition or replace as necessary.	LEMP to be secured by planning condition.

6.2 EDP concludes that, in light of the embedded mitigation and subject to the full implementation of the additional measures summarised above, the proposed development is capable of compliance with relevant planning policy and legislation and can deliver net benefits for wildlife biodiversity and ecosystem resilience.

Appendix EDP 1
Illustrative Masterplan
(Hammond Architectural Ltd, IMP-01, Jan 26)



ACTIVE TRAVEL CONNECTIVITY

- Footpath connection
- Active Travel Route / Emergency Access with retained existing private access to rear property via bridleway
- Retained Bridleway *
- Retained PROW - formal footpath *
- Retained PROW - informal trail *
- Accessible recreational footpath (indicative)
- Informal woodland trail (indicative)

* Bridleway/PROW routes indicatively marked for illustrative purposes only and should not be relied upon as definitive legal alignments.

KEY PRINCIPLES

KEY

- Red Line Boundary (11.8HA)

Built Form & Use

- Residential
- Mixed-use Community Hub

Community, Recreation & Landscape

- Parkland - Formal Public Open Space
- Informal Public Open Space
- Eco-Tone Planting (maintenance & PROW access only)
- Proposed growing space / allotment
- Landscaped Based Play
- Disaggregated LEAP

Infrastructure

- Street Network with integrated roadside SUDS features
- Bus Loop
- BUS STOP Indicative Bus Stop
- Sub Station

REV.	DESCRIPTION	DATE
A	Mplan and key updated	04/06/26

CLIENT: Codi Group

JOB TITLE: Leiros Park Outline Planning Application

DRAWING TITLE: Illustrative Masterplan

SCALE @ A3	DATE	DRAWN BY
1:2000	Jan' 26	GB

2421 IMP-01

hammond Architectural Ltd
10 Gold Tops
Newport
NP20 4PH
t. 01633 844970
e. info@hammond-ltd.co.uk
www.hammond-ltd.co.uk

© Hammond Architectural Ltd 2024
Figured dimensions must be taken in preference to scaled dimensions and any discrepancies are to be referred to Hammond Architectural Ltd. Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any workshop drawings.

Appendix EDP 2
Green Infrastructure Strategy (Tir Collective Landscape Architects, TC24246_Leiros Park_v5.dwg, 16 June 2026)

codi

tir

Leiros Parc

Green Infrastructure Strategy

LA.**1**

Leiros

Proposed woodland

Ecotone

Ecotone

Ecotone

Ecotone

Ecotone

Ecotone

Ecotone

Ecotone

Ecotone

Ty Coch

Penfield

Active Travel Connection

Local Equipped Area of Play (LEAP)

Leiros Parc Drive

Vehicular Access

Dephne Road

Key

- Site boundary
- Existing trees to be retained. Root protection area shown as orange dash
- Existing tree/hedge canopy to be removed shown as red dash
- Proposed tree planting including native, fruiting and flowering species
- Proposed native woodland planting
- Proposed mixed native hedgerow planting
- Proposed hazel coppice and native shrubs
- Proposed native scrub
- Proposed roadside SuDS features
- Proposed grassland and scrub ecotone to ancient woodland with 15m and 30m buffer from ancient woodland
- Proposed species rich grassland
- Proposed amenity grassland
- Proposed growing space / allotment
- Retained Public Right of Way
- Proposed public route through green space
- Proposed landscape based play
- Proposed disaggregated LEAP
- Proposed mixed-use community hub

0 10 20 40 60 80 100 metres

Scale 1:1000 @ A1

North

TC24246_Leiros Park_v5.dwg

16 June 2026

tir collective
LANDSCAPE ARCHITECTS

Floor 7, Brunel House, 2 Fitzalan Road, Cardiff, CF24 0EB
© Tir Collective Limited 2026. Registered Company No. 13489264

Appendix EDP 3
Extended Phase 1 Habitat Survey and Botanical Survey

METHODOLOGY

Extended Phase Habitat Survey

A3.1 The survey technique adopted for the Extended Phase 1 habitat survey was at a level intermediate between a standard Phase 1 survey technique, involving habitat mapping and description, and a Phase 2 survey, based on detailed habitat and species surveys. The survey involved identifying and mapping the main habitat types (including Priority Habitats) and scoping any potential protected or Priority Species[25] populations. This level of survey is not intended to compile a complete floral and faunal inventory for the Site.

A3.2 The Extended Phase 1 habitat survey was undertaken by a suitably experienced surveyor on 26 April 2024, during which the weather was dry with 80% cloud cover, no wind and 12°C. This was followed by an update Extended Phase I habitat survey completed on 19 March during which the weather was dry with 40% cloud cover, no wind and 13°C.

Limitations

A3.3 April is within the optimal period for undertaking an Extended Phase 1 habitat survey, such that survey completed during 2024 was not constrained by seasonal or climatic conditions. Whilst an update survey was undertaken during March 2026 this is not considered a limitation to survey effort, particularly given the nature of habitats present and the objective of the survey being to confirm the existing ecological baseline for the Site.

A3.4 Surveys were limited to recording plant species present in both vegetative and floristic forms at the time of survey. The lack of any species record from this report cannot be taken to automatically infer species' absence from the Site.

Detailed Botanical Survey and SINC Assessment

A3.5 Following identification of an acid grassland community exhibiting relatively greater botanical diversity compared to the rest of the Site, a detailed botanical survey of field **F5** (**Plan EDP 3**) was undertaken on 21 August 2024 to provide a more robust assessment of its botanical diversity and condition.

A3.6 The survey adopted the DAFOR methodology whereby all vascular plant species (and bryophytes where identifiable) were identified and assigned one of the following abundance levels within the surveyed habitat: D = Dominant (over 75%); A = Abundant (51–75%;); F= Frequent (26–50%); O = Occasional (11–25%); and R = Rare (1–10%). It should be noted that the percentages are taken as a visual approximation across the entirety of each specified habitat parcel.

A3.7 The data from this survey was assessed against criteria documented within the Guidance for the Selection of Wildlife Sites in South Wales produced by the Gwent Wildlife Trust on behalf of

[25] Species considered of key significance to sustain and improve biodiversity in Wales, as defined under Section 7 of Part 1 of the Environment (Wales) Act 2016.

the South Wales Wildlife Sites Partnership (2004) (hereafter referred to as 'the SINC guidance handbook') to provide an indication of its overall condition and floristic diversity.

Limitations

A3.8 The survey was completed within the optimal period for an assessment of grassland habitats albeit at the end of this period such that some early-flowering species were no longer identifiable. In addition, the heavily grazed nature of much of the sward means that it is likely that some species of plant, in particular grasses, will not have been identifiable for survey purposes. More species may thus be present than currently reported here. Nevertheless, the survey followed an Extended Phase I Habitat survey completed in April 2024 where any key, early flowering species may have been identified.

RESULTS

A3.9 The principal habitats within the Site together with their dominant/characteristic plant species identified during the surveys are discussed in turn below.

A3.10 The following should be read in conjunction with **Plan EDP 3** and illustrative photographs are provided where appropriate.

Poor Semi-improved Grassland

A3.11 The majority of fields within the Site (**F1**–**F4**) are relatively species-poor, which was circa 0.2–0.3m tall at the time of survey and left to grow over the spring and summer months before being subject to a hay cut prior to end-September 2024.

A3.12 The sward was dominated by Yorkshire fog (*Holcus lunatus*) with abundant perennial ryegrass (*Lolium perenne*). Common bent (*Agrostis capillaris*) was frequent alongside creeping buttercup (*Ranunculus repens*) whilst cock's-foot (*Dactylis glomerata*), sweet vernal grass (*Anthoxanthum odoratum*), stitchwort (*Stellaria* sp.), dandelion (*Taraxacum* sp.) and broadleaved plantain (*Plantago plantain*) were also recorded. Red fescue (*Festuca rubra*) and broadleaved dock (*Rumex obtusifolius*) otherwise occurred occasionally. Redshank (*Persicaria maculosa*) and cuckoo flower (*Cardamine pratensis*) was present rarely where the grass was slightly damper. A localised patch of wet grass was also recorded within the south-east corner of field **F3**, where occasional patches of soft rush (*Juncus effusus*) were recorded (refer to **TN1** on **Plan EDP 3**).



Image EDP A3.1: Field **F1** looking east.



Image EDP A3.2: Field **F3** looking south-east.

A3.13 Given the comparatively species-poor composition of the grassland sward across these areas, and the common nature of this habitat within the local area, poor semi-improved grassland is judged to be of Site level importance.

Semi-improved Neutral/Acid Grassland

A3.14 A significant part of field **F5** comprises wide margins with no grassland interest where bracken (*Pteridium aquilinum*), Himalayan balsam (*Impatiens glandulifera*), foxglove (*Digitalis purpurea*) and common gorse (*Ulex europaeus*) are locally dominant with bramble (*Rubus fruticosus* agg). occasionally.



Image EDP A3.3: Eastern margin of field **F5** with a broad band of bracken, foxglove and some bramble.

A3.15 The remainder of the field is subdivided by an access track with the majority of the field located to the east of the track with a smaller area of the west, the latter abutting the western boundary of the Site here. The area of the field to the west of the track exhibits a slightly more waterlogged character than the rest of the field and is essentially marshy grassland; it is here where redshank, American willowherb (*Epilobium ciliatum*), marsh cudweed (*Gnaphalium uliginosum*), toad rush (*Juncus bufonius*), and water-pepper (*Persicaria hydropiper*) are mostly found. However, there is also a small patch of trailing St John's-wort (*Hypericum humifusum*), indicative of semi-improved acid grassland conditions (no other acid grassland indicators were present in this location), together with a small patch where black knapweed (*Centaurea nigra*) is common and thus indicative of neutral grassland conditions.

A3.16 The remainder of the grassland is largely a semi-improved neutral grassland sward where common cat's-ear (*Hypochaeris radicata*) and autumnal hawkbit (*Leontodon autumnalis*) are

abundant and white clover (*Trifolium repens*) also locally abundant along with common bird's-foot trefoil (*Lotus corniculatus*). The sward was too tightly grazed here to accurately determine grass species presence and relative abundance.

A3.17 Amongst this matrix of semi-improved neutral grassland there are small pockets of semi-improved acid grassland where trailing St John's-wort, sheep's sorrel (*Rumex acetosella*), and heath bedstraw (*Galium saxatile*) are recorded at low frequency alongside a species of foliose lichen. Sheep's sorrel, however, is the most frequently recorded of the acid grassland indicators and can be locally frequent even in parts of the sward which are otherwise clearly semi-improved neutral grassland. Small quantities of corn spurrey (*Spergula arvensis*) were also recorded here; this is a species indicative of disturbed ground on acidic soils and has become uncommon in many lowland areas of England but remains fairly common in Wales.



Image EDP A3.4: Field **F5** looking south.

A3.18 There are also two large patches of coarser and species-poor grassland in the centre of the Site. These represent horse latrines and thus they have very high nutrient loads, which favour coarse grasses and herbs. Their status as latrines also means that horses do not graze them thus exacerbating the tall, coarse and species-poor nature of these areas. These latrines have a poor semi-improved sward and support much common ragwort (*Senecio jacobaea*). Of particular note, however, was the record of a small population of waxcaps in the south of the field, most probably *Hygrocybe coccinea*, which are becoming increasingly uncommon. A species list for field **F5** is provided in **Table EDP A3.1**.

A3.19 For the field to be meet the criteria for SINC quality neutral grassland, there is a requirement for at least eight species from the SINC guidance handbook's neutral grassland indicator list to

be present. However, only five species from that list were recorded during the survey. In addition, for the field to be considered for designation as an acid grassland SINC there is a requirement for at least seven species from the SINC guidance handbook's acid grassland indicator list to be present. However, only four species from that list were recorded.

A3.20 Semi-improved neutral and acid grassland supported by field **F5** is considered to be of Local level importance.

Semi-natural Broadleaved Woodland

A3.21 The eastern boundary of the Site (adjacent to fields **F1** and **F2**) is defined by semi-natural broadleaved woodland which, for the most part, slopes steeply downwards away from the Site towards the settlement of Cadoxton in the south-east. Further north, adjacent to the eastern and north-eastern corners of field **F2**, the woodland becomes sparser, with scattered mature and semi-mature trees amongst open grassland areas and/or a dense bramble understorey. The woodland is dominated by semi-mature/mature pedunculate oak (*Quercus robur*) with occurrences of ash (*Fraxinus excelsior*) sycamore (*Acer pseudoplatanus*) and silver birch (*Betula pendula*). Blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquilinum*) and hazel (*Corylus avellana*) are present within the understorey. The boundary edge of woodland habitat within the Site is characterised by a circa 3–4m wider fringe of bramble with bracken and hemp agrimony (*Eupatorium cannabinum*) also recorded here. Bluebell (*Hyacinthoides non-scripta*), lesser celandine (*Ficaria verna*) and herb Robert (*Geranium robertianum*) were recorded occasionally within this marginal habitat as well as comprising the ground flora community present within the woodland interior, particularly within the northern most corner of field **F1** where woodland here overlaps with an ASNW designation.



Image EDP A3.5: Broadleaved woodland along eastern boundary of field **F1**.



Image EDP A3.6: More scattered remnants of broadleaved woodland along eastern edge of field **F2**.

A3.22 A small, linear belt of woodland also defines the southern boundaries of fields **F4** and **F5**. Semi-mature/mature sycamore is abundant here whilst the understory is characterised by holly, hazel, hawthorn and goat willow (*Salix caprea*) with much bramble and locally frequent pendulous sedge (*Carex pendula*) to the south of field **F4**. Further west along the southern boundary of field **F5** the woodland becomes thinner comprising more scattered trees including mature sycamore which have established along an historic earth bank, with Himalayan balsam, bracken and grassland species representing the ground flora community here. Himalayan

balsam was often recorded here. There are several clearings within this woodland belt, accommodating exiting access tracks between the adjacent bridleway and two distinct groups of disused agricultural buildings. Much of these open areas have been colonised by dense bramble scrub with only a few scattered trees. Bluebell, wild garlic and broad bucker fern (*Dryopteris dilatata*) are visible in the understorey.

A3.23 Broadleaved woodland comprises a Priority Habitat for Wales and thus considered to be of Local level importance with those areas overlapping with the boundaries of ASNW woodland elevated to County level importance.

Dense and Scattered Scrub

A3.24 The boundaries between internal fields are typically characterised by defunct tree lines and outgrown hedgerows, gaps within which have been colonised by dense and scattered bramble scrub. Bramble is also abundant within the field margins along the northern boundary of field **F1** and northern boundary of field **F2**. Bramble scrub is particularly abundant along the northern boundary of the Site which is defined by a stone-built wall, overcome with scrub growth. Other species were often recorded within the scrub including several grassland species, hemp agrimony, bracken and occasionally bluebell and foxglove with aggregations of the latter particularly noticed along the northern boundary of the Site. Along the northern boundary of field **F2**, Himalayan balsam was also present in some abundance.



Image EDP A3.7: Dense bramble scrub along northern boundary of the Site.

A3.25 Field **F6** in the southernmost corner of the Site is almost entirely dominated by dense bramble scrub with some scattered shrubs. Where patches of grassland are visible, predominantly along the boundary with adjacent residential housing, Yorkshire fog, red fescue, and creeping buttercup is visible.

A3.26 Overall, dense scrub is considered to be of negligible ecological importance given its poor structural and botanical diversity.

Native Hedgerows

A3.27 The northern and western boundary of field **F1** are defined by a species-poor native hedgerow, reinforced with post and rail stock fencing, the latter forming the curtilage to a residential property. Hedgerow **H1** comprises a line of outgrown shrubby trees circa 8m high and 3m wide. Hawthorn, blackthorn, field maple (*Acer campestre*), hazel and wild cherry (*Prunus avium*) were recorded here in addition to bramble and sycamore. A ground flora community is species-poor, dominated by common ivy (*Hedera helix*) with occasional cleaver (*Galium aparine*), broadleaved dock and common nettle (*Urtica dioica*).

A3.28 Hedgerow **H2** is notably defunct, only extending partway across the northern boundary of field **F1** with occasional occurrences of immature oak (*Quercus* sp.), hawthorn, holly, rowan (*Sorbus aucuparia*), elder (*Sambuca nigra*) silver birch and goat willow amongst bramble scrub. Broad buckler fern, lesser stitchwort (*Stellaria graminea*) and bluebell are present within the ground flora community.

A3.29 Hedgerow **H7** is an outgrown line of holly trees colonising an earth bank with some semi-mature/mature sycamore, silver birch and rowan with a ground community dominated by common ivy with occasional foxglove visible. Access was limited here such that a full assessment of this boundary could not be completed.

A3.30 Hedgerow **H9** is an outgrown hedgerow/tree line circa 10m high and 5m wide located offsite and defining the far southern boundary of field **F3** with the adjacent bridleway. A thick band of mixed scrub is present within the Site along this hedgerow boundary. Scrub here is again dominated by bramble but with occasional hazel, hawthorn and oak and willow, alongside some scattered semi-mature sycamores, which are contiguous with sycamore dominated woodland to the west. The hedgerow itself is located atop an earth bank and comprises rowan, holly, hazel, hawthorn and field maple with greater stitchwort (*Stellaria holostea*), herb Robert, wild garlic, primrose and hart's-tongue (*Asplenium scolopendrium*) present in the field layer although introduced species such as laurel, which have presumably escaped from adjacent residential houses. Of further pertinence, the hedgerow travels parallel to a wet ditch such that water mint (*Mentha aquatica*) and meadow buttercup (*Ranunculus acris*) is locally frequent here.

A3.31 Being in association with earth banks delineating field boundaries and characterised by semi-mature/mature specimens, boundary tree lines are considered to be of Local level importance.



Image EDP A3.8: Hedgerow **H9** visible to left of the photo marking the northern boundary of the adjacent bridleway.



Image EDP A3.9: Hedgerow **H2**.

A3.32 Although predominantly defunct and species-poor, hedgerows comprise a Priority Habitat for Wales and thus are considered to be of Local level importance.

Line of Trees

A3.33 Field boundaries **H3**–**H6** and **H8** are defined by a scattered line of semi-mature/mature trees colonising an earth bank, sometimes with remnants of a drystone wall visible. Semi-mature/mature pedunculate oak is typically the dominant specimen, with silver birch and sycamore occurring rarely. Small shrubs are often present within the understorey and include hawthorn, hazel, wild cherry and holly. A ground flora community is typically scattered in its distribution, dominated by common ivy but with occurrences of broad buckler fern, lesser stitchwort, foxglove and bluebell. Himalayan balsam (**TN2**) was frequently recorded in association with **H3** and associated bramble scrub. **H5** encompasses a small copse of predominantly immature trees, which has colonised a steep earth mound near the north-western corner of field **F4**. Specimens recorded here include oak, holly and silver birch with some bramble and European gorse.



Image EDP A3.10: Looking towards the north-west corner of field **F2** with **H3** and **H4** in the background.



Image EDP A3.11: Atop the earth mound in the north-west corner of field **F4**.

Running Water

A3.34 The southern boundary of field **F3** is also defined by a wet ditch, which has its source near the junction with field boundaries **H2**, **H4** and **H9**. Much of the watercourse here is inaccessible due to dense scrub. Where visible, the uppermost reach is characterised by a circa 40cm wide channel with a substrate dominated by silt, being largely dry or otherwise only supporting shallow pools of water, c.1cm deep. The watercourse flows in a westerly direction, veering offsite and following the alignment of the bridleway, before flowing closer towards the southern boundary of field **F5**. Here, the channel is typically 1.5m wider with a silt substrate and c.5cm water depth. Both the northern and southern banks of the watercourse are relatively steep (45° angle) and sparsely vegetated with scattered patches of bramble, ferns, Himalayan balsam and grass species associated with adjacent woodland habitat. In-channel vegetation is absent, growth of which is likely suppressed by overhanging mature/semi-mature trees.

A3.35 The watercourse adjacent to the Site presumably comprises the headwaters of an unnamed tributary, which eventually flows into the River Clydach c.700m downstream of the Site. Although appearing poor in channel and hydrological diversity, the stream is considered to qualify as Priority Habitat for Wales and is thus considered to be of Local level importance.



Image EDP A3.12: Wet ditch along the southern boundary of the Site.

Buildings

A3.36 A group of disused outbuildings and sheds are present within a woodland clearing adjacent to the southern boundary of field **F4**, accessed via a dirt track. A full description of each building is provided within **Appendix EDP 6**. Buildings are considered to be of negligible ecological importance given their low distinctiveness.

Other Features

A3.37 Other habitat features identified onsite included boundary stone walls and post and rail fences alongside discrete patches of tall ruderal vegetation dominated by common nettle. Such features are considered to be of negligible ecological importance given their low distinctiveness and/or limited extent.

Table EDP A3.1: Field **F5** Species Recorded and DAFOR. (Records in bold are species identified as indicators of acidic and/or neutral grasslands according to the SINC designation handbook. The bracketed letters N and A indicate whether those species are of Neutral or Acid grasslands)

Common Name	Scientific Name	DAFOR
Yarrow	*Achillea millefolium*	O/LF
Common bent	*Agrostis capillaris*	A
Brown bent	***Agrostis vinealis***	**R (A)**
Daisy	*Bellis perennis*	R
Silver birch seedlings	*Betula pendula*	R
Black knapweed	***Centaurea nigra***	**O/LF (N)**
Common mouse-ear	*Cerastium fontanum*	R
Foxglove	*Digitalis purpurea*	O/LA
American willowherb	*Epilobium ciliatum*	R
Heath bedstraw	***Galium saxatile***	**R (A)**
Marsh cudweed	*Gnaphalium uliginosum*	O/LF
Creeping soft grass	*Holcus mollis*	O
Yorkshire fog	*Holcus lanatus*	A
Trailing St John's-wort	***Hypericum humifusum***	**R/LO (A)**
Common cat's-ear	***Hypochaeris radicata***	**A (N)**
Himalayan balsam	*Impatiens glandulifera*	F/LA
Toad rush	*Juncus bufonius*	O/LA
Soft rush	*Juncus effusus*	R
Autumn hawkbit	*Leontodon autumnalis*	F/LA
Perennial ryegrass	*Lolium perenne*	O
Common bird's-foot trefoil	***Lotus corniculatus***	**O/LA (N)**
Field woodrush	***Luzula campestris***	**R/LO (N)**
Water-pepper	*Persicaria hydropiper*	R
Redshank	*Persicaria maculosa*	R
Ribwort	*Plantago lanceolata*	F
Greater plantain	*Plantago major*	O
Annual meadowgrass	*Poa annua*	O
Silverweed	*Potentilla anserina*	O
Selfheal	*Prunella vulgaris*	F
Bracken	*Pteridium aquilinum*	F/LD
Creeping buttercup	*Ranunculus repens*	F
Sheep's sorrel	***Rumex acetosella***	**F (A)**
Broad-leaved dock	*Rumex obtusifolius*	O

Common Name	Scientific Name	DAFOR
Annual pearlwort	*Sagina apetala*	R
Common ragwort	*Senecio jacobaea*	F
Corn spurrey	*Spergula arvensis*	O
Dandelion	*Taraxacum officinale agg.*	R
Lesser trefoil	*Trifolium dubium*	R
Red clover	***Trifolium pratense***	**O (N)**
White clover	*Trifolium repens*	A
Common gorse	*Ulex europaeus*	O/LF
Nettle	*Urtica dioica*	O
Thyme-leaved speedwell	*Veronica serpyllifolia*	R

Appendix EDP 4
Hedgerow Survey

METHODOLOGY

A4.1 An assessment of the entire hedgerow network onsite was undertaken on 26 April 2024, to determine its importance with reference to the Wildlife and Landscape criteria provided in Part II of Schedule 1 of the *Hedgerows Regulations* 1997. The results were subsequently ground truth during an update Extended Phase I habitat survey on 19 March 2026. The *Hedgerows Regulations* 1997 serve the purpose of ensuring the retention of important countryside hedgerows; their removal only being approved by the relevant local authority via a Hedgerow Removal Notice or as part of a planning permission.

