



**Woodside Training
Centre**

Bat Survey Report

Prepared by:
**The Environmental Dimension
Partnership Ltd**

On behalf of:
Vistry Group

March 2023

Report Reference
edp7182_r004a

Document Control

DOCUMENT INFORMATION

Client	Vistry Group
Report Title	Bat Survey Report
Document Reference	edp7182_r004a

VERSION INFORMATION

	Author	Formatted	Peer Review	Proofed by/Date
004_ DRAFT	CNe/EDe	CLa	WCo	-
004a	CNe/EDe	-	-	CRo 140323

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Plan EDP 1: Extended Phase 1 Habitat Survey (edp7182_d002a 15 March 2023 GYo/CNe)
Plan EDP 2: Bat Roosting – Buildings (edp7182_d006a 15 March 2023 GYo/CNe)

Executive Summary

- S1 This Bat Survey Report has been prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Vistry Group (hereafter referred to as 'the Applicant') in relation to the proposed demolition at Woodside Training Centre, Kenilworth (hereafter referred to as 'the Site').
- S2 The Site is approximately 2.48 hectares (ha) in size, situated to the east of Kenilworth and comprises large areas of hard standing and buildings associated with the training centre, with improved grassland, scattered trees and introduced shrub making up the gardens. The proposed development comprises the construction of 55 residential dwellings and associated infrastructure and public open space.
- S3 The assessment of the buildings identified that B1 and B2 contain low number day roosts of bats. The species roosting are brown long-eared bat (*Plecotus auritus*) (B1) and common pipistrelle (*Pipistrellus pipistrellus*) (B1 and B2). A licence will be required for the loss of the low conservation significance bat roosts within the Site.
- S4 Mitigation has been set out in **Section 5** of the report including the provision of bird and bat boxes.

Section 1 Introduction

- 1.1 This Bat Survey Report has been prepared by EDP on behalf of Vistry Group (hereafter referred to as ‘the Applicant’) in relation to the demolition consent at Woodside Training Centre, Kenilworth (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 Appraisal¹;
 - CIEEM Guidelines for Ecological Impact Assessment²; and
 - British Standard: Biodiversity - Code of Practice for Planning and Development³.
- 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) SP 30779 71936 and the Local Planning Authority (LPA) is Warwick District Council. The location and extents of the Site are illustrated on **Plan EDP 1**.
- 1.5 The Site measures approximately 2.48 hectares (ha) and is located to the east of the town of Kenilworth, Warwickshire. The Site comprises large areas of hard standing and buildings associated with the training centre, with areas of improved grassland, introduced shrub, scattered trees and dense scrub surrounding a waterbody. The surrounding landscape comprises grassland field bound by hedgerows and strips of linear woodland, with residential settlements to the west.
- 1.6 Three large buildings are present within the Site that make up the training centre and hotel complex. B1 is an Edwardian building constructed of red brick, which has had multiple modern extensions adjoining the original building. The roof is multi-pitched, and covered with slate tiles, with an original square, flat roofed turret on the southern elevation of the building. Several glass conservatories have also been added onto the exterior of the building and a courtyard with clay tiles is present. B2 is a red brick building of modern construction

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

with a concrete pan tile, forming a multi-pitched roof. B3 is a small single storey garage of similar construction type and age to B2, with an adjoining conservatory.

- 1.7 A smaller outbuilding (B4) is also present in the north-east of the Site, which is brick built with a tiled roof. This building is not covered by the demolition consent and will be discussed within the Ecological Appraisal report (Report Ref: edp7182_r002) provided in support of a full planning application for the Site.

SITE PROPOSALS

- 1.8 This report has been produced in support of the proposed demolition of the three buildings present within the Site (B1–B3). The applicant is looking to obtain demolition consent for the removal of the three buildings, prior to the submission of a full planning application, which will be addressed by a separate Ecological Appraisal report (Report Ref: edp7182_r002) (proposals are shown at **Appendix EDP 1**).
- 1.9 This report relates to the demolition of the three buildings only (B1–B3) and addresses the ecological sensitivities of the proposed demolition with relation to roosting bats and nesting birds, providing mitigation to avoid or reduce the severity of potential ecological impacts.

SCOPE OF THE ASSESSMENT

- 1.10 This Bat Survey Report describes the current ecological interest within 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 in the context of relevant legislation and planning policy. Finally, this Bat Survey Report 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 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 pertinent ecological features/receptors;
 - **Section 4** describes how the development design has responded to the ecological constraints, and then considers the potential impacts of the proposals on pertinent ecological features; and
 - **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 provides the overall conclusions of the report.

Section 2 Baseline Survey Methodology

2.1 This section of the Bat Survey Report summarises the methodologies employed in determining the baseline ecological conditions within the Site. This has been undertaken by appropriately qualified ecologists using relevant best practice methodologies 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:

- Warwickshire Biological Records Centre (WBRC); and
- Multi-Agency Geographic Information for the Countryside (MAGIC) website⁴.