A4.2 The aims of the hedgerow assessment were to:

- Identify hedgerows that are classified as important under the ecological criteria of the *Hedgerows Regulations* 1997; and

- Identify hedgerows that, although not deemed important under the ecological criteria of the *Hedgerows Regulations* 1997, have ecological value in terms of species diversity or as potential wildlife corridors.

A4.3 A total of four shrubby hedgerows (**H1**, **H2**, **H7** and **H9**) and five tree lines (**H3**–**H6** and **H8**) located within or adjacent to the Site were surveyed against the *Hedgerows Regulations* 1997 criteria. Hedgerows qualify for assessment by exceeding 20m in length or by being connected at both ends to another hedgerow of any length. The middle 30m of all hedgerows up to 100m in length were surveyed, whilst the central 30m of each half of hedgerows up to 200m in length were surveyed. For hedgerows exceeding 200m in length, the central 30m section from each third of the hedgerow was surveyed. Hedgerows surveyed were assigned points dependent upon the number of qualifying 'features' as defined by the *Hedgerows Regulations* 1997, with total scores per hedgerow determining their status.

A4.4 Qualifying as important under the ecological criteria requires the hedgerow to be greater than 30 years of age.

A4.5 Further to this a hedgerow should be considered important should if it satisfies any of the following criteria:

- Must either contain (or have a record of having contained) species listed in Schedule 5 (animals) or 8 (plants) of the *Wildlife and Countryside Act* 1981 (as amended), birds categorised as declining breeders (Category 3) within the 'Red Data Birds in Britain' (Batten 1990), or any species categorised as 'endangered', 'extinct', 'rare' or 'vulnerable' by any of the British Red Data Books; or

- Contains one of the following criteria per average 30m section surveyed:

    - Seven Schedule 3 (woody) species;

- Six Schedule 3 species and three listed features (see below);
- Six Schedule 3 species, including one of the following – black poplar (*Populus nigra* subsp. *betulifolia*), large-leaved lime (*Tilia platyphyllos*), small-leaved lime (T*ilia cordata*) or wild service-tree (S*orbus torminalis*); or
- Five Schedule 3 species and four listed features; or
- Four Schedule 3 species, two listed features and lying adjacent to a bridleway or footpath; with listed features including:
    a) A bank or wall, which supports the hedgerow along at least one half of its length;
    b) Gaps, which in aggregate do not exceed 10% of the length of the hedgerow;
    c) Where the length of the hedgerow does not exceed 50m, at least one standard tree;
    d) Where the length of the hedgerow exceeds 50m but does not exceed 100m, at least two standard trees;
    e) Where the length of the hedgerow exceeds 100m, such number of standard trees (within any part of its length) as would when averaged over its total length amount to at least one for each 50m;
    f) At least three woodland species within 1m, in any direction, of the outermost edges of the hedgerow;
    g) A ditch along at least one half of the length of the hedgerow;
    h) Connections scoring four points or more; and
    i) A parallel hedge within 15m of the hedgerow.

A4.6 It is recognised that, with reference to the *Hedgerow Regulations* (1997), certain animal species listed in the *Wildlife and Countryside Act* 1981 (as amended) or by the Joint Nature Conservation Committee (JNCC) that could result in a hedgerow being recognised as important, may have gone unrecorded due to the timing and nature of the survey. Indeed, the use of the hedgerow by such species may be seasonal or at particular periods during the day. Whilst the full survey of such species falls outside the scope of the hedgerow survey, incidental sightings recorded during the hedgerow survey and records retrieved during the desk study were re-assessed for these species. In addition, data gained through relevant protected species surveys has also been considered.

Limitations

A4.7 The optimum time for undertaking hedgerow assessments is between April and September when species predominantly associated with hedgerows are in flower. As such, there were no seasonal nor climatic constraints to this survey.

A4.8 It is recognised that, with reference to the *Hedgerow Regulations* 1997, certain species of bird or animals listed in the *Wildlife and Countryside Act* 1981 (as amended) or by the JNCC, that could result in a hedgerow being recognised as 'important', may have gone unrecorded due to the timing and nature of the survey. Indeed, the use of the hedgerow by such species may be seasonal or at particular periods during the day.

RESULTS

A4.9 The detailed results of the hedgerow surveys undertaken are provided in **Table EDP A4.1**. The location of hedgerows assessed within the Site is shown in **Plan EDP 3**. All hedgerows within the Site have existed for over 30 years.

A4.10 In summary, of the hedgerows surveyed, only hedgerow **H9**, qualifies as 'important' under the *Hedgerows Regulations* (1997) criteria owing to its species-richness, ground flora community with woodland indictors, and associated hedgerow features including a bank, watercourse and PRoW.

A4.11 The remaining hedgerows/tree lines surveyed sections did not qualify as 'important' under the *Hedgerows Regulations* 1997.

A4.12 All hedgerows/tree lines within the Site are considered to be Priority Habitats as consist predominantly (80% or more) of at least one woody UK native species.

A4.13 The hedgerows onsite have inherent ecological value and also have value because they support, or are likely to support, a range of protected and notable species. However, hedgerows of this nature are very common within the county and thus are considered to have Local level importance.

Table EDP A4.1: Hedgerow Survey Results

Hedgerow Number	Schedule 3 Species Recorded	Mean Count of Schedule 3 Species	Number of Schedule 2 Woodland Plants	Bank/Wall Present	Any Gaps are less than 10%	Standard Trees (min. 1/50m)	Ditch	Connections (4 or >4)	Parallel Hedge	Adjacent footpath, Bridleway, Road Used as Path, or BOAT	Contains rare or notable species	Important Hedgerow
H1	Field maple, hawthorn, hazel, wild cherry	4	0	N	Y	N	N	3	N	N	N	N
H2	Elder, goat willow, hawthorn, holly, oak, rowan, silver birch	5	2	Y	N	N	N	3	N	Y	N	N
H3	Hawthorn, holly, oak, silver birch	3	2	Y	N	Y	N	3	N	Y	N	N
H4	Hawthorn, holly, oak	3	1	Y	N	Y	N	4	N	Y	N	N
H5	Hawthorn, holly, oak, wild cherry	3	1	Y	N	Y	N	3	N	N	N	N
H6	Holly, oak, rowan, silver birch	3	1	Y	N	Y	N	4	N	N	N	N
H7	Rowan, silver birch, holly	3	0	Y	N	Y	Y	4	N	N	N	N
H8	Oak	1	1	Y	N	Y	N	3	N	N	N	N
H9	Field maple, hawthorn, hazel, holly, oak, privet, rowan	5	4	Y	Y	Y	Y	6	Y	Y	N	Y

Appendix EDP 5
Breeding Bird Survey

METHODOLOGY

A5.1 Survey visits during 2024 were spread evenly between late March and early July to cover the main bird breeding season whilst a single update breeding bird survey was completed on 15 May 2026 to determine any significant changes in the underlying baseline for a breeding bird assemblage. Visits were started within half an hour from dawn and timed to ensure they were completed prior to 11a.m. to cover the peak activity period. The dates and timings of breeding bird survey visits undertaken in 2024 and 2026, and the weather conditions encountered, are summarised in **Table EDP A5.1**.

Table EDP A5.1: Breeding Bird Survey Visit Details

Visit Number	Date	Timing of Survey	Wind Speed (Beaufort Scale)	Cloud Cover (%)	Precipitation
1	03.05.2024	07:30–09:30	0–1	100%	One brief rain shower.
2	23.05.2024	06:30–08:30	1–2	100%	Nil.
3	19.06.2024	06:00–08:00	2	10–20%	Nil.
4	15.05.26	04:05-06:07	3-4	20-40%	Nil

A5.2 During each visit the Site was walked at a slow pace to enable all birds detected to be identified and located. Frequent stops were made to scan suitable habitats and to listen for singing and calling birds. All areas of suitable breeding habitat within the Site boundary and immediately adjacent areas were approached to within 50m.

A5.3 During the survey the location and activity of each bird detected (including those seen or heard) was recorded and mapped using standard two-letter British Trust for Ornithology (BTO) species codes. The breeding status of each bird species identified at the Site was determined according to the nature and frequency of the behavioural elements recorded, as set out in **Table EDP A5.2**.

Table EDP A5.2: Field Evidence Used to Determine Bird Breeding Status

Breeding Status	Examples of Behaviour Exhibited
Confirmed	• Distraction display; • Nest building; • Nest with eggs; • Nest with young; • Used nest; • Recently fledged young; and • Adult carrying faecal sac/food.

Breeding Status	Examples of Behaviour Exhibited
Probable	• Pair observed in suitable nesting habitat in breeding season; • Permanent territory presumed through registration of territorial behaviour (song, etc.) on at least two different occasions, a week or more apart at the same place; • Courtship and display; • Visiting a probable nest site; • Agitated behaviour or anxiety calls from adults; • Brood patch on adult examined in the hand; and • Nest building or excavating nest-hole.
Possible	• Species observed in breeding season in possible nesting habitat • Male in song; and • Adult giving alarm call.
Non-breeder	• Feeding birds only; • Birds flying over only; and • Lack of suitable breeding habitat.

A5.4 To inform the assessment in this report, the numbers of potential territories identified, the abundance of species at the County and National level, the quality of the habitat present and the geographical range of the birds concerned have been considered, based on national and regional accounts.

A5.5 The conservation status of each species of bird was also taken into account and the following lists were considered:

- Schedule 1 of the *Wildlife and Countryside Act* 1981 (as amended) – affords greater protection to certain breeding species that are considered appropriately at risk nationally and are listed additional legal protection accordingly;
- Priority Species; and
- Birds of Conservation Concern[26] – under this approach Wales's bird populations are assessed, using quantitative criteria, to determine the population status of each species and then placed on one of three lists: Red, Amber or Green.

Limitations

A5.6 As with all breeding bird surveys following this technique, the process is open to some subjectivity in interpretation except where active nests are located. Therefore, recorded locations indicate the 'centre' of a territory and not necessarily the breeding location.

[26] Johnstone, I.G., Hughes, J., Balmer, D.E., Brenchley, A., Facey, R.J., Lindley, P.J., Noble, D.G. & Taylor, R.C. 2022. *Birds of Conservation Concern Wales 4: the population status of birds in Wales*. Milvus 2:1.

A5.7 Following best practice, the survey visits were timed to start around first light, to coincide with the period of peak activity for birds, most particularly passerine songbird species. They were also undertaken during suitable weather conditions, i.e. days/periods with strong winds and heavy or persistent rain were generally avoided. The results are therefore not significantly limited by seasonal or climatic factors.

RESULTS

A5.8 A total of 30 bird species were recorded during the surveys, of which six were confirmed as breeding on or immediately adjacent to the Site, seven were recorded as probably breeding and seven were recorded as possibly breeding. Of these, 29 bird species were recorded during 2024, with a survey undertaken during May 2026 recording a total of 17 species, including tawny owl (*Strix aluco*) which was not previously recorded during 2024. Full details of each species recorded, including their breeding status on-site and their conservation status, are provided in **Table EDP A5.3**.

A5.9 Of the 13 bird species that were recorded as breeding or probably breeding on-site, five are species of nature conservation importance, namely being listed on Schedule 1 of the *Wildlife and Conservation Act* 1981 (as amended), being a Priority Species and/or being species included on the latest Red and Amber lists of Birds of Conservation Concern. The distribution of these species recorded within the Site is shown on **Plans EDP 6** to **9**.

A5.10 Overall, the abundance and diversity of bird species recorded on-site was consistent with the extent and diversity of nesting habitats present, perhaps relatively lower than other greenfield sites albeit not unexpected given the dominance of defunct tree lines subdividing agricultural fields, replaced in areas with stone walls and post and rail fence lines. Whilst only 17 species were recorded during the update breeding bird survey in 2026, this is not unexpected given an assessment is based on one survey only. The species assemblage during 2026 was otherwise comparable to that recorded during 2024.

A5.11 The majority of species were recorded in association with woodland boundaries along the eastern and southern boundaries of the Site with adjacent residential housing also offering some nesting opportunities for house sparrow, an Amber listed Priority Species. There was an absence of specialist woodland species, however, with the majority of bird species recorded being garden variety species, typical of an urban edge environment. A single tawny owl was, however, recorded onsite during May 2026.

A5.12 No ground nesting birds were identified within the Site, which was not unexpected given the small size of the fields themselves and the relative unsuitability of agricultural grassland for nesting, being subject to grazing and homogeneous in nature.

A5.13 Gulls were occasionally recorded flying over or landing within the Site during 2024 such that it is considered of some value as a foraging resource whilst buzzard, a Green listed species was recorded flying over woodland offsite to the east and across the Site during the first and second survey visit respectively. Overall, however, no significant assemblages/populations of breeding and non-breeding birds were recorded during survey effort. The breeding bird assemblage is judged to be of no greater than Local ecological importance.

Table EDP A5.3: Results of the Breeding Bird Survey 2024 - 2026

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Blackbird	*Turdus merula*	Green List	Confirmed	2–6	Visit 1: Two alarm calling individuals recorded in association with field **F1** with calling individuals also recorded in association with vegetation along the southern boundary. Several individuals also recorded either landing within or taking flight from the Site. An aggressive encounter was recorded between two individuals within southern boundary woodland. Visit 2: Singing/alarm calling individuals recorded on several occasions during survey, all in association with woodland habitats and hedgerow boundaries. Visit 3: Blackbird carrying food within woodland along the western boundary of field **F5**. Up to 13 individuals recorded across the Site, predominantly in association with woodland boundaries with the majority exhibiting no breeding behaviour (only one calling). Visit 4 (2026): Singing/alarm calling individuals during survey, predominantly in association with woodland along eastern and southern boundaries of the Site with one individual within hedgerow **H2**.
Blackcap	*Sylvia atricapilla*	Green List	Probable	3–4	Visit 1: Singing individuals recorded on seven occasions during survey, all in association with woodland habitats across the southern and eastern extents of the Site. Visit 2: Singing individuals recorded on six occasions during survey, all in association with woodland habitats across the southern and eastern extents of the Site. Visit 3: Three singing individuals within woodland along the southern boundary of field **F4** with a forth individual along the eastern boundary of field **F2** and an alarm calling individual taking flight from field **F1**. Visit 4 (2026): A total of five singing individuals in association with woodland along eastern and southern boundaries of the Site.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Blue tit	*Cyanistes caeruleus*	Green List	Confirmed	4	Visit 1: Three individuals recorded in association with field **F5** boundaries either calling, alarm calling or singing with another five individuals recorded across the Site, predominantly in association with woodland habitat. Single individual recorded carrying food within the north-west corner of field **F2**. Visit 3: Three calling individuals, predominantly along the northern boundary of the Site with an alarm calling individual within field **F5** along the western boundary. Visit 4 (2026): Two singing individuals; one within hedgrow **H6** and one within southern boundary woodland
Bullfinch	*Pyrrhula pyrrhula*	Amber List Priority Species	Probable	2–5	Visit 1: Calling individual within the north-west boundary of field **F4** and a further four singing/calling/alarm calling individuals in association with woodland habitat along the southern and eastern boundaries of the Site. Visit 2: Female bullfinch observed landing within vegetation along the eastern boundary of Site. Visit 3: Single individual flying over the Site over woodland along the southern boundary of field **F4**.
Buzzard	*Buteo buteo*	Green list	Non-Breeder	N/A	Visit 1: Observed flying over woodland offsite to immediate east. Visit 2: Single individual flying across field **F3**.
Carrion crow	*Corvus corone*	Green List	Non-Breeder	N/A	Visit 1: Single carrion crow observed flying over field **F4**. Visit 3: Carrion crow observed landing within field **F5** with a family of four observed in field **F3**. Visit 4 (2026): One individual calling within hedgerow **H4**.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Chaffinch	*Fringilla coelebs*	Amber List Priority Species	Probable	1–2	Visit 1: Singing individual recorded within **H4**/**H9** and a second within eastern boundary woodland. Visit 2: One singing individual in association with **H6** and eastern boundary woodland. Visit 3: Two singing individuals on southern boundary of field **F5**. Visit 4 (2026): One singing chaffinch within southern boundary woodland.
Chiffchaff	*Phylloscopus collybita*	Green List	Probable	2–5	Visit 1: Three singing chiffchaff in association with the southern boundary woodland with a fourth recorded singing within the eastern boundary woodland. Visit 2: Five singing/alarm calling individuals associated with woodland along the eastern and southern boundaries of the Site. Visit 3: Five singing individuals and two alarm calling, scattered along the western, southern and eastern boundaries of the Site predominantly in association with woodland. Visit 4 (2026): Four singing individuals within eastern and southern boundary woodland.
Dunnock	*Prunella modularis*	Amber List Priority Species	Confirmed	3–4	Visit 1: Three singing dunnock, one along the northern boundary of the Site, one in association with the southern boundary and one in association with **H4**. Visit 2: Dunnock observed carrying food within woodland habitat adjacent to outbuildings with two singing and one alarm calling individual recorded within **H1**, **H4** and **H5**. Two juveniles also recorded in association with **H9**. Visit 3: Singing dunnock in hedgerow **H5**. and along the southern boundary of field **F3** with another two individuals observed within hedgerow **H4**. Visit 4 (2026): A single singing dunnock within southern boundary woodland.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Goldcrest	*Regulus regulus*	Red List Priority Species	Possible	1–2	Visit 3: Single singing goldcrest within the eastern boundary of field **F1** and within **H2** adjacent to southern boundary of field **F2**. Visit 4 (2026): A single singing goldcrest within southern boundary woodland.
Goldfinch	*Carduelis carduelis*	Green List	Possible	2–4	Visit 1: Alarm calling individual within the eastern boundary of field **F5** and hedgerow **H2** with singing individual in association with the southern boundary woodland. Visit 2: Group of five goldfinches flying across field **F5** with a further six individuals flying across fields **F1**–**F4**. Visit 3: Two calling, one alarm calling and one singing goldfinch within the southern boundary woodland of field **F4**. Single individual flying along edge of the eastern boundary woodland. Visit 4 (2026): A single calling individual within hedgerow **H4**.
Great tit	*Picus viridis*	Green List	Confirmed	2–5	Visit 1: Singing/calling individuals scattered across the Site. Visit 2: Single individual observed carrying food within **H9**. Visit 3: Alarm calling individual along the western boundary of field **F5**. Visit 4 (2026): A single singing individual within eastern boundary woodland.
Grey heron	*Ardea cinerea*	Amber List Priority Species	Non-breeder	N/A	Visit 1: Single individual flying over field **F1**.
Herring gull	*Larus argentatus*	Red List Priority Species	Non-breeder	N/A	Visit 1: Two gulls recorded flying over field **F3**. Visit 2: Single individual flying across field **F3**. Visit 3: Up to three individuals flying across field **F5**.
House martin	*Delichon urbicum*	Amber List Priority Species	Non-breeder	N/A	Visit 1: Three individuals observed flying over field **F1**.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
House sparrow	*Passer domesticus*	Amber List Priority Species	Confirmed (adjacent to site)	1–2	Visit 1: Two singing individuals recorded in association with offsite residential house adjacent to the western boundary of field **F1**. Visit 2: Singing individual recorded offsite along the bridleway adjacent to residential housing with a second singing individual recorded in association with a residential house adjacent to the western boundary of field **F1**. Visit 3: Single individual observed taking flight from field **F1** towards adjacent residential housing. Visit 4 (2026). A single singing individual within southern boundary woodland on the edge immediately adjacent to residential housing.
Jackdaw	*Corvus mondelua*	Green List	Non-breeding	N/A	Visit 1: Three jackdaws flying over field **F5** with a third observed flying over field **F1**. Group of 10 jackdaw observed in field **F4**. Visit 2: Three jackdaws observed flying over fields **F4**/**F5**. A fourth was seen carrying food whilst flying over field **F2**, albeit heading offsite to the east. Visit 3: Single jackdaw flying across field **F3** with two individuals flying across field **F2** heading offsite to the north. Visit 4 (2026): One jackdaw flying over field **F2** with a second calling from mature sycamores on southern edge of field **F6**.
Jay	*Garrulus glandarius*	Green List	Possible	1–2	Visit 1: Calling individual within **H2** and within woodland in north-east corner of field **F2**.
Long-tailed tit	*Aegithalos caudatus*	Green List	Possible	1	Visit 3: Single calling long-tailed tit within eastern boundary of field **F1**.
Magpie	*Pica pica*	Amber List Priority Species	Possible	1	Visit 1: One alarm calling magpie within the western boundary of field **F1** with other individuals recorded within the Site exhibiting no breeding behaviour. Visit 2: Single individual flying across field **F4**. Visit 3: Single individual in field **F5** exhibiting no breeding behaviour.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Marsh tit	*Poecile palustris*	Red List Priority Species	Possible	1	Visit 1: Singing individual within the woodland in the north-east corner of the Site.
Pheasant	*Phasianus colchicus*	Green List	Non-breeder	N/A	Visit 2: Calling pheasant identified offsite to the north.
Pied wagtail	*Motacilla alba*	Green List	Non-breeder	N/A	Visit 2: Single individual flying across field **F4**. Visit 3: Single individual in flight within field **F5**.
Robin	*Erithacus rubecula*	Green List	Probable	3–11	Visit 1: Up to five calling/singing individuals evenly scattered across the Site in association with field boundaries. Visit 2: Circa 11 singing/calling individuals in association with woodland/hedgerow boundaries across the Site. Visit 3: Three calling individuals within the southern boundary woodland with another three individuals otherwise observed, predominantly along the eastern woodland boundary. Visit 4 (2026): A total of five individuals predominantly recorded in association with southern boundary woodland with one robin recorded within mature tree lines at the northern edge of the Site.
Rook	*Corvus Frugilegus*	Red List Priority Species	Non-breeder	N/A	Visit 3: Four individuals observed flying over field **F1**.
Song thrush	*Turdus philomelos*	Green List	Confirmed	1–5	Visit 1: Singing song thrush moving across field **F5** with a second individual observed landing within field **F2**. Visit 2: Three singing song thrush recorded within east, west and south of the Site. Single song thrush observed carrying food over the southern boundary of the Site heading offsite. Visit 3: Five singing song thrush within the woodland along the southern and eastern boundaries of the Site. One individual observed carrying food between field **F1** and adjacent woodland.

Common Name	Scientific Name	UK Status	On-site Status	Estimated No. Breeding Pairs	Survey Observations
Starling	*Sturnus vulgaris*	Red List Priority Species	Non-breeder	N/A	Visit 3: Single/groups of starlings observed flying over the Site. Visit 4 (2026): A single common starling flying over field **F4**.
Tawny owl	*Strix aluco*	Green List	Possible	1	Visit 4 (2026): Tawny owl calling from southern boundary of field **F4**.
Woodpigeon	*Columba palumbus*	Green List	Probable	2–3	Visit 1: Single calling individual within the western boundary of field **F5** with a second singing individual within the north-east corner of the Site and a third within woodland along the southern boundary. A further individual observed flying over the Site. Visit 2: Two singing individuals recorded within the woodland along the southern boundary. A further individual observed flying over the Site or otherwise exhibiting non-breeding behaviour. Visit 3: Up to six individuals across the Site at different locations with a singing individual recorded with woodland along western boundary of field **F5**. Visit 4 (2026): Five individuals recorded across the Site predominantly in association with southern boundary woodland.
Wren	*Troglodytes troglodytes*	Green List	Probable	4–6	Visit 1: Singing individuals frequently recorded across the Site particularly in association with woodland habitat along the southern and eastern boundaries. Visit 2: Singing/calling individuals frequently recorded across the Site. Visit 3: Singing wren observed moving between two perches within the southern boundary woodland and within field **F4**. A further four singing individuals observed within woodland along the southern and eastern woodland boundaries. Visit 4 (2026): Four individuals, three of which were singing. In association with eastern and southern boundary woodland.

Appendix EDP 6
Bat Surveys

METHODOLOGY

A6.1 The scope of bat surveys undertaken at the Site was determined following completion of the Extended Phase 1 habitat survey and review of relevant desk study findings and with reference to best practice guidelines published by the Bat Conservation Trust[27].

Bat Roost Surveys

Ground Level Tree Assessment

A6.2 Owing to the presence of suitably mature trees within or adjacent to the Site, a Ground Level Tree Assessment (GLTA) of these trees was undertaken to record any external evidence of roosting bats or any features capable of supporting roosting bats that can be seen from the ground.

A6.3 The survey was completed on 26 April 2024 by an NRW bat licensed ecologist in accordance with the good practice guidelines referred to above, with an update survey completed on 19 March 2026. On each occasion the trees were searched as thoroughly as possible from ground level with all elevations covered where these could be accessed.

A6.4 Suitable features for roosting bats (Potential Roost Features – PRF) recorded (where present) include features formed by disease, decay, damage and association as listed within the guidelines published by the Bat Conservation Trust and detailed within the 'Bat Roosts in Trees' book[28]. In addition, bat, bird and dormouse boxes are also considered to provide potentially suitable roosting opportunities.

A6.5 Signs of roosting bat presence recorded (where present) include seeing a bat within a PRF, or finding bat droppings within, around or beneath a PRF. Other signs which could indicate a roost include smoothing of the entrance to a PRF, staining around or beneath a feature, audible squeaking from the roost at dusk or during warm weather, and large/regularly used roosts may produce a distinctive odour.

A6.6 The roost suitability of each tree was categorised as either:

- None – Either no PRFs in the tree or highly unlikely to be any;
- Further Assessment Required (FAR) – Tree is of a size, age or condition that is likely to have PRFs, further assessment is therefore required to establish if PRFs are present in the tree;
- PRF – Tree supports at least one PRF which is visible from the ground; and

[27] Collins, J. (ed.) (2016). *Bat Surveys: for Professional Ecologists: Good Practice Guidelines (3rd edition)*. The Bat Conservation Trust, London

[28] Andrews, H (2018). *Bat Roosts in Trees. A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.* Pelagic Publishing, Exeter.

- Confirmed roost – Signs of roosting bat presence were found within or around a PRF.

A6.7 For those trees categorised as having a 'PRF', an estimate was made as to whether each PRF visible from the ground was likely to suitable for individual bats (PRF-I) or multiple bats (PRF-M). It should be noted that this categorisation from ground level is an estimate only, as it is often not possible to establish the internal extent of a tree feature from ground level.

A6.8 For those trees categorised as having a 'PRF', an estimate was made as to whether each PRF visible from the ground was likely to suitable for individual bats (PRF-I) or multiple bats (PRF-M). It should be noted that this categorisation from ground level is an estimate only, as it is often not possible to establish the internal extent of a tree feature from ground level.

Limitations

A6.9 Bats are mobile animals and will move between a series of different tree roost sites, frequently establishing and occupying different potential roost features, depending on seasonal requirements and resources available locally. Furthermore, existing potential roost features on trees can be transient and new features formed regularly. This survey, therefore, only provides a snapshot of the conditions present at the Site at the time of survey.

A6.10 It should be noted that this type of assessment is based on features visible from ground level and is not considered to be a definitive bat roosting survey.

Aerial Inspection Survey of Trees

A6.11 An initial aerial inspection survey was undertaken on 28 August 2024 of all trees potentially impacted by the proposals that were identified during the GLTA (on 26 April 2024) as having potential to support individual bats (PRF-I), multiple bats (PRF-M) and trees which were identified to require further assessment (FAR). This included a total of 13 trees, namely **T1**, **T8**, **T15**, **T16**, **T18**, **T19** and **T20**–**27**. The purpose of the aerial inspection was to comprehensively assess the identified potential roost features at height, to more accurately determine the suitability of each feature to support roosting bats in addition to searching internally for evidence of past and present bat use.

A6.12 The aerial inspection survey was undertaken by a suitably bat licensed and trained tree climber and assistant, using a combination of tree climbing equipment and ladders to access each potential roost feature. An endoscope (Ridgid CA-300 inspection camera with extension cable), torches and mirrors were utilised where necessary to internally inspect each feature.

A6.13 Physical details and measurements of each potential roost feature were recorded during the survey, in addition to any evidence of bats. An updated assessment of suitability for roosting bats was then made. Following completion of the aerial inspection, the bat roost suitability category for each tree inspected was updated accordingly where required.

A6.14 Following the re-classification of the bat roost suitability of each tree, a repeat aerial inspection was undertaken of the trees **T1**, **T8**, **T15**, **T16**, **T18**, **T19** and **T20**–**27** on 23 September 2024.

A6.15 Following delays to a planning submission and completion of an update GLTA on 19 March 2026, an update aerial inspection of **T15** and **T19** whose RPAs will be potentially impacted was

undertaken on 12 June 2026, in addition to survey of **T28**-**T30** newly identified during the update GLTA on 19 March 2026.

Limitations

A6.16 All potential roost features present on the accessible trees identified for survey were accessible and able to be fully inspected by the surveyors. There were therefore no access or health and safety limitations to the aerial inspection survey.

A6.17 A single tree **T4**, was not accessible to climb due to dense vegetation around the base of the tree preventing access.

A6.18 Aerial inspection surveys can be undertaken at any time of year, although May to September is optimal to increase the likelihood of finding bats or evidence of their recent use within features. However, repeat visits are best spread across the seasons to detect bats that use trees at different times of year, and if the potential roost feature has hibernation suitability, a survey should be undertaken during winter. Due to survey and access constraints the surveys were limited to August and September. However, this was considered a suitable period to confirm the suitability of roost features for bats and identify any evidence of use by bats.

A6.19 Bats are mobile animals and will move between a series of different tree roost sites, frequently establishing and occupying different potential roost features, depending on seasonal requirements and resources available locally. Furthermore, existing potential roost features on trees can be transient and evidence of past bat use (e.g. droppings) disintegrates quickly in trees. This survey, therefore, only provides a snapshot of the conditions present at the Site at the time of survey.

Buildings

Preliminary Roost Assessment

A6.20 Owing to the presence of potentially suitable buildings within or adjacent to the Site, a preliminary roost assessment of these buildings was undertaken to record any evidence of roosting bats or any features capable of supporting roosting bats.

A6.21 The survey was completed on 03 May 2024 by a bat licensed ecologist and assistant in accordance with the best practice guidelines referred to above whilst a further site visit was completed on 30 May 2024. All external features considered potentially suitable for bats were assessed using a high-powered torch and binoculars, from all aspects, where access allowed. In addition, an internal inspection of buildings/structures **B3** and **B6** was undertaken where access was possible on 30 May 2024. This was followed by an update external inspection of all buildings/structures during the Extended Phase I habitat survey on 19 March 2026 to determine any changes to the overall condition of the buildings and roosting potential.

A6.22 Suitable features for roosting bats recorded (where present) include the following:

- Cracks/crevices in stone/brickwork/timber;
- Missing/broken/raised roof/ridge/hanging tiles;
- Loose/lifted lead flashing/bitumen felt;

- Loft voids (particularly if relatively undisturbed, potential bat access points present, clear flight space with simple truss formation, roof lining and insulation present);
- Gaps between lintels above doors and windows;
- Gaps in soffits, barge boards or fascias; and
- Cavity walls with potential bat access.

A6.23 Signs of roosting bat presence recorded (where present) include the following:

- Bat(s) roosting *in situ*;
- Bat droppings or urine splashes within or beneath a feature/access point;
- Feeding remains (e.g. insect wings and beetle wing cases);
- Oily marks, smoothly worn surfaces or staining around a feature/access point;
- Audible squeaking from the roost; and
- Large/regularly used roosts may produce a distinctive odour.

A6.24 Based upon the evidence/features identified, each building was assigned to one of the following categories:

- Known or confirmed roost – European Protected Species (EPS) licence may be required for modifications, and will be required for demolition, to be completed lawfully;
- High suitability – 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;
- Moderate suitability – Structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only);
- Low suitability – Structure with one or more potential roost sites that could be used by individual bats opportunistically. These roost sites do not provide enough space, shelter, protection, appropriate conditions and suitable surrounding habitat to be used on a regular basis or by large numbers of bats; and
- Negligible suitability – No potential to support roosting bats.

Limitations

A6.25 Preliminary roost assessments of buildings can be undertaken at any time of year and these assessments were therefore not limited by seasonal or climatic factors.

A6.26 There was no internal access to buildings/structures **B1**–**B2**, **B4**, **B5** and **B7**–**B8**, these being well sealed/overgrown with vegetation or structurally unstable with potential presence of

asbestos. It was, however, possible to assess the suitability of internal features for roosting bats for buildings/structures **B1**–**B2**, **B5** and **B7**–**B8** from open doors and windows.

Dusk Emergence Surveys

A6.27 Owing to the presence of buildings with features suitable for roosting bats which are at risk of impacts from development, dusk emergence surveys of buildings **B4** and **B7** were conducted during 2024 in accordance with the best practice guidelines referred to above. **B6** was also observed during dusk emergence surveys of **B7** given its proximity. Following delays to submission of a planning application, a further update dusk emergence survey of building **B7** was undertaken on 10 June 2026.

A6.28 The date and type of surveys conducted on each relevant building (see **Plan EDP 10** for building reference numbers) are set out in **Table EDP A6.1**.

Table EDP A6.1: Dusk Emergence Surveys

Building Reference	Date	Dusk/Dawn	Number of Surveyors/Infrared Cameras
B4	07/08/2024	Dusk	Two surveyors (with two infrared cameras).
B6 and **B7**	11/06/2024	Dusk	Two surveyors (with three infrared cameras).
	11/07/2024	Dusk	Two surveyors (with three infrared cameras).
B7	02/09/2024	Dusk	Two surveyors (with two infrared cameras).
B7	10/06/2026	Dusk	Two surveyors (with three infrared cameras).

A6.29 During each survey, suitably qualified ecologists and a minimum of two infrared-capable video cameras (Canon XA11) with external lighting arrays (JC Infrared 12-Led 90°Wide Angle High-Power IR Illuminator), and/or Nightfox Whisker Night Vision Binoculars were positioned in appropriate locations, as shown on **Plan EDP 10** and **Plan EDP 11**, so that all the relevant building elevations/features could be observed. The dusk surveys commenced 15 minutes prior to sunset and continued until at least one and a half hours after, as per best practice guidelines. The surveyors used Elekon Batlogger M bat detectors to record the echolocation calls of any bats observed during the survey.

A6.30 The weather conditions were suitable for such surveys, as detailed in **Table EDP A6.2**.

Table EDP A6.2: Weather Conditions During Emergence/Re-entry Surveys

Building	Date	Sunset/ Sunrise Time	Start-Finish Time	Temperature (ºC)	Cloud Cover (%)	Wind (Beaufort)	Precipitation
B6 and **B7**	11/06/2024	21:33	21:18–23:08	11	10	1	Nil
B6 and **B7**	11/07/2024	21:29	21:14–22:59	18	5	1	Nil

Building	Date	Sunset/ Sunrise Time	Start-Finish Time	Temperature (°C)	Cloud Cover (%)	Wind (Beaufort)	Precipitation
B4	07/08/2024	20:53	20:38–22:23	18	90	3	Nil
B7	02/09/2024	19:58	19:43–21:28	20	90	1	Nil
B7	10/06/2024	21:32	21:17-23:02	13-14	30	1	Nil

A6.31 All sonogram recordings made during the dusk/dawn surveys were later analysed using BatExplorer sound analysis software to confirm species identification. Where infrared cameras were not manned during the survey, all video recordings were reviewed using media player software.

Limitations

A6.32 Given the density of vegetation to the rear of building **B7** during 2024, it was not possible to access the northern and western elevations of the building during the emergence surveys. While features suitable for roosting bats on these elevations cannot be ruled out entirely, the density of vegetation is likely to result in any features being very cluttered and overgrown, limiting their suitability for use by roosting bats. This vegetation had, however, been cleared in part by a local resident prior to the dusk emergence survey on 10 June 2026 with an increase in visibility such that surveyor positions were re-distributed accordingly to cover more elevations of the building.

Bat Activity Surveys

A6.33 During the Extended Phase 1 habitat survey, an initial assessment was undertaken of suitability of the habitats within and immediately adjacent to the Site for foraging and commuting bats. In accordance with the best practice guidelines referred to above, the Site was assigned to one of the following categories:

- High suitability – 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. 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, treelined watercourses and grazed parkland. Site is close to and connected to known roosts;

- Moderate suitability – 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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water;

- Low suitability – Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but 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; and

- Negligible suitability – Negligible habitat features onsite likely to be used by commuting or foraging bats.

A6.34 Having determined that the overall suitability of the Site is Moderate, given its location adjacent to existing residential development, with vegetated boundaries predominantly defunct albeit with connectivity to suitable habitat to the north and east, including large expanses of semi-natural woodland, a proportionate level of survey effort was expended in terms of the number and frequency of manual transect surveys and automated detector surveys. These are described in further detail below.

Nighttime Bat Walkover Surveys

A6.35 NBW surveys were undertaken across the Site with the objective of identifying important roosting and commuting behaviour as well as foraging areas used by bats. A total of three NBW surveys were undertaken over the course of the active bat season in 2024.

A6.36 Details of the date, timing, and weather conditions during each of the NBW surveys are given in **Table EDP A6.3**. All visits were completed in weather conditions that were generally suitable for such surveys.

Table EDP A6.3: Date, Timing and Weather Conditions during NBW Surveys

Survey Date	Sunset/Sunrise Time	Start - Finish Time	Weather Conditions			
			Temperature (°c)	Cloud Cover (%)	Wind (Beaufort Scale)	Precipitation
20/05/2024	21:09	21:09–23:09	14–16	10–20	1	Nil
16/07/2024	21:25	21:25–23:25	16–17	90	1	Nil
18/09/2024	19:22	19:22–21:22	17–19	10	2–3	Nil

A6.37 During the NBW surveys, one stationary observation point was surveyed, with surveyors positioned along potential flight lines close to potential roost sources. Following the stationary part of the NBW survey, the transect route was walked simultaneously within the Site, with the route designed to provide coverage of all habitats within the Site. The stationary observation points and transect routes are illustrated on **Plans EDP 10**–**13**. The NBW surveys were carried out by experienced bat surveyors and assistants, with the stationary part of the NBW survey starting at sunset and continuing for a minimum of 30 minutes followed by a walked transect part of the survey, carried out until two to three hours after sunset. The walked part of the NBW survey was carried out at a slow and steady pace and where appropriate surveyors stopped temporarily or took detours from the route to observe bat behaviour.

A6.38 All bat calls were recorded, time-stamped and location tagged using Elekon Batlogger M bat detectors, and any observed behaviour described on survey forms, in order to characterise the value of the Site and its component habitats for foraging and commuting bats.

A6.39 Bats were identified on the basis of their characteristic echolocation calls, which analysed using computer sonogram analysis BatExplorer to confirm species identification. Species of *Myotis*

bat and long-eared bat are difficult to tell apart solely from their echolocation calls and were therefore grouped as such.

Limitations

A6.40 Due to the presence of horses within field **F5**, which were spooked during the surveys, the transect route was amended during the July survey. However, all key habitats present within the Site were accessible during the survey, such that this is not considered to be a significant limitation to survey effort and an assessment of bat activity.

Automated Detector Surveys

A6.41 Bat activity within the Site was also sampled using Anabat Swift detectors (hereafter referred to as 'automated detectors'), which are deployed in fixed locations to automatically trigger and record bat echolocation calls over multiple nights at a time. In this case, automated detectors were deployed at three locations within the Site during each survey, as shown on **Plan EDP 16**, covering all habitat types within the Site and concentrating on locations of known/anticipated higher impacts. The automated detectors were fixed in secure locations, with an external microphone attached c.1–2m above ground, where possible, and the microphone directed away from the tree/branch to maximise detection sensitivity. In total seven surveys were completed over the course of the active bat season in 2024, each comprising sampling by automated detectors for at least five consecutive nights. Details of dates, sampling locations and weather conditions during each of the surveys are given in **Table EDP A6.4**.

Table EDP A6.4: Automated Detector Survey Details

Sampling Period Dates	Location (Reference Number and OS Grid Reference)	Microphone		Weather (Temp (max/min), Wind Speed, Rainfall)
		Height	Direction	
24/04/2024 – 29/04/2024	L1 – SS7552298874	2	North-east	Maximum temp: 13°C Minimum temp: 3°C Maximum wind speed: 24mph Minimum wind speed: 5mph Light rain during daytime, no overnight rainfall.
	L2 – SS7543499026	2.5	North-east	
	L3 – SS7529399003	2	South-west	
22/05/2024 – 28/05/2024	L1 – SS7552298874	1.5	North-west	Maximum temp: 17°C Minimum temp: 6°C Maximum wind speed: 25mph Minimum wind speed: 4mph Light overnight rain on two occasions.
	L2 – SS7543499026	1.5	West	
	L3 – SS7529399003	1.5	South-west	
21/06/2024 – 26/06/2024	L1 – SS7551698868	2	North-west	Maximum temp: 22°C Minimum temp: 10°C Maximum wind speed: 17mph Minimum wind speed: 4mph No overnight rainfall.
	L2 – SS7542999022	2	West	
	L3 – SS7529199001	2	West	

Sampling Period Dates	Location (Reference Number and OS Grid Reference)	Microphone		Weather (Temp (max/min), Wind Speed, Rainfall)
		Height	Direction	
17/07/2024 – 23/07/2024	L1 – SS7552698877	1.5	North	Maximum temp: 20°C Minimum temp: 13°C Maximum wind speed: 27mph Minimum wind speed: 5mph Generally dry, one night of heavy rain.
	L2 – SS7542599017	2	West	
	L3 – SS7529099002	2	West	
21/08/2024 – 29/08/2024	L1 - SS7552598870	1.4	North-west	Maximum temp: 18°C Minimum temp: 11°C Maximum wind speed: 40mph Minimum wind speed: 10mph Light overnight rain on two occasions, fast winds.
	L2 – SS7542499058	1.6	West	
	L3 – SS7524699007	1.1	North-west	
12/09/2024 – 18/09/2024	L1 – SS7552498875	1.5	North-west	Maximum temp: 21°C Minimum temp: 2°C Maximum wind speed: 21mph Minimum wind speed: 3mph No overnight rainfall.
	L2 – SS7542899019	2	West	
	L3[29] – SS7528799009	1.5	North-west	
18/09/2024 – 25/09/2024	L3 Redeployment - SS7528799009	1.5	West	Maximum temp: 22°C Minimum temp: 8°C Maximum wind speed: 14mph Minimum wind speed: 4mph No overnight rainfall.
14/10/2024 – 21/10/2024	L1 – SS7552498875	1.5	North-west	Maximum temp: 17°C Minimum temp: 8°C Maximum wind speed: 40mph Minimum wind speed: 4mph Light overnight rainfall on two occasions. One night of fast winds.
	L2 – SS7542899019	2	West	
	L3 – SS7528799009	1.5	West	

A6.42 The sound files recorded by the automated detectors were analysed using Kaleidoscope Pro's Auto ID for Bats software, which uses clustering technology and known bat species calls to classify each call to species level. Except for common and soprano pipistrelle, for which the classifiers are more accurate, all other species files, those classified as 'No ID', and 10% of the noise files were checked manually using sonogram analysis in accordance with published guides to confirm the species identification of each bat call.

[29] Detector failure, redeployed between 18/09/2024 – 25/09/2024

Limitations

A6.43 The identification of calls and species using Kaleidescope Pro software is dependent upon the quality of the recording made which can be influenced by the following factors, and may limit levels of activity and species recorded:

- Weather conditions – rainfall and wind;
- Distance of bat from the detector's microphone;
- Presence of obstructions through which the noise must pass i.e. trees/leaves; and
- Proximity of other noise sources such as roads.

A6.44 Weather conditions were generally suitable throughout the survey period. Occasional overnight rainfall and fast winds occurred but were not considered to significantly impact the findings of the activity surveys.

A6.45 Deployment of the swift at Location 3 in September 2024 failed due to a battery issue. The detector was re-deployed for a second period of five days during September, and as such, this was not considered to be a significant limitation to the findings of these surveys.

RESULTS

Bat Roost Surveys

Ground Level Tree Assessment

A6.46 The GLTA during 2024 identified a total of 27 trees with suitable features for bat roosting (PRF) or requiring further assessment (FAR). Of this total, 14 (**T1**, **T3**, **T5**, **T7**, **T9**–**T11**, **T13**, **T15**–**T19** and **T21**) were assessed as likely to support single/low number of bats (PRF-I trees) with 7 (**T2**, **T4**, **T6**, **T8**, **T12**, **T14** and **T20**) supporting features with potential to support multiple bats/larger roosts (PRF-M trees). A further six trees (**T22**–**T27**) with further assessment required (FAR trees) were considered likely to have potential to support roosting features given their age and/or condition, although a ground level assessment couldn't confirm presence/absence of PRFs. Further details on each of these trees are provided in **Table EDP A6.5** and their locations are shown on **Plan EDP 10**.