2.4 The desk study was undertaken in November 2022 and involved obtaining the following information:

- Annex II bat species⁵ records (6km radius); and
- Protected, priority and notable bat and bird species records (1km radius).

2.5 These search areas are considered sufficient to cover the potential zones of influence⁶ of the proposed development in relation to designated sites, habitats and species.

DETAILED (PHASE 2) SURVEYS

Bat Surveys

2.6 A number of buildings and mature trees present within the Site were considered to have suitability to support roosting bats.

⁴ www.magic.gov.uk

⁵ Bat species listed in Annex II of the EC Habitats Directive, namely Greater horseshoe, Lesser horseshoe, Barbastelle and Bechstein's bats

⁶ Zone of Influence - the areas and resources that may be affected by the proposed development

- 2.7 The following surveys for bats were therefore undertaken, with reference to good practice guidelines⁷:
- Preliminary roost inspections of all buildings on-site undertaken on 25 May 2022;
 - Emergence/re-entry surveys of all the buildings on-site (B1, B2 and B3) were undertaken in June, July and August 2022; and
 - Bat hibernation survey of building B1 was undertaken on 27 February 2023.
- 2.8 Full details of the bat survey methodologies, and any limitations encountered, are provided in **Appendix EDP 2. Plan EDP 2** shows the location of the buildings and surveyor and infrared camera locations during the emergence and re-entry surveys.
- 2.9 A full assessment of the bat roost suitability of all trees present within the Site will be provided within the Ecological Appraisal report (Report Ref: edp7812_r002), expected to be submitted to the LPA as part of the planning application.

⁷ Collins, J. (ed.) (2016). Bat Surveys: for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust, London

Section 3 Baseline Survey Results

- 3.1 This section of the Ecological Appraisal 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).

PROTECTED, PRIORITY OR OTHERWISE NOTABLE SPECIES

- 3.3 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.
- 3.4 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, the conservation of which public authorities in England must have due regard to under the Natural Environment and Rural Communities Act 2006 (NERC). The National Planning Policy Framework (NPPF) recognises species as an important component of biodiversity.
- 3.5 The likelihood of presence, or confirmed presence, of protected, priority or other notable⁸ 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.

Breeding Birds

- 3.6 All wild birds, their nests and eggs are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). This makes it an offence to:
- Intentionally kill, injure or take any wild bird;

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

- 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.
- 3.7 In addition, further protection is afforded to those wild bird species listed on Schedule 1, 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.
- 3.8 Nine records of bird species were retrieved during the desk study from within the last 10 years, including red kite (*Milvus milvus*) that receives legal protection under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Also returned were a further two records of species that comprise Priority Species; bullfinch (*Pyrrhula pyrrhula*) and song thrush (*Turdus philomelos*), and a further three are of listed as Species of Conservation Concern; swift (*Apus apus*), house martin (*Delichon urbicum*) and mallard (*Anas platyrhynchos*).
- 3.9 With the exception of red kite, which generally favours woodlands, the species identified during the desk study relate to species that would potentially breed in habitats found within the Site.
- 3.10 The buildings on the Site have suitability to support nesting birds within the internal loft voids of the buildings where there is external access, and on the roofs of the buildings. The assemblage of nesting bird species is considered likely to be of Site Level importance and comprise common species such as woodpigeon (*Columba palumbus*), although habitat suitable for swift, house martin and other building dwelling species is present.

Bats

- 3.11 All species of British bat are European Protected Species (EPS) as they receive strict protection under the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations), which 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.
- 3.12 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.

- 3.13 The data search returned 19 records for bats within the 1km search radius around the Site within the last 10 years. This related to at least nine different species: Leisler's bat (*Nyctalus leisleri*), serotine (*Eptesicus serotinus*), common pipistrelle (*Pipistrellus pipistrellus*), whiskered bat (*Myotis mystacinus*), Nathusius' pipistrelle (*Pipistrellus nathusii*), soprano pipistrelle, brown long-eared bat, noctule and barbastelle. No records of bat roosts were returned within 1km of the Site from the last 10 years, however, there are two historic records of a bat roost from a building within the Site, relating to brown long-eared bat in 1991 and *Pipistrelle* sp. in 1984. The OSGR (SP 308719) provided for the records is within B2, however, as this is only accurate to 100m and given that this building would have been newly constructed in 1991 it's unlikely to have had potential roost features suitable for supporting a 'large roost of brown long-eared bats', with no suitable features identified in the 2022 assessment. It is considered likely that the record relates to B1, in which brown long-eared droppings were recorded in 2022, as well as numerous voids that would be suitable for supporting a large roost of this nature.
- 3.14 For Annex II species, four records of barbastelle and one record of Bechstein's bat were returned within 6km of the Site, with no roost records.
- 3.15 Twenty records within 6km of the Site relating to European Protected Species Mitigation Licences (EPSML) issued for bats were returned from the data search on MAGIC. These related to six different species: common pipistrelle, soprano pipistrelle, brown long-eared bat, barbastelle, whiskered bat and noctule. The closest record is associated with the damage of a resting place and breeding site for brown long-eared bats and common pipistrelle c.1.3km north of the Site at Dalehouse Farm. In addition, a record of a licence relating to barbastelle is present c.4km north-west of the Site.