A6.47 All other trees were found to be of negligible suitability for roosting bats and have not been mapped/described.

A6.48 Following an update GLTA during March 2016 an additional 3 trees (**T28-T30**) were identified along the southern boundary of field **F5**, supporting features with potential to support multiple bats (PRF-M). In addition, **T25** previously assessed as FAR but not inspected further due to dense scrub was accessible at the time of survey in March 2026 and was assessed as having features suitable for single/low numbers of bats (PRF-I).

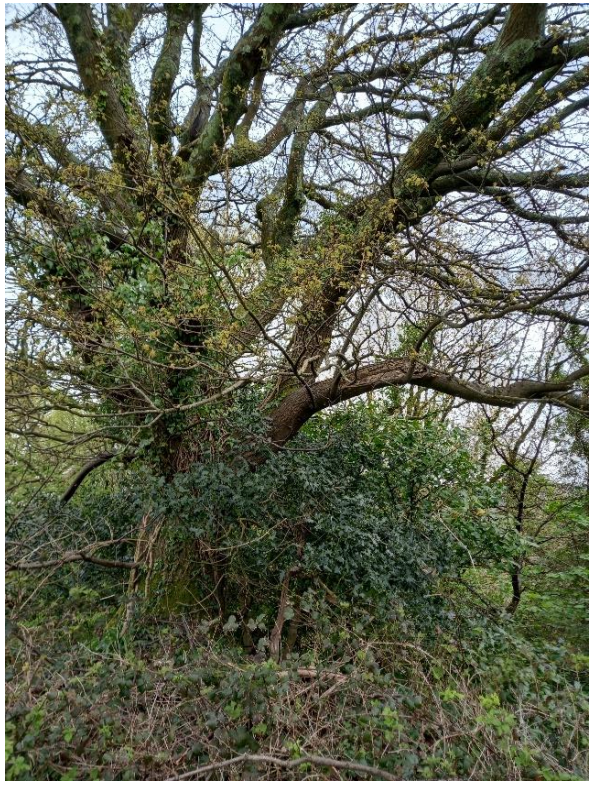
Aerial Inspection Survey of Trees

A6.49 Following further detailed inspection of those trees likely to be impacted by development during 2024, including **T1**, **T8**, **T15**, **T16**, **T18**, **T19** and **T20**–**T27** on two occasions, **T8** and **T16** were downgraded to negligible suitability for roosting bats whilst **T15** was upgraded from PRF-I to PRF-M. Following identification of an additional 3 trees with PRF-M in March 2026, **T28-T30** were subject to a detailed inspection at height on 12 June 2026, in addition to **T19** proposed for loss and **T15** (PRF-M) whose RPAs overlap with the footprint of built development.

A6.50 The roosting suitability of each tree assessed following completion of both the GLTA, and aerial inspections (where undertaken) during 2024 and 2026 are provided in **Table EDP A6.5** and illustrated at **Plan EDP 10**. No evidence of roosting bats was identified in any of the trees surveyed indicating current absence.

Table EDP A6.5: Details of Trees with Bat Roost Suitability 2024 - 2026

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T1		Oak	2024 - Semi-mature specimen located offsite but near boundary. Exposed heartwood in main trunk at 7m, north-west facing. Heart wood found to be completely healed on east and west side with negligible suitability for bats. Lots of thin stemmed ivy with dense foliage; generally unsuitable but can't rule out use by individual bats. 2026 – Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T2		Oak	2024 - Mature specimen with rot observed in limbs and north facing cavity at 3m. Large opening in second leading limb at 3m, north facing with downwards cavity. 2026 – Update GLTA found no visible change in baseline.	PRF-M

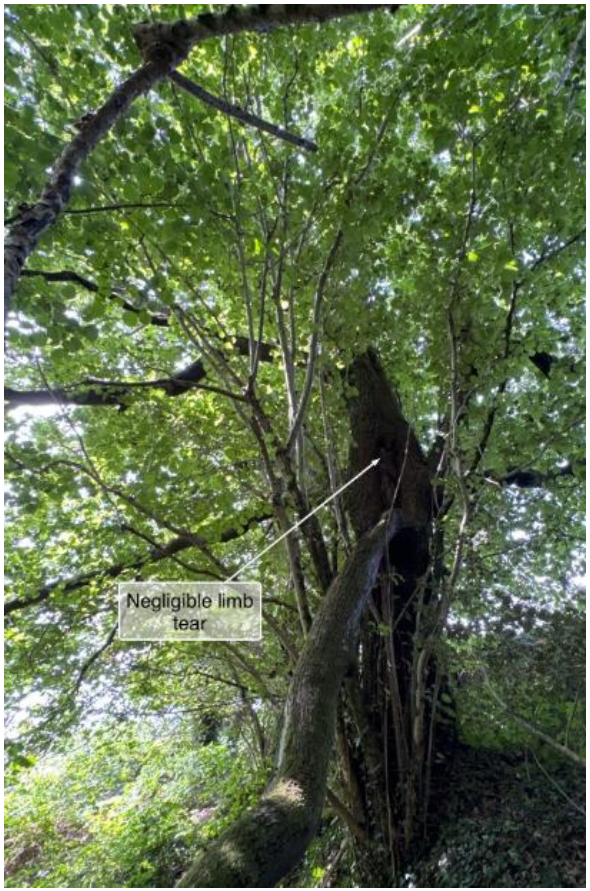
Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T3		Oak	2024 - Mature specimen with dense ivy cover forming small plates on lower main trunk offering limited shelter for individual bats. 2026 – Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T4		Oak	2024 - Mature specimen with rot recorded in lower branches of tree at 4m. North facing limb hole within main trunk at 6m. Some ivy cover. 2026 – Update GLTA found no visible change in baseline.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T5		Oak	2024 - Semi-mature oak. Two rot holes in single branch, north facing at 7m and east facing at 6m. 2026 – Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T6		Oak	2024 - Mature oak with exposed heart wood in main trunk at 4m, west facing. West facing limb hole recorded at 7m. 2026 - Update GLTA found no visible change in baseline.	PRF-M

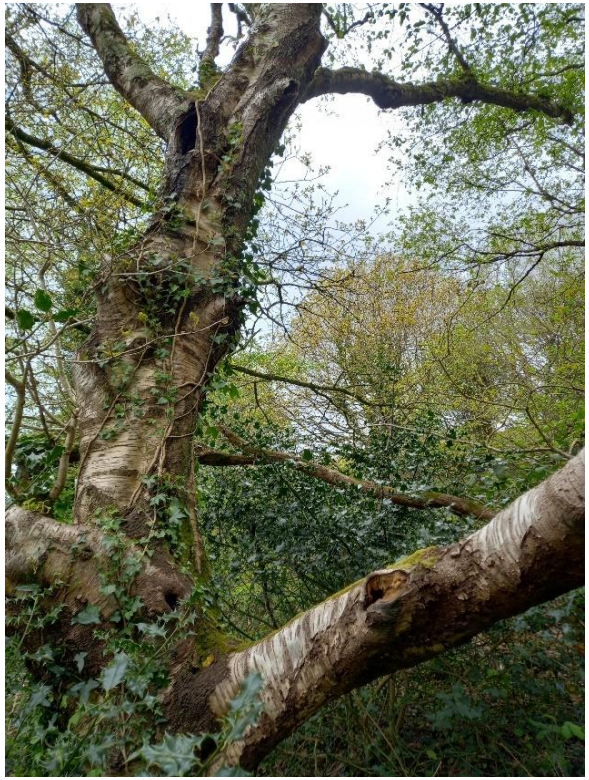
Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T7		Oak	2024 - Mature oak with dense ivy cover forming small plates offering limited shelter for individual bats and limb hole in branch. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T8		Oak	2024 - Mature oak with large limb tear, east facing at 4m, intertwined with hazel. Tear is completely healed following detailed inspection with no other suitable PRF's observed. 2026 - Update GLTA found no visible change in baseline.	Negligible

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T9			2024 - Mature oak with rot in several lower limbs. Small limbs holes recorded on main trunk at 6m and 7m but appear completely sealed. Hazard beam present at 8m, north-west facing. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T10		Oak	2024 - Mature oak with damaged limb exposing heart wood at 8m. Damage looks recent with no smoothing, erosion and no visible cavity. Rot present in lower limbs. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T11		Oak	2024 - Mature oak with small crack in third lowest limb, at 4m facing towards ground. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T12		Silver birch	2024 - Rot hole in lower limb at 1.5m, south facing. Tear out in main trunk. 2026 - Update GLTA found no visible change in baseline.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T13		Oak	2024 - Directly next to **T12**, a limb hole is present at 2m with rot in branches providing a shallow PRF suitable only for single bats. 2026 - Update GLTA found no visible change in baseline.	PRF-I
T14	No photograph available	Oak	2024 - Twin stemmed oak with multiple features including a limb hole, split and rotting limbs at 5m south facing, 6m facing and 10m east facing respectively. 2026 - Update GLTA found no visible change in baseline.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T15			2024 - With Arbtech tag (T359). Rot recorded in limbs. Some dense ivy but generally unsuitable. A crack identified within limb at 5.5m, north-west facing with potential to support roosting bats. 2026 - Features confirmed during update detailed inspection with no evidence of roosting bats. Feature is wedge shaped and narrower leading away from stem. Opens up into some nesting material leading down.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T16		Oak	2024 - With ArbTech tag (T305). Limb hole with large looking cavity/weld at 3–4m, west facing. Following detailed inspection, weld was found completely healed over with no suitable PRFs. 2026 - Update GLTA found no visible change in baseline.	Negligible

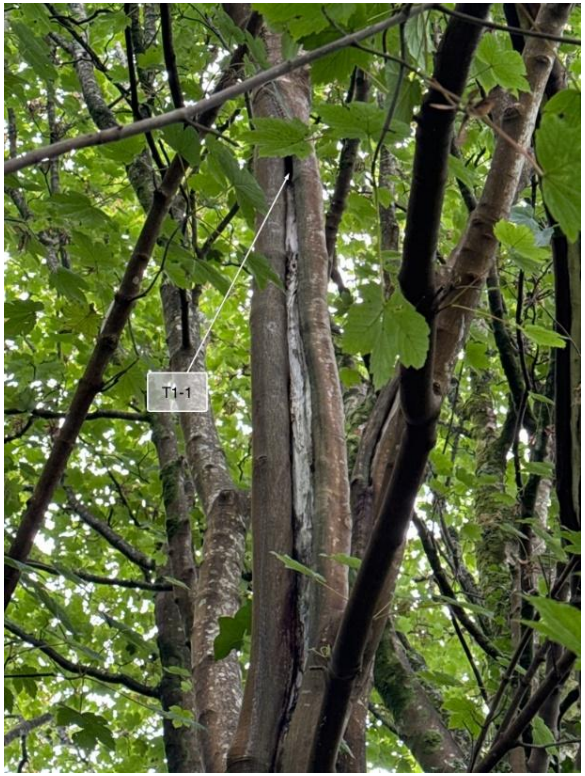
Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T17		Sycamore	2024 - Mature specimen with some large plates of flaking bark in canopy at 10m with one split limb. 2026 - Update GLTA found no visible change in baseline.	PRF-I

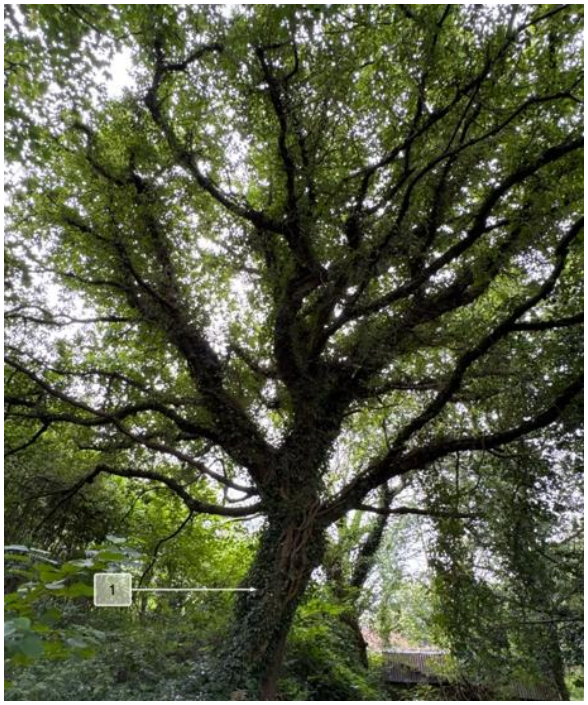
Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T18		Oak	2024 - 1 and 2 – Two hazard beams identified offering limited shelter. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T19		Oak	2024 - With ArbTech tag (T371). Limb hole at 4m south-west facing, looks shallow (PRF-I). Wet near entrance but drier further back. Erosion visible around exposed heart wood. 2 – Hazard beam at 5m, north-west facing. Suitable shelter in wedge of hazard beam. 2026 - Features confirmed during update detailed inspection with no roosting bats found	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T20		Oak	2024 - ArbTech Tag (T368). Fused ivy stems around the trunk with various small entrances behind the ivy. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T21		Oak	2024 - ArbTech Tag (T365). Mature specimen with cavity at 0.5m at base of trunk travelling upwards. 2026 - Update GLTA found no visible change in baseline.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T22		Mature sycamore	2024 - ArbTech Tag (T337). Several tear out wounds; only one is suitable for roosting bats with the remaining mostly healed. Limb tear out at, 5.5m north-west facing with potential to support individual bats. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T23		Oak	2024 - ArbTech Tag (T336). A mature specimen with a small suitable section of dense ivy stem near the base on northern side at 1.5m, north facing. Remainder of tree had no other suitable PRFs observed. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T24		Oak	2024 - ArbTech Tag: T335. Loose bark on stem at base. Suitable crevice present, although a little crumbly and very fragile in places. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T25		Goat Willow	2024 - No access to tree due to dense bramble scrub. 2026 - Following access and inspection on 19 March 2026, a cavity was identified on the underside of a limb, 2m above ground. Cavity was shallow offering limited shelter with no evidence of roosting bats identified.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T26		Sycamore	2024 - ArbTech Tag (T322). Suitable wound at 6m not visible from the ground. Several tear outs and knot holes. Mostly healed except one in limb, facing west at 4m. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T27		Sycamore	2024 - Some old limb tears and wounds and knot holes but mostly healed over, negligible and leading back 1–2cm, or else provide no suitable shelter. Knot hole at 2m facing west suitable for individual bats. 2026 - Update GLTA found no visible change in baseline.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T28		Sycamore	2026 - ArbTech Tag (T287). Two suitable PRF-I's on the same tear out in main trunk at 2m and 3.5m both west facing.	PRF-I

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T29		Sycamore	2026 - Arbtech Tag (T286). Cavity in main stem at 2-4m height. The main chamber leads up into dome apex but is damp with slugs present. Two small secondary chambers leading back c. 6 cm. No evidence of roosting bats.	PRF-M

Tree/Group Ref. No.	Photograph	Tree Species	Potential Bat Features	Roosting Suitability
T30		Sycamore	2026 - ArbTech Tag (T285). Multiple knot holes (features 1 and 2) with negligible potential being too exposed or completely healed. Suitable cavity on stem, west facing at 3.5m (feature 3) with PRF-M. Some ivy starting to grow inside. No evidence of roosting bats.	PRF-M

Preliminary Roost Assessment of Buildings

A6.51 The preliminary roost assessment/inspection of buildings identified a total of two buildings with suitable features for bat roosting, but no confirmed roosts were recorded. Of this total, **B7** was found to be of high suitability, with **B4** considered to have low suitability. The remaining six buildings on-site were found to be of negligible suitability for roosting bats.

A6.52 Further details on each of the buildings inspected are provided in **Table EDP A6.6** and their locations are shown on **Plan EDP 11**.

Table EDP A6.6: Preliminary Bat Roost Assessment of Buildings

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
B1		Damaged lean to with corrugated roof and timber beam supports. Small section of stone wall present. No suitable roosting features. Bird's nest identified on south elevation.	Negligible summer roosting and hibernation potential.

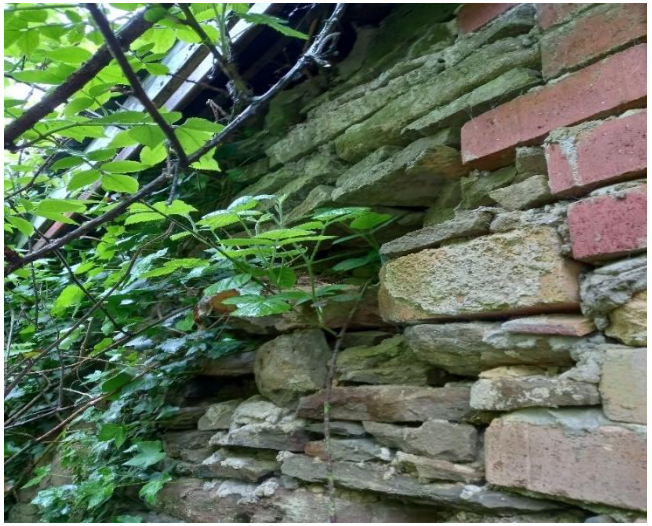
Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
B2	 	Derelict caravan with side windows slightly ajar and missing panels permitting access to the interior of the structure. Internally, the caravan is heavily lit during the daytime, likely precluding roosting bats. No external or internal roosting features with construction of caravans typically lacking internal spaces and wall/roof cavities suitable for bats.	Negligible summer roosting and hibernation potential.

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
B3	 	Corrugated metal portacabin structure with lean to attached to side comprising a corrugated roof supported by timber beams. Damage to walls of container and large gap above the wood door provide internal access for bats. Wooden barge board supporting a corrugated roof is present above the access door although space beneath this is relatively large and exposed with no evidence of roosting bats. Internally, there is much light ingress from damage to the roofs and wall with no suitable roosting features nor evidence of roosting bats identified. Active bird's nest identified.	Negligible summer roosting and hibernation potential.

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
			
B4		Metal portacabin with sealed steel door and window. Small gaps from rust damage around window provides potential internal access for bats. No internal access with internal conditions appearing much darker, such that potential for low numbers of roosting bats cannot be ruled out although unlikely given nature of structure and materials. Portacabin adjacent to a small wood structure with corrugated sheeting to its sides and a pitched roof covered in bitumen felt only standing 1m above the ground. Gaps around connecting side walls provide internal access but conditions inside light and spacious with no visible evidence of roosting bats and overall, considered unsuitable.	Low summer roosting potential and negligible hibernation potential.

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
			
B5		Derelict shed with wood walls and a corrugated roof which have partially collapsed. No suitable roosting features identified.	Negligible summer roosting and hibernation potential.

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
B6		Portacabin with steel corrugated walls and roof. Gaps present beneath the corrugated wall, and created from rust damage to walls, provides potential internal access for bats. Internally there is some light ingress with no suitable roosting features nor evidence of bats identified.	Negligible summer roosting and hibernation potential.
B7		Derelict barn with stone walls and a pitched corrugated roof with flat roof extension. Externally, a wooden barge board provides potential cavities for low numbers of crevice dwelling bats with potential cavities also present within stone walls where mortar is missing. Gaps above the front door and between the stone walls and corrugated roof provide internal access for bats. Dense ivy growth on northern, eastern and western elevations. Although there was no internal access, roof doesn't appear to support a roof void or lining as indicated by damage to its eastern gable end. Bird's nest identified within cavity in stone wall.	High summer roosting potential and negligible/low hibernation potential.

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
	 		

Building Ref. No.	Photograph	Description and Potential Bat Features	Roosting Suitability
B8		Derelict caravan with windows slightly open and damage to roof provide potential internal access for bats. Internally, the caravan is heavily lit during the daytime, likely precluding roosting bats. No external or internal roosting features with construction of caravans typically lacking internal spaces and wall/roof cavities suitable for bats.	Negligible summer roosting and hibernation potential.

Dusk Emergence/Dawn Re-entry Surveys

A6.53 The emergence surveys during 2024 recorded no bats emerging or entering any of the buildings, including **B4**, **B7** and also **B6**, which was located within proximity to **B7** and in full view of a surveyor/IR camera. Presence of a bat roost within either building was thus considered unlikely. Similarly, a further dusk emergence survey of **B7** during June 2026 did not record any emerging bats.

Bat Activity Surveys

Nighttime Bat Walkover Survey

A6.54 As noted above in relation to the scope/design of the bat activity surveys, the initial habitat assessment of the Site found the Site to be of Moderate suitability for foraging and commuting bats. This is due to the location of the Site on the urban edge of Bryncoch limiting connectivity to suitable habitat in the south and dominance of the Site by species-poor agricultural fields providing a limited foraging resource. Hedgerows, mature tree lines and woodland boundaries do, however, provide optimal habitat for a bat assemblage, facilitating their dispersal between the Site and suitable habitat predominantly to the north and east. Mature trees and woodland also provide roosting opportunities for an assemblage whilst the Site is subject to minimal disturbance and not artificially lit.

A6.55 During the stationary part of each NBW survey located on the southern boundary of field **F4**, bat activity was dominated by common pipistrelle with individuals predominantly originating from adjacent woodland to the south, then commuting circa east–west along the edge of the tree line here. Common pipistrelle was again the dominant species during the course of the walked part of each survey with occasional recordings of soprano pipistrelle and *Myotis* sp. On each occasion bat activity was typically greatest along the southern boundary of the Site particularly within fields **F4** and **F5**. Bat activity along the northern and eastern boundaries of the Site were usually limited with fewer recordings along internal hedgerows **H4**, **H5** and **H6** although this varied throughout the seasons with more activity recorded along **H4** greatest during May 2024 and more activity recorded along hedgerows **H5** and **H6** during July 2024. During September 2024, however, bat activity was more equally distributed across the Site with a greater number of recordings along the eastern boundary of the Site where previously activity appeared limited. The results of the NBW surveys are illustrated on **Plans EDP 11** to **13**.

Automated Detector Surveys

A6.56 As the Site was found to be of moderate suitability for foraging and commuting bats, three automated detectors were left out for five nights on seven occasions across the bat active season.

A6.57 With reference to the automated detector data tables, the vast majority of recorded bat calls were of common pipistrelle bats accounting for 80% of all calls between April and October inclusive. Soprano pipistrelle accounted for 16.5% of all calls whilst *Myotis* sp. accounted for 2.5% of all calls. Nathusius pipistrelle, noctule, long-eared, Leisler's and serotine bats make up a small minority of the total (typically less than 1%). Activity was largely comparable across months with the exception of June and October representing the lowest and greatest levels of activity respectively by a notable margin. The increase in activity during October may be

indicative of transitional behaviour whereby bats are utilising the Site to commute between their summer and hibernation roosts in the wider landscape.

A6.58 Between automated detector locations, activity at Location 1 and Location 3 were comparable during April and May but greatest at Location 2. This is consistent with the results of the manual transect survey, which recorded greater activity along hedgerow **H4** (in which automated detector 2 was located) compared to the eastern woodland boundary and other internal hedgerows. Activity at all three locations during June and July was broadly more comparable but peaked at Location 1 (eastern boundary woodland) during September and October, accounting for the majority of all bat calls during these months and again indicating that the eastern boundary woodland is of some value during the transitional autumn months for bats commuting between their summer and hibernation roosts. There is, however, some anomalies in the results with no bat recordings at Location 2 during September and Locations 2 and 3 during October, despite automated detectors functioning correctly during this period.

A6.59 The results of the automated detector surveys are provided, in detailed and summary form, within **Tables EDP A6.7** to **A6.15**. These results are also described below for the assemblage as whole and on a species-by-species basis. The species accounts also draw upon information collated during the desk study and published data on national conservation status[30].

Overall Diversity, Abundance and Distribution

A6.60 A total of nine bat species/species groups (*Myotis* and long-eared bat species were not identified to species level), were confirmed to be present foraging and/or commuting within the Site during the transect and/or automated detector surveys. With reference to the automated detector data tables, the vast majority of recorded bat calls were of common pipistrelle.

A6.61 Levels of bat activity recorded during the NBW surveys were generally low, with levels of activity similar throughout the year, although increasing from May to August. Activity was found to be relatively highest along the woodland/tree line along the southern of the Site (north of Alexander Road and Curlew Drive). Immediately south of the Site and in addition to the woodland edge is a watercourse and unlit PRoW, which likely provides a suitable commuting route for bats from east to west, whilst several trees and derelict buildings here offer roosting potential. During September 2024, however, bat activity was more equally distributed across the Site with a greater number of recordings along the eastern boundary of the Site where previously activity appeared limited.

A6.62 Levels of bat activity recorded during the automated detector surveys were generally moderate with relatively high levels recorded in October and relatively lower levels recorded in June. As summarised above, the distribution of this activity varied between automated detector locations throughout the year. However, a peak in activity was recorded at Location 1 in October, with the highest number of bat passes recorded at over 9,881 passes.

A6.63 Overall, the importance of the bat assemblage recorded within the Site is of County importance being dominated overall by common and widespread species albeit with occurrences of rarer species including Leisler's, serotine and Nathusius' pipistrelle bats.

[30] https://www.bats.org.uk/our-work/national-bat-monitoring-programme/reports/nbmp-annual-report

Species/Species Groups Recorded

Common and Soprano Pipistrelle

A6.64 Common pipistrelle and soprano pipistrelle bats are common and widespread across the UK, representing the most, and second most, abundant bat species in the UK respectively. Whilst having suffered significant historic declines, national population monitoring indicates that common pipistrelle and soprano pipistrelle bats are increasing nationally.

A6.65 No records of common pipistrelle were identified within the Site as part of the desk study. However, a record of a common pipistrelle potential maternity roost was identified in a building approximately 150m south of the Site. The record location is directly connected to the Site by an existing band of woodland, which forms the eastern boundary of the Site. Common pipistrelle were the most common species recorded onsite, with the species accounting for 80% of all passes recorded during the automated detector surveys, and over 81% of the passes recorded during the NBW surveys.

A6.66 Common pipistrelle were commonly recorded during the NBW surveys within the initial observation period in the first 30 minutes of the survey and were observed flying into the Site from the PRoW immediately to the south and foraging along the tree line. Given the early recordings of common pipistrelle following sunset, it is likely that the species may be roosting nearby. The buildings immediately south of the Site may provide potentially suitable roosting habitat.

A6.67 Common pipistrelle passes were high across the automated detector survey period but peaked significantly in October with over 8,000 passes recorded. This peak was recorded at Location 1 on the eastern boundary of the Site. Given this significant increase in activity, there is the potential that this habitat corridor is of value for bats commuting between their summer and hibernation roosts.

A6.68 With respect to soprano pipistrelle, the desk study did not identify any records of this species within the Site. However, a soprano pipistrelle potential maternity roost was identified in a building approximately 150m south of the Site. The recorded location is directly connected to the Site by an existing band of woodland, which forms the eastern boundary of the Site.

A6.69 Soprano pipistrelle were the second most common species recorded both during the NBW surveys and the automated detector surveys, with the species representing 16.5% and 16% of the passes recorded during the surveys respectively.

A6.70 As with common pipistrelle, soprano pipistrelle bats were frequently observed foraging along the southern tree line and PRoW immediately south of the Site during NBW surveys. Soprano pipistrelles were common across the automated detector survey period but peaked in August with a total of 2,227 passes. A smaller peak was also observed in October with a total of 1,343 passes.

A6.71 Given their common and widespread distribution, albeit combined with the relatively moderate levels of activity recorded during the NBW an automated survey (particularly during October 2024), common pipistrelle and soprano pipistrelle bats using the Site are considered to be of Local level importance.

Nathusius' Pipistrelle

A6.72 Nathusius' pipistrelle are widespread across the UK, but generally less common in South Wales. An assessment of the population trends is not available for the species, although records are known to be increasing.

A6.73 No records of Nathusius' pipistrelle were identified during the desk study. Nathusius' pipistrelle were only rarely recorded during the automated detector surveys, with a total of 181 passes across the year, representing <1% of total activity recorded between April and October 2024. No Nathusius' pipistrelle were recorded during the NBW surveys. The majority of Nathusius' pipistrelle were recorded in May with 103 passes, 101 of which were recorded at Location 2 within the centre of the Site.

A6.74 Given this species was rarely recorded during the course of the NBW and automated detector surveys, albeit accounting for its greater rarity, Nathusius' pipistrelle is considered to be of local importance.

Noctule

A6.75 Uncommon, but considered to be widespread in the UK with population levels stable since 1999, noctule bats are listed as a species of principal importance for conservation in Wales.

A6.76 No records of noctule were identified within the Site during the desk study. However, several records of noctule were returned for the River Neath approximately 820m south of the Site. All of the records were of foraging/commuting bats, with no known roosts in close proximity to the Site.

A6.77 Noctule were rarely recorded during the survey, with a total of 33 passes recorded across the year during the automated detector surveys, representing less than 1% of the total bat passes recorded. Noctule were not recorded during the NBW surveys.

A6.78 Noctule was recorded in low numbers throughout the year during automated detector surveys, although no activity for this species was recorded in October. The recordings of noctule were evenly spread across the Site, with no distinctive spatial distribution. Given the low number of recordings, it is considered likely that noctule activity on the Site consists of occasional commuting across the Site.

A6.79 Given the low numbers of this species recorded during 2024 and its common and widespread status across the UK and Wales, noctule is considered to be of no more than Site level importance.

Serotine/Leisler's

A6.80 Serotine bats are rarely recorded in Wales, to the extent that there is insufficient data available to understand their current population trend (albeit with populations considered to remain stable in England). With respect to Leisler's bats, insufficient data is available to understand their current population trend, although this species is considered to be widespread albeit uncommon in Great Britain.

A6.81 A single record of serotine was identified during the desk study, recorded approximately 650m west of the Site in 2016.

A6.82 Serotine was recorded throughout the automated detector surveys between May and September 2024, with a total of 10 passes. Of these passes, a minor peak was recorded in July, with seven total passes recorded across all three locations. No serotine were recorded during the NBW surveys.

A6.83 No records of Leisler's bat were identified as part of the desk study. A total of seven recordings for Leisler's bat were identified during the automated detector surveys. The passes were recorded across the Site in very low numbers, representing less than 1% of the total bat passes across the year. A single Leisler's bat pass was recorded during the NBW in May along the southern boundary of the Site.

A6.84 Given their rarity (in conservation status terms), serotine and Leisler's bats using the Site are considered to be of Local importance.

Myotid Bat Species

A6.85 *Myotid* (*Myotis* sp.) bat species occur throughout most of the UK, their populations considered to be either stable or increasing, with the exception of Bechstein's (*Myotis bechsteinii*) bat, which is listed in Annex II of the European Commission Habitats Directive and is considerably rarer.

A6.86 The desk study returned a total of eight records of *Myotis* sp. within 2km of the Site, including records for natterer's bat (*Myotis natteri*), Daubenton's bat (*Myotis daubentonii*) and whiskered bat (*Myotis mystacinus*). Of the records, two of these were for roosts located over 1.5km from the Site.

A6.87 *Myotis* sp. were the third most recorded bat during the automated detector surveys, with 770 passes representing 2.5% of the total bat passes between April and October. *Myotis* sp. were recorded across the entirety of the survey period, with activity levels for this species group peaking in August and October with 216 and 321 passes respectively. The majority of these passes were recorded at Location 1 in both months. During the NBW surveys, nine *Myotis* sp. passes were recorded across the three surveys, representing a total of 1% of all bat passes.

A6.88 While *Myotis* sp. were the third mostly commonly recorded species on the Site, the numbers of passes recorded were relatively low. Given the Site sits outside of the ranges of the rare *Myotis* species, it is assumed that the *Myotis* sp. recorded within the Site were likely one of the more common species such as Natterer's bat, Daubenton's bat, or whiskered/Brandt's bat. Given the more widespread nature of these particular species, and the limited number of passes recorded, the Site is considered to be of less than local importance for the species.

Long-eared

A6.89 Brown long-eared bat (*Plecotus auritus*) is found throughout the UK, its population considered to remain stable nationally. In contrast, the grey long-eared bat (*Plecotus austriacus*) is considerably rarer and its population appears to be declining. This species is primarily confined to the extreme south of the British Isles, from Sussex to Devon.

A6.90 The desk study identified three records of *Plecotus* sp. within 2km of the Site, all of which were for brown long-eared bats *(Plecotus auritus).*

A6.91 *Plecotus* sp. represent <1% of the bat passes recorded during the automated detector surveys, with a total of 42 passes recorded across the year. *Plecotus* sp. were recorded throughout the year, with no notable peaks in activity. *Plecotus* sp. were also recorded at all three locations across the Site. A single *Plecotus* sp. pass was recorded during the NBW in May.

A6.92 Grey long-eared bats (*Plecotus austriacus)* have not been found in Wales, whereas brown long-eared bats are common and widespread across the UK and Wales. Given the very limited distribution of grey long-eared bats, it is assumed that the *Plecotus* sp. recorded within the Site were likely brown long-eared bats.

A6.93 Given the very low numbers of *Plecotus* sp. passes across the survey period, and the common nature of the species across the UK and Wales, the Site is considered to be of less than local importance for brown long-eared bats.

Lesser Horseshoe Bat

A6.94 Lesser and greater horseshoe bats are a rare and endangered species in the UK, being predominantly confined to the west/south-west of England and South Wales, though their population status is understood to have increased since 1999.

A6.95 Two records of lesser horseshoe bat were identified during the desk study, consisting of a field record and a record of a single bat roosting in a building 3.6km south of the Site. An extended search of Annex II bat species within 6km of the Site retuned a further three records of lesser horseshoe bat, all located over 3.8km from the Site.

A6.96 Two passes of lesser horseshoe bat were recorded during a single night of the automated detector surveys in October, both of which were recorded at Location 1. No lesser horseshoe bat passes were recorded during the NBW. While the Site and adjacent habitats may provide suitable foraging and commuting habitat for the species, given the very low number of passes recorded throughout the survey period, the presence of lesser horseshoe on the Site is considered to be limited to very occasional commuting. As such, the Site is considered to be of less than local importance for the species.

Automated Detector Data Tables

Table EDP A6.7: Automated Detector Survey Results April 2024

Location	Bat Species	Number of Bat Passes Recorded per Night					Total (and percentage)
		24/04/2024	25/04/2024	26/04/2024	27/04/2024	28/04/2024	
1	Common pipistrelle	40	46	128	8	76	**298 (83%)**
	Soprano pipistrelle	0	17	6	0	28	**51 (14%)**
	Noctule	1	0	2	0	1	**4 (1%)**
	Myotis sp.	0	1	4	0	0	**5 (2%)**
	Total	**41**	**64**	**140**	**8**	**105**	**358**
2	Common pipistrelle	176	501	293	57	472	**1499 (87%)**
	Soprano pipistrelle	11	66	48	0	86	**211 (12%)**
	Noctule	1	0	2	0	0	**3 (<1%)**
	Myotis sp.	3	1	2	0	5	**11 (1%)**
	Plecotus sp.	0	1	0	0	0	**1 (<1%)**
	Total	**191**	**569**	**345**	**57**	**563**	**1725**
3	Common pipistrelle	27	107	109	1	164	**408 (94%)**
	Soprano pipistrelle	3	4	6	1	0	**14 (3%)**
	Noctule	0	0	3	1	0	**4 (1%)**
	Myotis sp.	0	0	2	0	0	**2 (<1%)**
	Plecotus sp.	1	0	3	0	0	**4 (1%)**
	Total	**31**	**111**	**123**	**3**	**164**	**432**

Table EDP A6.8: Automated Detector Survey Results May 2024

Location	Bat Species	Number of Bat Passes Recorded per Night						Total (and percentage)
		22/05/2024	23/05/2024	24/05/2024	25/05/2024	26/05/2024	27/05/2024	
1	Common pipistrelle	67	112	114	82	0	0	**375 (95%)**
	Soprano pipistrelle	3	3	9	2	0	0	**17 (4%)**
	Nathusius' pipistrelle	0	0	1	0	0	0	**1 (<1%)**
	Noctule	1	0	0	0	0	0	**1 (<1%)**
	Myotis sp.	0	2	0	0	0	0	**2 (1%)**
	Total	**71**	**117**	**124**	**84**	**0**	**0**	**396**
2	Common pipistrelle	1030	347	108	97	641	568	**2791 (89%)**
	Soprano pipistrelle	63	7	4	13	66	82	**235 (7%)**
	Nathusius' pipistrelle	31	5	1	1	62	1	**101 (3%)**
	Noctule	0	0	1	0	0	1	**2 (<1%)**
	Leisler's bat	0	2	0	0	0	0	**2 (<1%)**
	Serotine	0	0	0	0	1	0	**1 (<1%)**
	Myotis sp.	2	2	0	3	1	3	**11 (<1%)**
	Plecotus sp.	2	1	0	1	2	4	**10 (<1%)**
	Total	**1128**	**364**	**114**	**115**	**773**	**659**	**3153**
3	Common pipistrelle	63	93	39	146	39	145	**525 (87%)**
	Soprano pipistrelle	2	6	16	32	1	21	**78 (13%)**
	Nathusius' pipistrelle	1	0	0	0	0	0	**1 (<1%)**
	Noctule	0	0	0	1	0	0	**1 (<1%)**
	Myotis sp.	0	1	0	0	0	0	**1 (<1%)**
	Total	**66**	**100**	**55**	**179**	**40**	**166**	**606**

Table EDP A6.9: Automated Detector Survey Results June 2024

Location	Bat Species	Number of Bat Passes Recorded per Night					Total (and percentage)
		21/06/2024	22/06/2024	23/06/2024	24/06/2024	25/06/2024	
1	Common pipistrelle	0	29	34	43	48	**154 (87%)**
	Soprano pipistrelle	0	2	1	10	3	**16 (9%)**
	Nathusius' pipistrelle	0	0	0	0	1	**1 (1%)**
	Noctule	0	0	0	1	1	**2 (1%)**
	Leisler's bat	0	0	1	0	0	**1 (1%)**
	Myotis sp.	0	1	0	1	1	**3 (1%)**
	Total	**0**	**32**	**36**	**55**	**54**	**177**
2	Common pipistrelle	48	61	81	52	48	**290 (78%)**
	Soprano pipistrelle	14	29	6	13	5	**67 (18%)**
	Nathusius' pipistrelle	0	5	1	2	0	**8 (2%)**
	Noctule	1	0	0	0	0	**1 (<1%)**
	Myotis sp.	0	1	0	3	1	**5 (1%)**
	Total	**63**	**96**	**88**	**70**	**54**	**371**
3	Common pipistrelle	26	78	77	118	22	**321 (89%)**
	Soprano pipistrelle	4	4	5	7	2	**22 (6%)**
	Nathusius' pipistrelle	0	1	0	4	1	**6 (2%)**
	Noctule	1	0	2	0	0	**3 (1%)**
	Serotine	1	0	0	0	0	**1 (<1%)**
	Myotis sp.	1	2	1	2	1	**7 (2%)**
	Plecotus sp.	0	0	0	2	0	**2 (1%)**
	Total	**33**	**85**	**85**	**133**	**26**	**362**

Table EDP A6.10: Automated Detector Survey Results July 2024

Location	Bat Species	Number of Bat Passes Recorded per Night							Total (and percentage)
		16/07/2024	17/07/2024	18/07/2024	19/07/2024	20/07/2024	21/07/2024	22/07/2024	
1	Common pipistrelle	103	254	181	194	202	361	107	**1402 (87%)**
	Soprano pipistrelle	10	10	13	19	11	36	24	**123 (8%)**
	Nathusius' pipistrelle	2	2	0	0	0	0	0	**4 (<1%)**
	Noctule	1	0	0	0	0	0	0	**1 (<1%)**
	Serotine	1	0	0	1	0	2	0	**4 (<15)**
	Myotis sp.	2	1	3	4	3	61	0	**74 (5%)**
	Plecotus sp.	1	1	2	0	0	1	0	**5 (<1%)**
	Total	**120**	**268**	**199**	**218**	**216**	**461**	**131**	**1613**
2	Common pipistrelle	304	455	304	168	269	100	77	**1677 (89%)**
	Soprano pipistrelle	17	40	27	18	24	6	4	**136 (7%)**
	Nathusius' pipistrelle	10	18	3	22	2	0	0	**55 (3%)**
	Noctule	1	0	0	0	0	0	0	**1 (<1%)**
	Serotine	0	0	2	0	0	0	0	**2 (<1%)**
	Myotis sp.	0	1	0	0	2	0	0	**3 (<1%)**
	Plecotus sp.	0	0	0	1	0	0	0	**1 (<1%)**
	Total	**332**	**514**	**336**	**209**	**297**	**106**	**81**	**1875**
3	Common pipistrelle	70	97	47	159	86	110	16	**585 (86%)**
	Soprano pipistrelle	12	7	7	12	13	33	3	**87 (13%)**
	Nathusius' pipistrelle	0	0	0	1	0	0	0	**1 (<1%)**
	Noctule	3	0	1	0	0	1	0	**5 (1%)**
	Leisler's bat	0	0	0	0	0	2	0	**2 (<1%)**

Location	Bat Species	Number of Bat Passes Recorded per Night							Total (and percentage)
		16/07/2024	17/07/2024	18/07/2024	19/07/2024	20/07/2024	21/07/2024	22/07/2024	
	Serotine	0	0	0	0	0	1	0	**1 (<1%)**
	Myotis sp.	0	0	0	0	0	1	0	**1 (<1%)**
	Plecotus sp.	0	1	0	0	0	0	0	**1 (<1%)**
	Total	**85**	**105**	**55**	**172**	**99**	**148**	**19**	**683**

Table EDP A6.11: Automated Detector Survey Results August 2024

Location	Bat Species	Number of Bat Passes Recorded per Night							Total (and percentage)
		21/08/2024	22/08/2024	23/08/2024	24/08/2024	25/08/2024	26/08/2024	27/08/2024	
1	Common pipistrelle	217	69	193	44	67	813	705	**2108 (52%)**
	Soprano pipistrelle	427	30	110	15	39	1002	110	**1733 (43%)**
	Noctule	0	0	0	0	0	0	1	**1 (<1%)**
	Leisler's bat	0	0	0	0	0	1	0	**1 (<1%)**
	Serotine	0	0	0	0	0	0	1	**1 (<1%)**
	Myotis sp.	161	3	5	3	2	32	4	**210 (5%)**
	Plecotus sp.	0	1	0	0	0	1	0	**2 (<1%)**
	Total	**805**	**103**	**308**	**62**	**108**	**1849**	**821**	**4056**
2	Common pipistrelle	0	33	41	92	51	227	361	**805 (64%)**
	Soprano pipistrelle	0	0	3	33	33	15	360	**444 (35%)**
	Noctule	0	0	0	2	0	0	0	**2 (<1%)**
	Myotis sp.	0	0	0	1	0	0	3	**4 (<1%)**

Location	Bat Species	Number of Bat Passes Recorded per Night							Total (and percentage)
		21/08/2024	22/08/2024	23/08/2024	24/08/2024	25/08/2024	26/08/2024	27/08/2024	
	Plecotus sp.	0	0	0	0	0	0	2	**2 (<1%)**
	Total	**0**	**33**	**44**	**128**	**84**	**242**	**726**	**1257**
3	Common pipistrelle	3	2	0	3	17	124	270	**419 (89%)**
	Soprano pipistrelle	0	0	0	0	2	14	34	**50 (11%)**
	Myotis sp.	0	0	0	1	0	1	0	**2 (<1%)**
	Total	**3**	**2**	**0**	**4**	**19**	**139**	**304**	**471**

Table EDP A6.12: Automated Detector Survey Results September 2024

Location	Bat Species	Number of Bat Passes Recorded per Night						Total (and percentage)
		12/09/2024	13/09/2024	14/09/2024	15/09/2024	16/09/2024	17/09/2024	
1	Common pipistrelle	14	190	185	1	443	1084	**1917 (76%)**
	Soprano pipistrelle	1	40	42	0	111	337	**531 (21%)**
	Noctule	0	0	0	0	1	0	**1 (<1%)**
	Leisler's bat	0	0	1	0	0	0	**1 (<1%)**
	Serotine	0	0	1	0	0	0	**1 (<1%)**
	Myotis sp.	1	8	4	0	16	28	**57 (2%)**
	Plecotus sp.	2	2	0	0	2	4	**10 (<1%)**
	Total	**18**	**240**	**233**	**1**	**573**	**1453**	**2518**
2	Common pipistrelle	0	0	0	0	0	0	**0**
	Soprano pipistrelle	0	0	0	0	0	0	**0**
	Noctule	0	0	0	0	0	0	**0**

Location	Bat Species	Number of Bat Passes Recorded per Night						Total (and percentage)
		12/09/2024	13/09/2024	14/09/2024	15/09/2024	16/09/2024	17/09/2024	
	Myotis sp.	0	0	0	0	0	0	**0**
	Plecotus sp.	0	0	0	0	0	0	**0**
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3	**Anabat Failure**							

Table EDP A6.13: Automated Detector Survey Results Redeployment of Location 3 September 2024

Location	Bat Species	Number of Bat Passes Recorded per Night						Total (and percentage)
		20/09/2024	21/09/2024	22/09/2024	23/09/2024	24/09/2024	25/09/2024	
3	Common pipistrelle	251	364	147	651	57	277	**1747 (92%)**
	Soprano pipistrelle	15	19	12	5	4	28	**83 (4%)**
	Nathusius' pipistrelle	2	0	0	0	0	0	**2 (<1%)**
	Noctule	0	0	0	0	0	1	**1 (<1%)**
	Leisler's bat	2	0	0	0	0	0	**2 (<1%)**
	Myotis sp.	8	30	6	2	2	3	**51 (3%)**
	Plecotus sp.	0	2	0	1	0	0	**3 (<1%)**
	Total	**278**	**415**	**165**	**659**	**63**	**309**	**1889**

Table EDP A6.14: Automated Detector Survey Results October

Location	Bat Species	Number of Bat Passes Recorded per Night							Total (and percentage)
		14/10/2024	15/10/2024	16/10/2024	17/10/2024	18/10/2024	19/10/2024	20/10/2024	
1	Common pipistrelle	2508	2187	0	79	1531	1854	54	**8213 (83%)**
	Soprano pipistrelle	300	510	0	15	68	439	11	**1343 (14%)**
	Nathusius' pipistrelle	0	1	0	0	0	0	0	**1 (<1%)**
	Myotis sp.	24	104	0	21	28	129	15	**321 (3%)**
	Plecotus sp.	0	0	0	0	1	0	0	**1 (<1%)**
	Lesser horseshoe	2	0	0	0	0	0	0	**2 (<1%)**
	Total	**2834**	**2802**	**0**	**115**	**1628**	**2422**	**80**	**9881**
2	Common pipistrelle	0	0	0	0	0	0	0	**0**
	Soprano pipistrelle	0	0	0	0	0	0	0	**0**
	Nathusius' pipistrelle	0	0	0	0	0	0	0	**0**
	Myotis sp.	0	0	0	0	0	0	0	**0**
	Plecotus sp.	0	0	0	0	0	0	0	**0**
	Lesser horseshoe	0	0	0	0	0	0	0	**0**
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3	Common pipistrelle	0	0	0	0	0	0	0	**0**
	Soprano pipistrelle	0	0	0	0	0	0	0	**0**
	Nathusius' pipistrelle	0	0	0	0	0	0	0	**0**
	Myotis sp.	0	0	0	0	0	0	0	**0**
	Plecotus sp.	0	0	0	0	0	0	0	**0**
	Lesser horseshoe	0	0	0	0	0	0	0	**0**
	Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table EDP A6.15: Monthly Summary of Automated Detector Surveys

Survey Month	Species	Number of Passes	% of Month Total
April	Common pipistrelle	2205	88%
	Soprano pipistrelle	276	11%
	Noctule	11	<1%
	Myotis sp.	18	1%
	Plecotus sp.	5	<1%
	Total Passes	**2515**	
May	Common pipistrelle	3691	89%
	Soprano pipistrelle	330	8%
	Nathusius' pipistrelle	103	2%
	Noctule	4	<1%
	Leisler's bat	2	<1%
	Serotine	1	<1%
	Myotis sp.	14	<1%
	Plecotus sp.	10	<1%
	Total Passes	**4155**	

Survey Month	Species	Number of Passes	% of Month Total
June	Common pipistrelle	765	84%
	Soprano pipistrelle	105	12%
	Nathusius' pipistrelle	15	2%
	Noctule	6	1%
	Leisler's bat	1	<1%
	Serotine	1	<1%
	Myotis sp.	15	2%
	Plecotus sp.	2	<1%
	Total Passes	**910**	
July	Common pipistrelle	3664	88%
	Soprano pipistrelle	346	8%
	Nathusius' pipistrelle	60	1%
	Noctule	7	<1%
	Leisler's bat	2	<1%
	Serotine	7	<1%
	Myotis sp.	78	2%
	Plecotus sp.	7	<1%
	Total Passes	**4171**	

Survey Month	Species	Number of Passes	% of Month Total
August	Common pipistrelle	3332	58%
	Soprano pipistrelle	2227	39%
	Noctule	3	<1%
	Leisler's bat	1	<1%
	Myotis sp.	216	4%
	Plecotus sp.	4	<1%
	Total Passes	**5783**	
September	Common pipistrelle	3664	83%
	Soprano pipistrelle	614	14%
	Nathusius' pipistrelle	2	<1%
	Noctule	2	<1%
	Leisler's bat	3	<1%
	Serotine	1	<1%
	Myotis sp.	108	2%
	Plecotus sp.	13	<1%
	Total Passes	**4407**	
October	Common pipistrelle	8213	83%
	Soprano pipistrelle	1343	14%
	Nathusius' pipistrelle	1	<1%
	Myotis sp.	321	3%
	Plecotus sp.	1	<1%
	Lesser horseshoe bat	2	<1%
	Total Passes	**9881**	

Evaluation of Overall Bat Assemblage

A6.97 Overall, species-poor semi-improved grassland, which dominates the Site is considered to be of limited importance to a foraging bat assemblage given its small extent and poor botanical diversity. Boundary features including dense scrub, mature tree lines and woodland are, however, of value for dispersal of a bat assemblage across the wider landscape, with woodland providing a potential foraging resource. The southern and eastern boundaries of the Site in particular, are considered of value for dispersal of a bat assemblage whilst the more fragmented nature of the northern boundary, dominated by stone walls and sometimes sparse scrub is of lesser importance. Indeed, bat activity recorded during the course of the NBW and automated bat detector surveys appeared to be greatest along the southern and/or eastern boundaries of the Site, with recordings of rarer species including lesser horseshoe, Leisler's, serotine, and Nathusius' pipistrelle bats. The eastern boundary woodland may be of further importance in facilitating the dispersal of a bat assemblage between their summer and hibernation roosts with significantly greater levels of bat activity recorded along this boundary during October 2024. Such habitats alongside derelict buildings recorded adjacent to the southern boundary of the Site further offer suitable roosting opportunities. Whilst no roosts were identified within buildings and trees subject to detailed surveys, the presence of a roost for common and or soprano pipistrelle nearby is likely, given recordings of these species early after sunset during the course of the NBW surveys.

A6.98 Taking into account the diversity of bat species utilising the Site and the extent of their roosting, foraging and commuting activity, and with reference to Bat Mitigation Guidelines 2025[31], the overall bat assemblage using the Site is judged to be of County level importance.

[31] Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

Plans

Plan EDP 1: Statutory Designations
(edp8635_d001a 13 January 2026 VMS/EWi)

Plan EDP 2: Non-statutory Designations
(edp8635_d002a 13 January 2026 VMS/EWi)

Plan EDP 3: Phase 1 Habitat Plan
(edp8635_d003b 18 June 2026 VMS/EWi)

Plan EDP 4: Dormouse Tube Locations
(edp8635_d007a 13 January 2026 VMS/EWi)

Plan EDP 5: Otter and Water Vole Survey Area
(edp8635_d014a 13 January 2026 GYo/EWi)

Plan EDP 6: Breeding Bird Survey Results – Early May 2024
(edp8635_d004b 28 May 2026 VMS/EWi)

Plan EDP 7: Breeding Bird Survey Results – Late May 2024
(edp8635_d005b 28 May 2026 VMS/EWi)

Plan EDP 8: Breeding Bird Survey Results – June 2024
(edp8635_d006b 28 May 2026 VMS/EWi)

Plan EDP 9: Breeding Bird Survey Results – May 2026
(edp8635_d015 28 May 2026 VMS/EWi)

Plan EDP 10: Bat Tree Roost Assessment Survey Results
(edp8635_d010b 18 June 2026 DJo/EWi)

Plan EDP 11: Preliminary Bat Roost Inspection Survey Results and Surveyor/IR Camera Locations – 2024
(edp8635_d009b 18 June 2026 DJo/EWi)

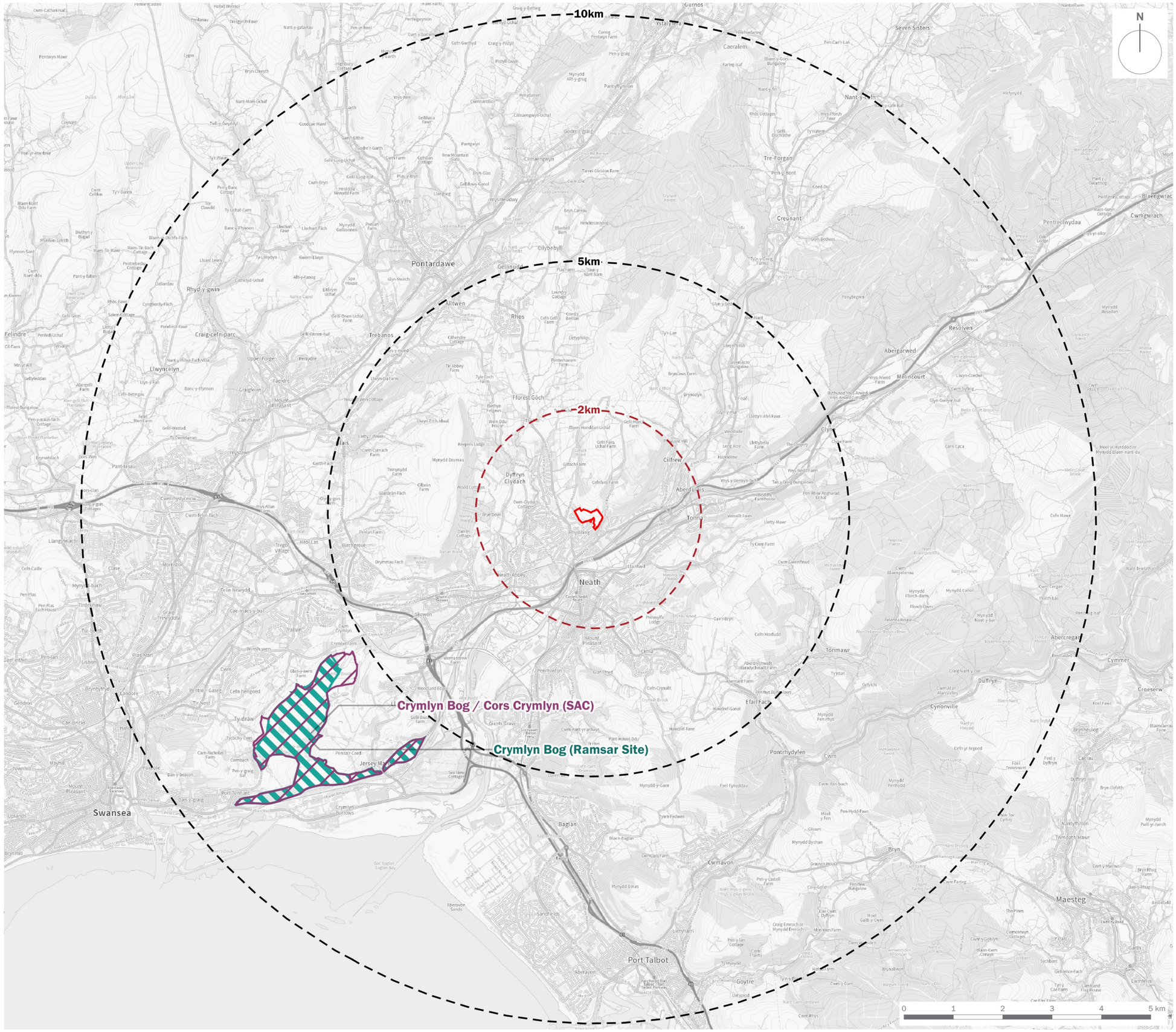
Plan EDP 12: Surveyor/IR Camera Locations 2026
(edp8635_d016 18 June 2026 PDr/EWi)

Plan EDP 13: Nighttime Bat Walkover Survey – May 2024
(edp8635_d011a 13 January 2026 VMS/IBo)

Plan EDP 14: Nighttime Bat Walkover Survey – July 2024
(edp8635 d012a 13 January 2026 VMS/IBo)

Plan EDP 15: Nighttime Bat Walkover Survey – September 2024
(edp8635_d013a 13 January 2026 VMS/IBo)

Plan EDP 16: Automated Detector Locations
(edp8635_d008a 13 January 2026 VMS/EWi)



Site Boundary

Range Rings (at 5km intervals)

2km Detailed Study Area

Special Area of Conservation (SAC)

Wetland of International Importance (Ramsar Site)

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

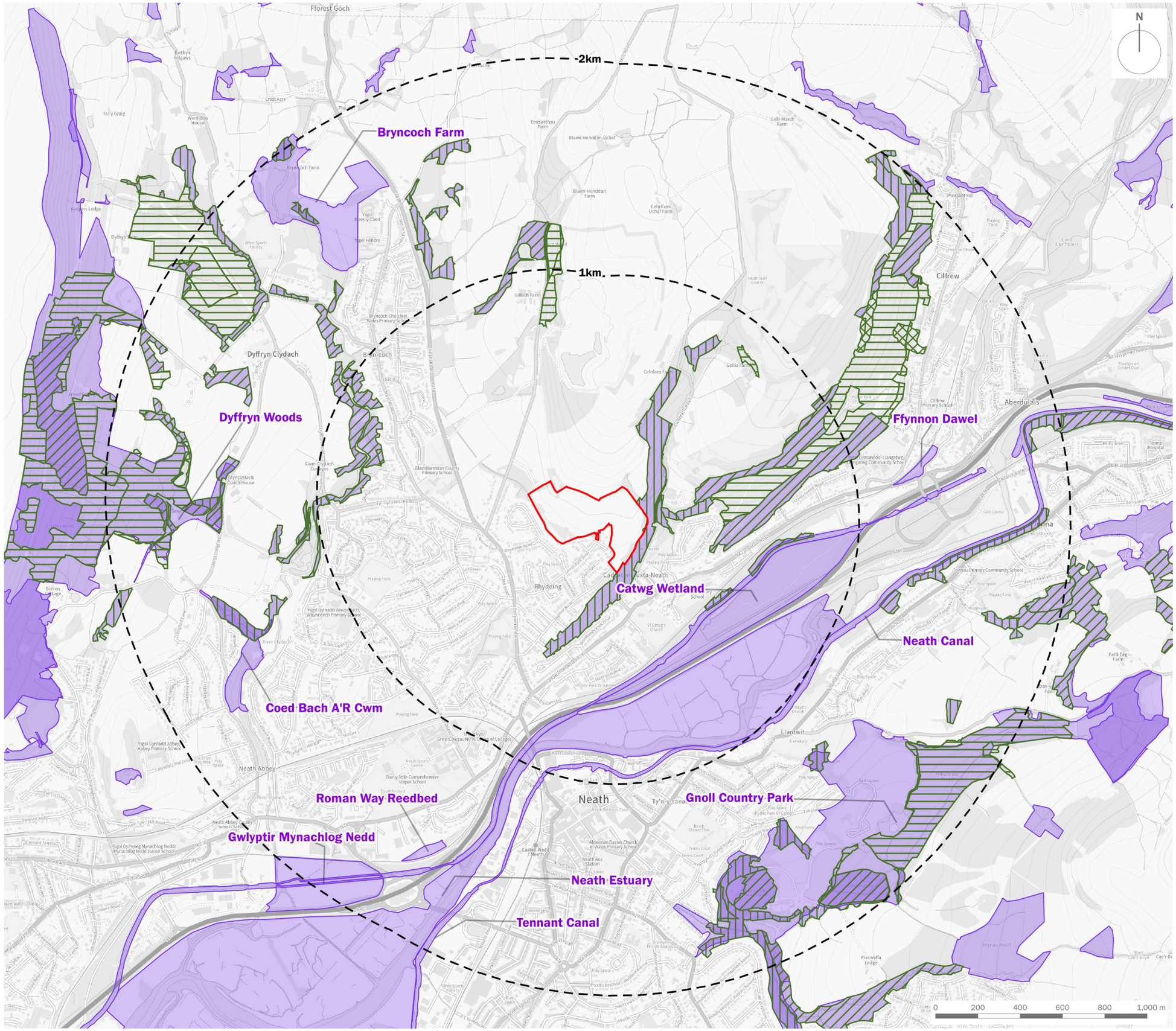
Statutory Designations

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d001a**	checked	**EWi**
scale	**1:75,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122. Contains Ordnance Survey Data © Crown Copyright and database rights 2026.



Site Boundary

Range Rings (at 1km intervals)

Ancient Semi-natural Woodland

Plantation on Ancient Woodland Site

Restored Ancient Woodland Site

Ancient Woodland Site of Unknown Category

Site of Importance for Nature Conservation / SINC (Adopted)

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

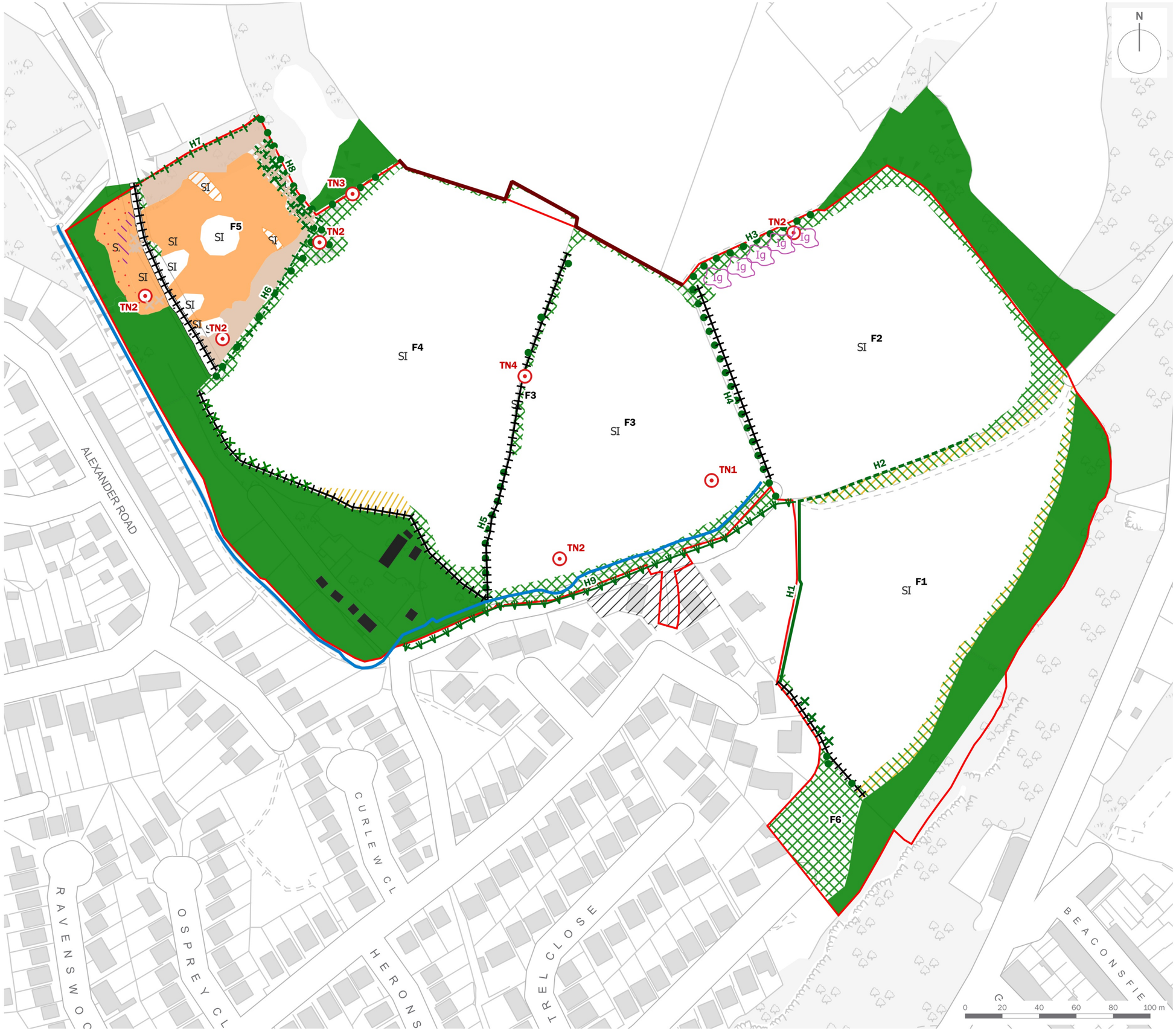
Non-statutory Designations

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d002a**	checked	**EWi**
scale	**1:17,500 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary
Broadleaved Semi-natural Woodland
Dense Continuous Scrub
Continuous Bracken
Tall Ruderal
Bracken/Dense Scrub Mosaic
Semi-improved Acid Grassland
Semi-improved Neutral Grassland
Poor Semi-improved Grassland
Marsh/Marshy Grassland
Building
Bare Ground
Semi-improved Neutral Grassland and Tall Ruderal
Area Not Surveyed
Intact Species-rich Hedgerow and Trees
Intact Species-poor Hedgerow
Defunct Species-poor Hedgerow and Trees
Defunct Species-poor Hedgerow
Scattered Trees/Parkland (Broadleaved)
Scattered Scrub
Running Water
Fence
Wall
Scattered Trees (Broadleaved)
Scattered Scrub
Scattered Bracken
Target Note
Himalayan Balsam

client
Codi Group

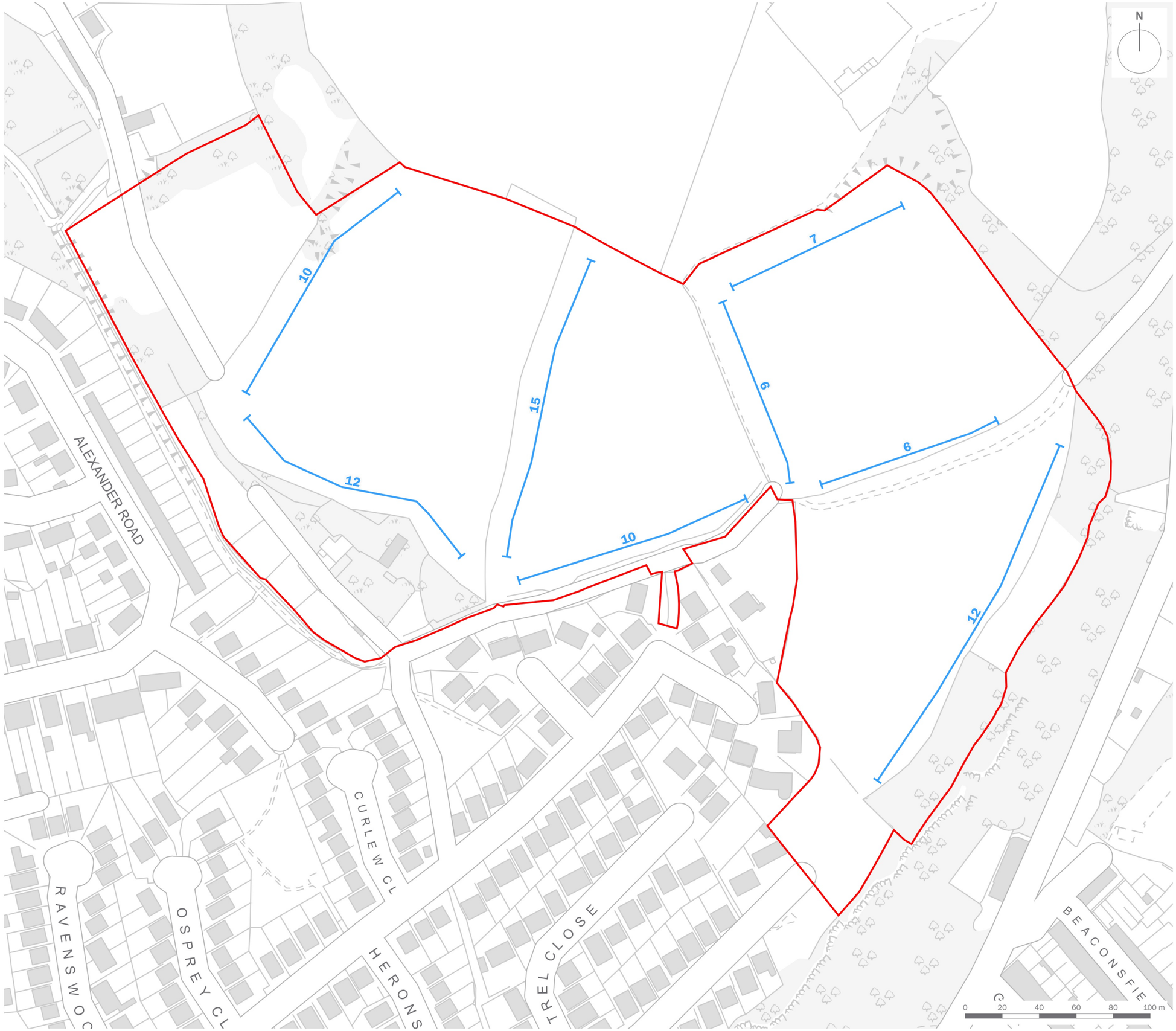
project title
Leiros Parc, Bryncoch, Neath

drawing title
Phase 1 Habitat Plan

date	**18 JUNE 2026**	drawn by	**VMS**
drawing number	**edp8635_d003b**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership
Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

10 Dormouse Tube Location

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

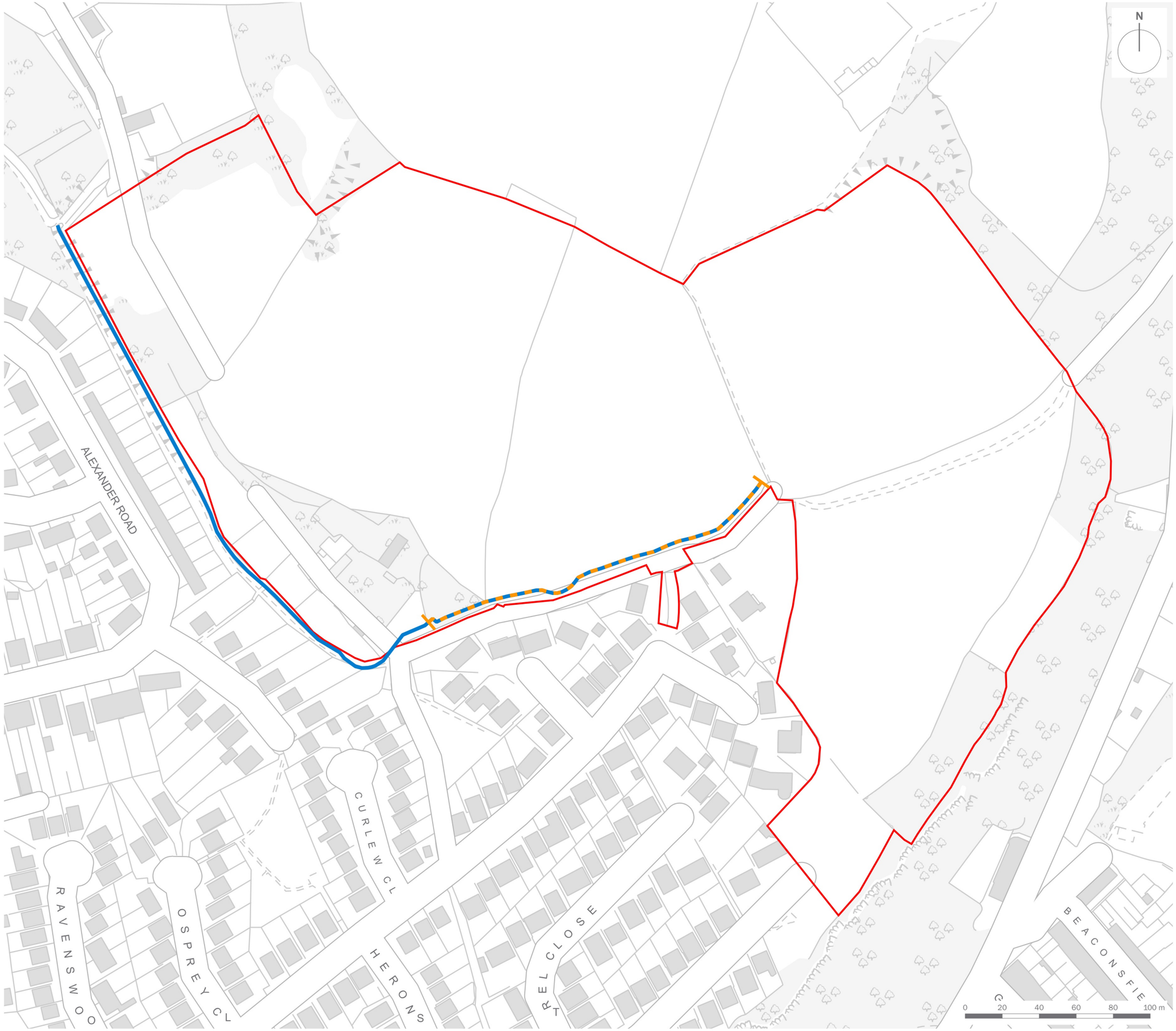
Dormouse Tube Locations

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d007a**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Otter and Water Vole Survey Area

Limited Access Due to Dense Scrub

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

Otter and Water Vole Survey Area

date	**13 JANUARY 2026**	drawn by	**GYo**
drawing number	**edp8635_d014a**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Conservation Status

Species of Principal Importance

Not Listed as Schedule 1 or SPI

Direction of Flight

Birds of Conservation Concern

Red List

Amber List

Code	Species
BF	Bullfinch
CH	Chaffinch
D.	Dunnock
H.	Grey Heron
HG	Herring Gull
HM	House Martin
HS	House Sparrow
MG	Magpie
MT	Marsh Tit

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

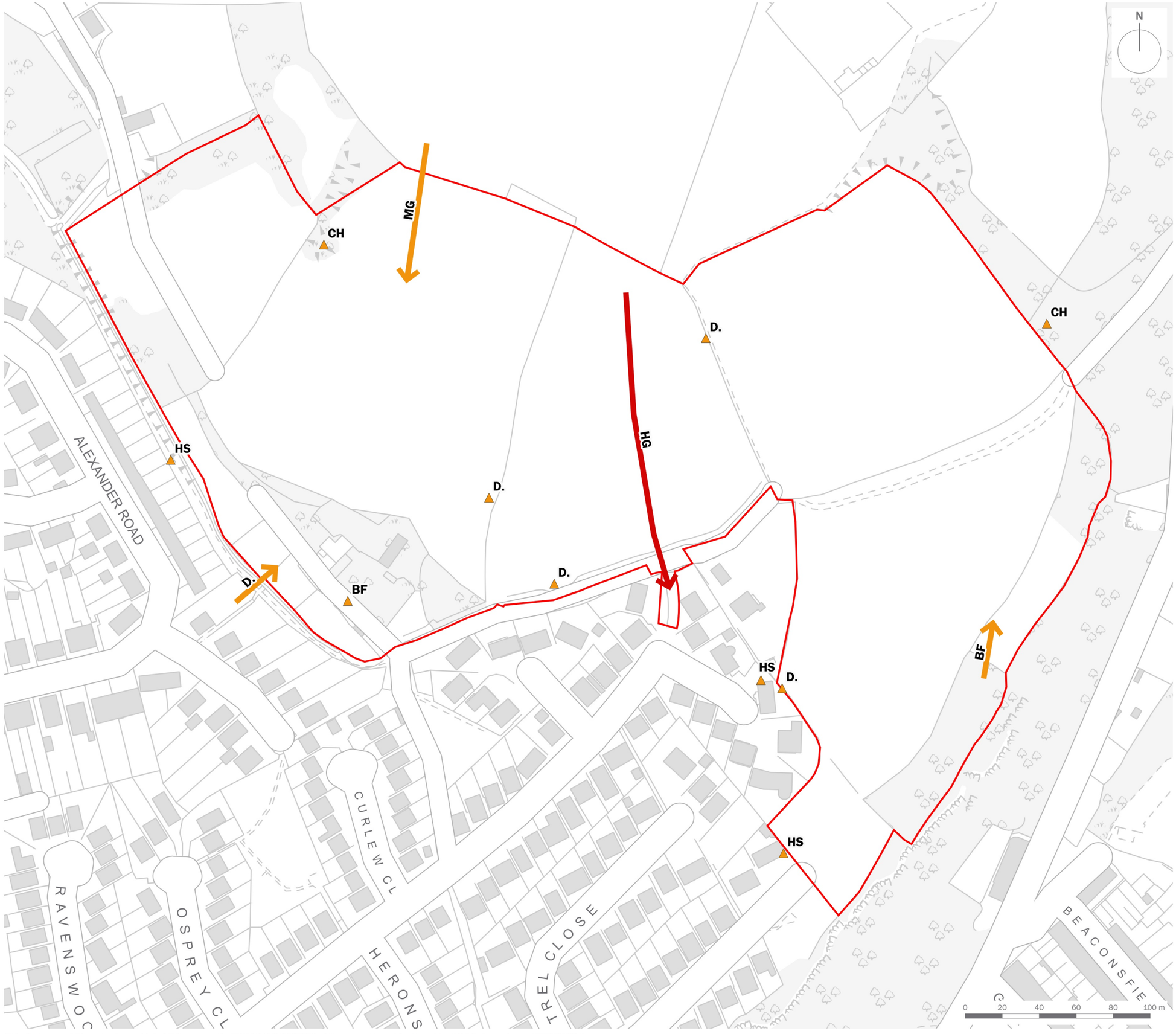
Breeding Bird Survey Results - Early May 2024

date	**28 MAY 2026**	drawn by	**VMS**
drawing number	**edp8635_d004b**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Conservation Status

Species of Principal Importance

Not Listed as Schedule 1 or SPI

Direction of Flight

Birds of Conservation Concern

Red List

Amber List

Code	Species
BF	Bullfinch
CH	Chaffinch
D.	Dunnock
HG	Herring Gull
HS	House Sparrow
MG	Magpie

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

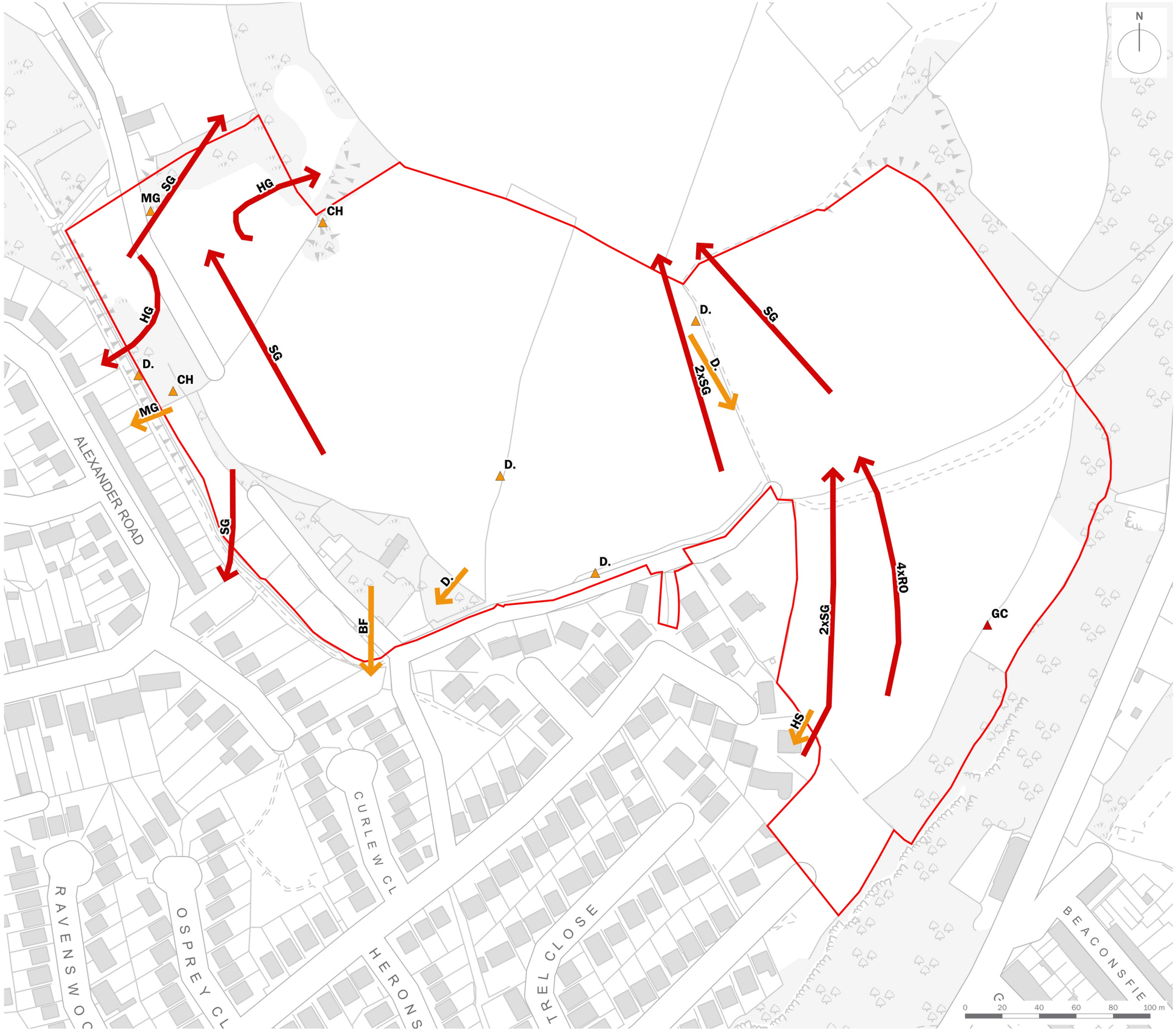
Breeding Bird Survey Results – Late May 2024

date	**28 MAY 2026**	drawn by	**VMS**
drawing number	**edp8635_d005b**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Conservation Status

Species of Principal Importance

Not Listed as Schedule 1 or SPI

Direction of Flight

Birds of Conservation Concern

Red List

Amber List

Code	Species
BF	Bullfinch
CH	Chaffinch
D.	Dunnock
GC	Goldcrest
HG	Herring Gull
HS	House Sparrow
MG	Magpie
RO	Rook
SG	Common Starling

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

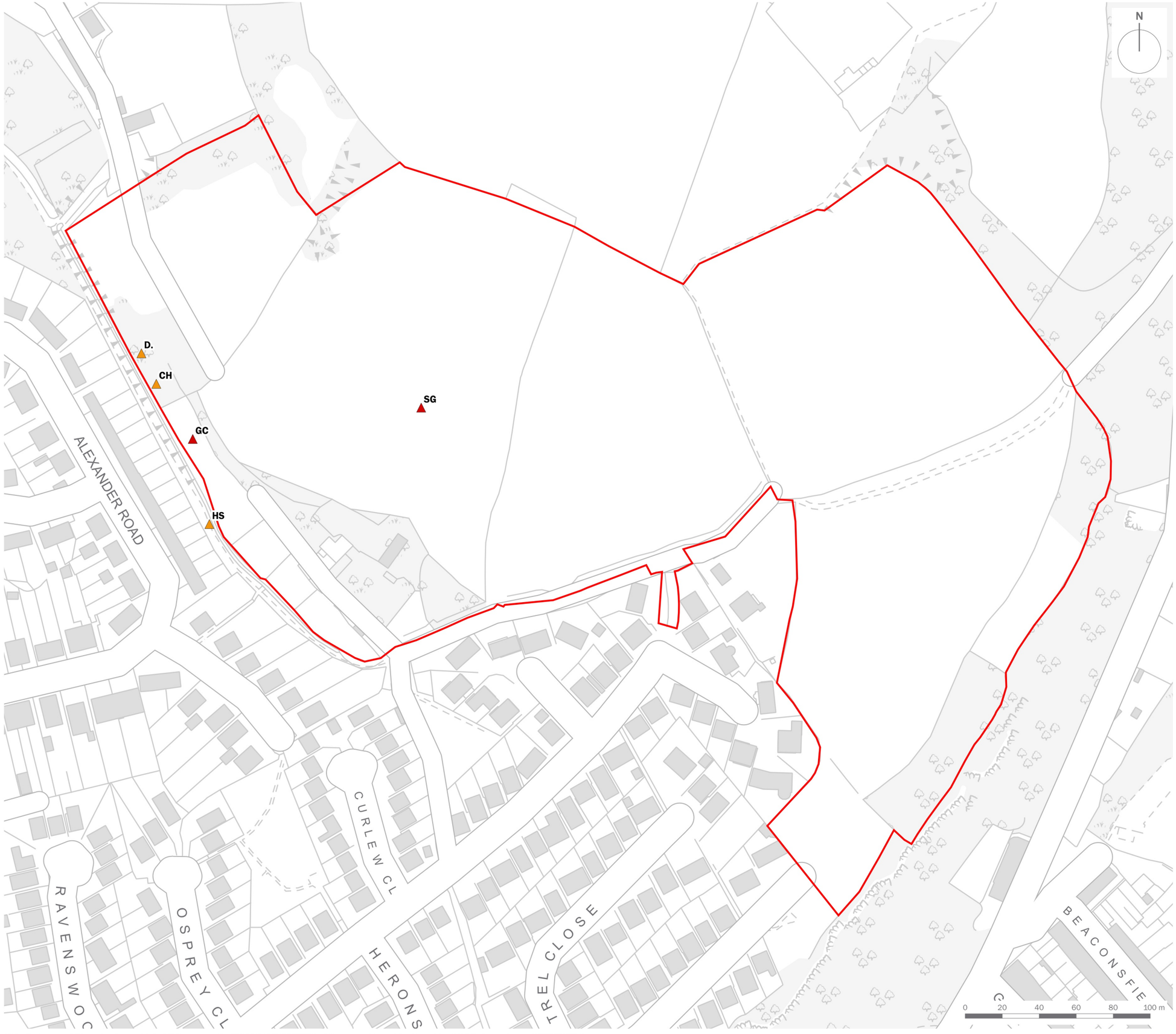
Breeding Bird Survey Results – June 2024

date	**28 MAY 2026**	drawn by	**VMS**
drawing number	**edp8635_d006b**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Conservation Status

Species of Principal Importance

Birds of Conservation Concern

Red List

Amber List

Code	Species
CH	Chaffinch
D.	Dunnock
GC	Goldcrest
HS	House Sparrow
SG	Common Starling

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

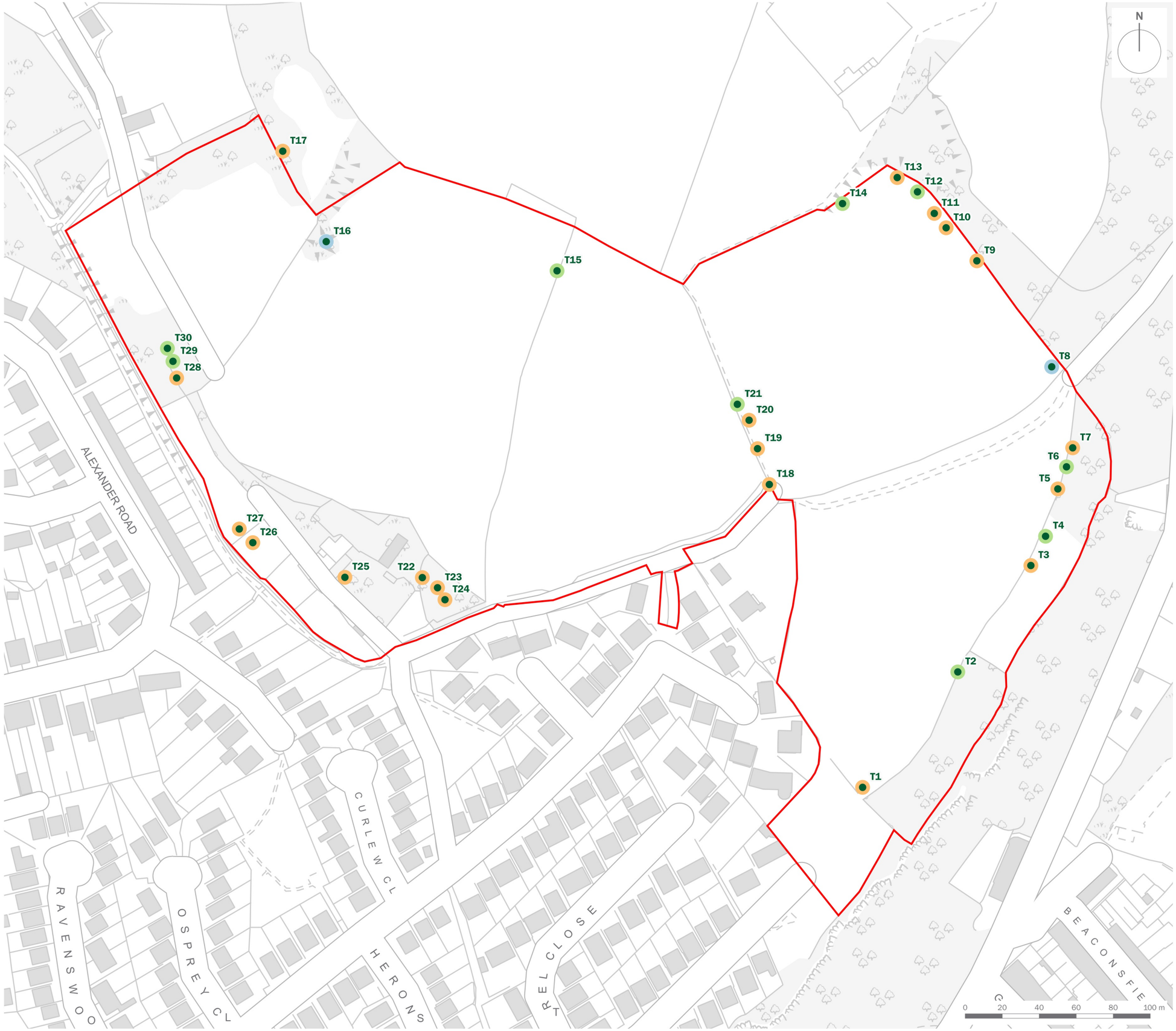
Breeding Bird Survey Results – May 2026

date	**28 MAY 2026**	drawn by	**VMS**
drawing number	**edp8635_d015**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**DJo**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Survey Results

- PRF-I
- PRF-M
- Negligible
- FAR (Further Assessment Required)

Potential roost feature (PRF) type estimated from the ground. A close inspection survey of any trees to be affected would be required to confirm PRF type. PRF shown is the maximum level for any PRF on a tree.

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

Bat Tree Roost Assessment Survey Results

date	**18 JUNE 2026**	drawn by	**DJo**
drawing number	**edp8635_d010b**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



N

Site Boundary

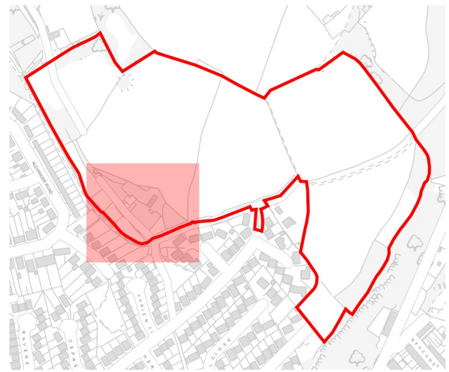
Bulding with High Bat Roost Suitability

Bulding with Low Bat Roost Suitability

Bulding with Negligible Bat Roost Suitability

IR Camera

Surveyor and IR Camera



client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

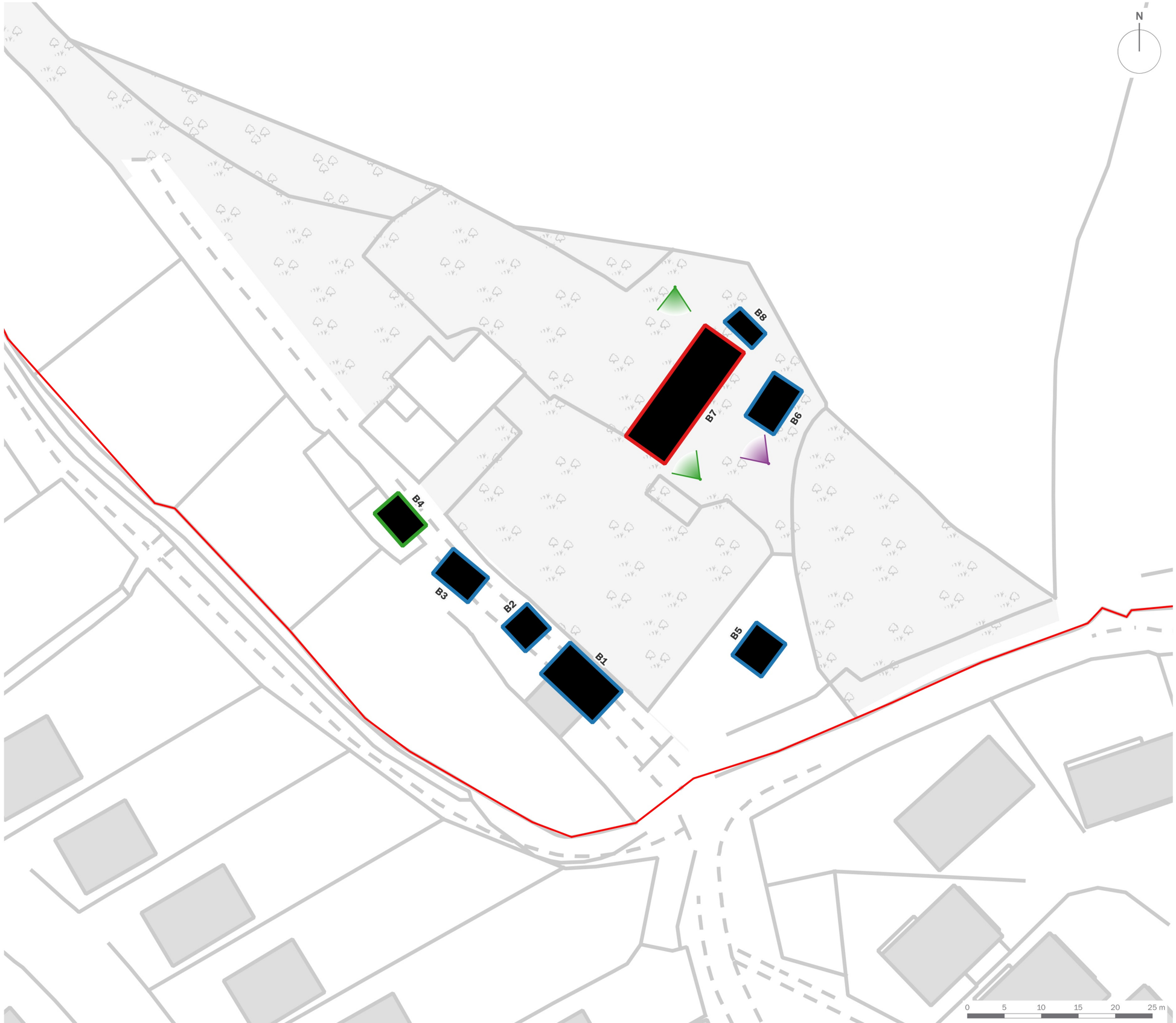
Preliminary Bat Roost Inspection Survey Results and Surveyor/IR Camera Locations – 2024

date	**18 JUNE 2026**	drawn by	**DJo**
drawing number	**edp8635_d009b**	checked	**EWi**
scale	**1:500 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



N

Site Boundary

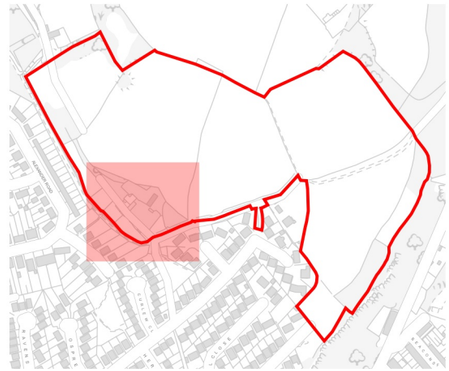
Bulding with High Bat Roost Suitability

Bulding with Low Bat Roost Suitability

Bulding with Negligible Bat Roost Suitability

IR Camera

Surveyor and IR Camera



client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

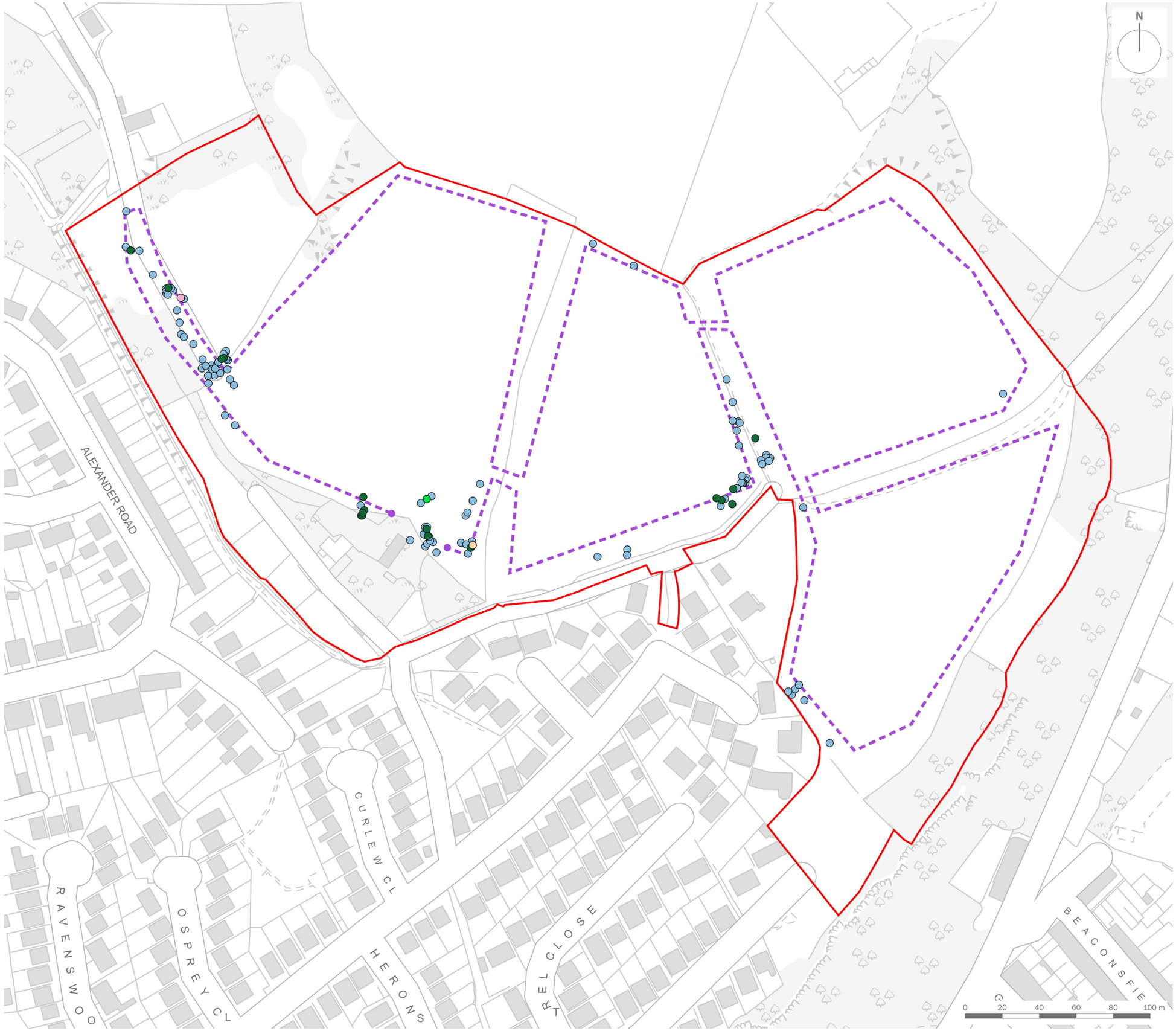
Surveyor/IR Camera Locations - 2026

date	**18 JUNE 2026**	drawn by	**PDr**
drawing number	**edp8635_d016**	checked	**EWi**
scale	**1:500 @ A3**	QA	**GYo**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Transect Route

Common Pipistrelle

Soprano Pipistrelle

Myotis spp.

Leisler's Bat

Long-eared Sp.

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

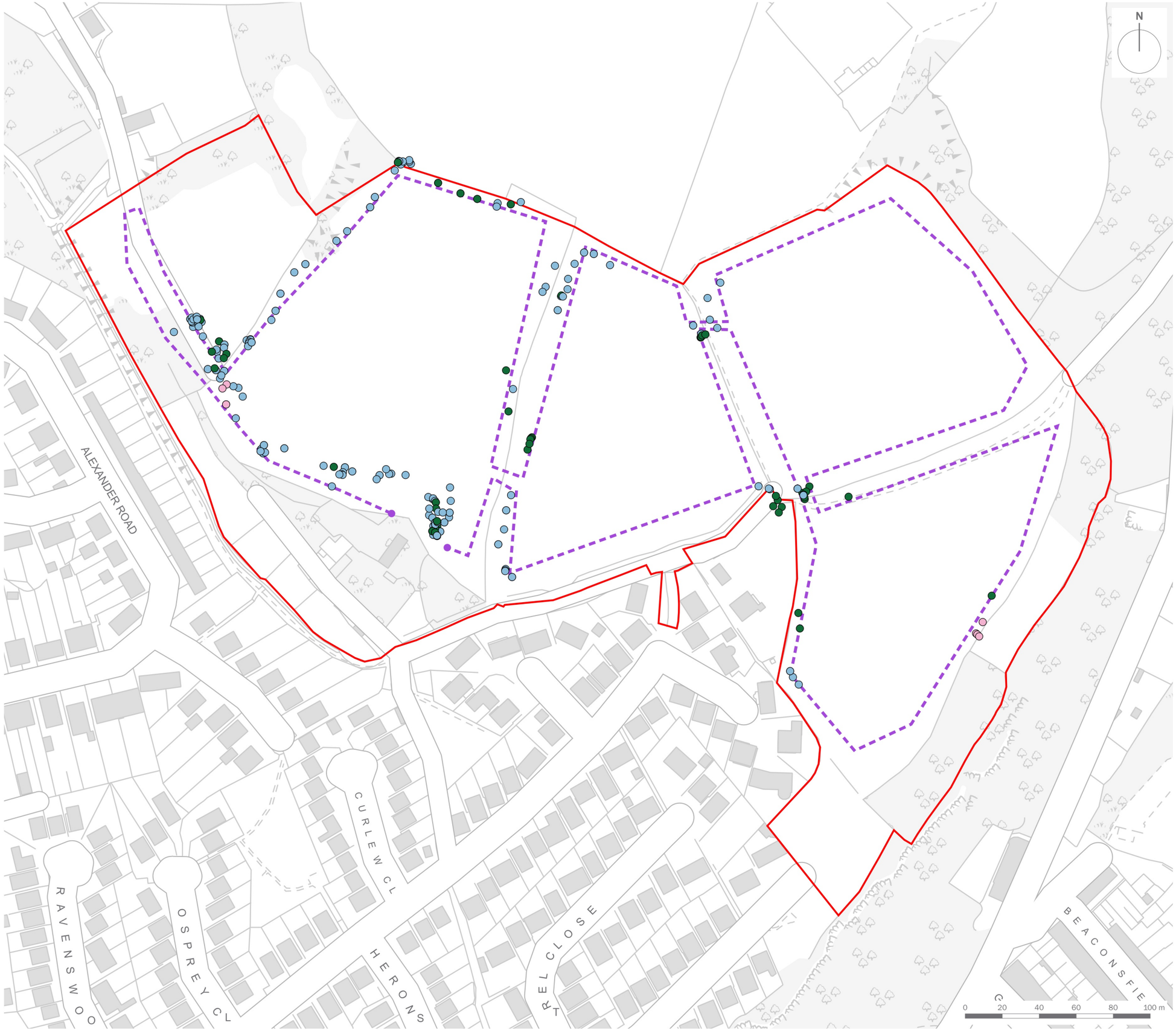
Nighttime Bat Walkover Survey – May 2024

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d011a**	checked	**IBo**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Transect Route

Common Pipistrelle

Soprano Pipistrelle

Myotis spp.

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

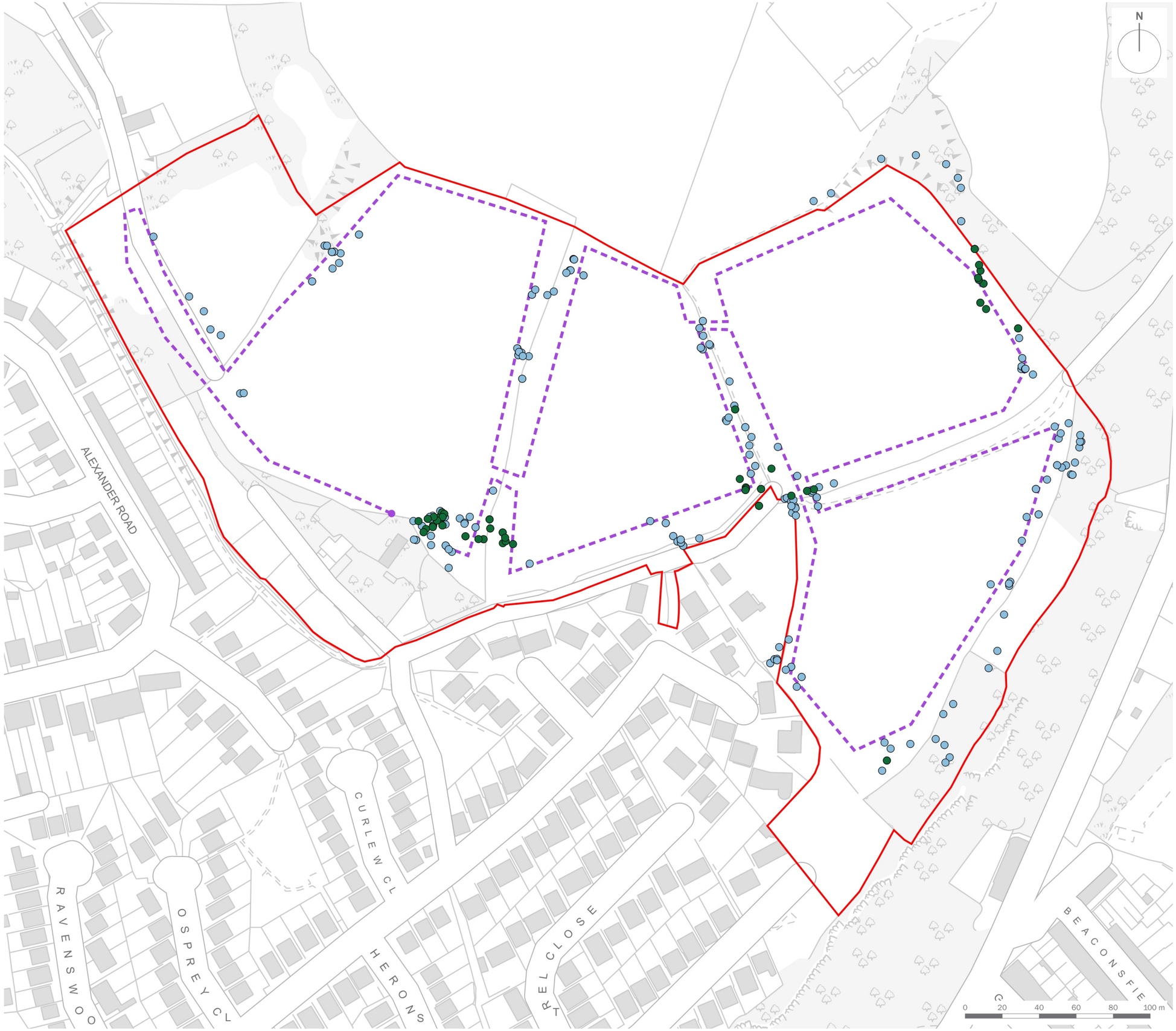
Nighttime Bat Walkover Survey – July 2024

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d012a**	checked	**IBo**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

Transect Route

Common Pipistrelle

Soprano Pipistrelle

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

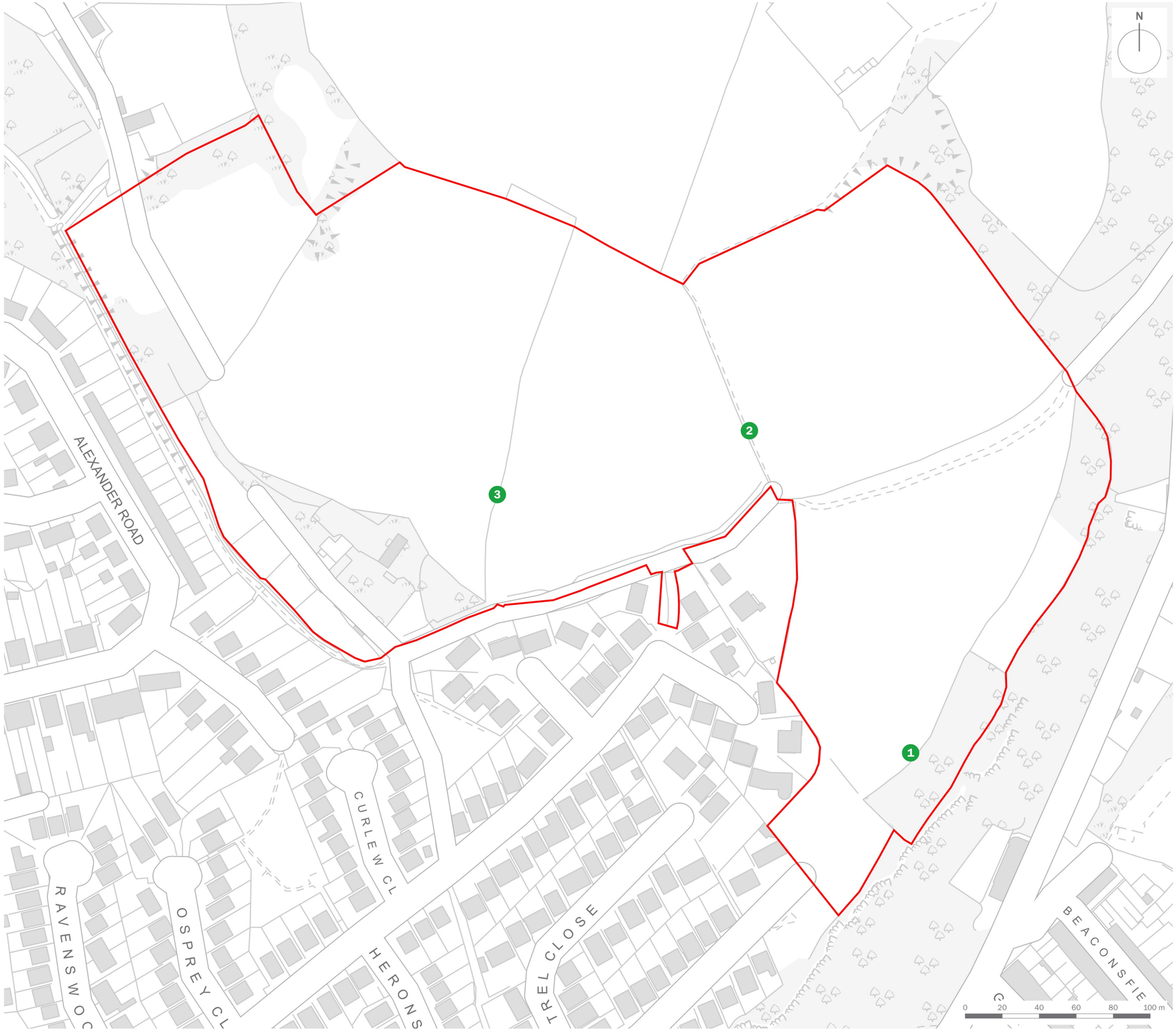
Nighttime Bat Walkover Survey – September 2024

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d013a**	checked	**IBo**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.



Site Boundary

1 Automated Detector Location

client

Codi Group

project title

Leiros Parc, Bryncoch, Neath

drawing title

Automated Detector Locations

date	**13 JANUARY 2026**	drawn by	**VMS**
drawing number	**edp8635_d008a**	checked	**EWi**
scale	**1:2,000 @ A3**	QA	**RBa**

the environmental dimension partnership

Registered office: 01285 740427 - www.edp-uk.co.uk - info@edp-uk.co.uk

© The Environmental Dimension Partnership Ltd. © Crown copyright 2026 OS AC0000805001. © Crown copyright and database rights 2026 Ordnance Survey AC0000808122.

edp | the environmental dimension partnership

CARDIFF
02921 671900

CHELTENHAM
01242 903110

CIRENCESTER
01285 740427

info@edp-uk.co.uk
www.edp-uk.co.uk

The Environmental Dimension Partnership Ltd. Registered as a Limited Company in England and Wales. Company No. 09102431. Registered Office: Quarry Barn, Elkstone Studios, Elkstone, Gloucestershire GL53 9PQ

REGISTERED ORGANISATION CIfA

URBAN DESIGN GROUP REGISTERED PRACTICE

IEMA CORPORATE PARTNER

Landscape Institute
Registered practice