Assessment of Buildings

- 3.16 With respect to buildings, preliminary assessments and emergence re-entry surveys were undertaken for all buildings which identified roosts in B1 and B2, and B3 was recorded as having moderate roosting potential. The results are summarised in **Table EDP 3.1** and shown on **Plan EDP 2** (see **Appendix EDP 2** for details).

Table EDP 3.1: Summary Results of Building Assessment

Building Number	Potential Bat Features	Roosting Suitability (or confirmed roost)
B1	Roof voids, lifted/cracked/missing tiles, missing bricks, ornate vent, door into roof void, gaps under fascia board and gaps around windows. Feeding remains and droppings (brown long-eared bat) present in roof voids.	Confirmed Roost: brown long-eared bat and common pipistrelle occasional day roost, low numbers.
B2	Roof voids, lifted/cracked/missing tiles and hanging tiles, wooden panelling, holes into void in soffit box and collapsed roof	Confirmed Roost: common pipistrelle occasional day roost, low numbers

Building Number	Potential Bat Features	Roosting Suitability (or confirmed roost)
B3	Roof void, lifted/cracked/missing tiles, holes into void in soffit box and open door.	Moderate

3.17 The hibernation survey of B1 identified no evidence of hibernating bats within the building. The building is considered to be a low suitability to hibernating bats, with B2 and B3 considered to be of negligible suitability.

3.18 Taking into account the presence of common pipistrelle and brown long-eared bats utilising the Site for summer day roosting, the overall value of the Site is considered to be of Local importance.

SUMMARY OF KEY SURVEY FINDINGS

3.19 The key ecological features/receptors pertinent to the development proposals, based on the survey findings described above, are set out in **Table EDP 3.2**.

Table EDP 3.2: summary of Ecological Features

Receptor	Key Attributes	Nature Conservation Importance
Species		
Breeding Birds	The Site has suitability to support common nesting bird species within open voids, crevices or under eaves of buildings and on any flat roof space.	Site
Bat Roosting – Buildings	Low numbers of roosting bats have been identified in buildings B1 (brown long-eared bat and common pipistrelle), and B2 (common pipistrelle).	Local

Section 4

Impact Assessment

- 4.1 This section of the Bat Survey Report considers the likely impacts of the development proposals on the pertinent ecological features identified in **Section 3** in the absence of additional mitigation.

IMPACTS ON PROTECTED, PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

- 4.2 All wild birds, their nests and eggs are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended), with certain species afforded additional protection measures. In addition, certain conservation concern species are listed as Priority Species.
- 4.3 Common, widespread and declining bird species may be using the exposed voids, crevices and flat roofs, or under eaves of the buildings as nesting habitat within the Site, all of which are proposed for demolition. There is therefore a risk of damaging, destroying or disturbing active bird's nests if these works take place during the recognised nesting bird season (March–September inclusive).
- 4.4 The loss of suitable habitat proposed as a result of the demolition is minimal and unlikely to result in the displacement of any territories given the scale of losses. It is considered that breeding birds present on the Site will not be significantly impacted by the proposed development.

Bats

Bat Roosting – Buildings

- 4.5 The Site supports buildings with occasional day roosts with low numbers for brown long eared bat and common pipistrelle bat.
- 4.6 The proposed layout will result in the loss of all buildings within the Site, including those with roosts. In the absence of a European Protected Species Licence (EPSL), the destruction of a bat roost is in breach of wildlife legislation.

Section 5

Mitigation and Enhancement Strategy

- 5.1 This section of the report considers the impacts set out in **Section 4** and puts forward additional measures to firstly avoid any ecological impact, and if this is not possible then to minimise the likely impacts of the proposed development to insignificant levels, to comply with relevant planning policy and avoid any infringement of relevant legislation.

PROTECTED PRIORITY OR OTHER NOTABLE SPECIES

Breeding Birds

- 5.2 The demolition of buildings should be undertaken between September and February inclusive to avoid impacting nesting birds, however, should the works occur outside of this period, the buildings should be inspected by a suitably experienced ecologist prior to demolition.
- 5.3 Further enhancement of bird nesting opportunities will be delivered within the full planning application proposed for the Site and will include new hedgerow planting; planting of new trees; the development of a wildflower grassland and the creation of a wildlife pond, in addition to the installation of bird boxes on retained trees. The following recommendation for number and specification has been incorporated into the detailed landscape design for the development:
- 2x 1B Schwegler Nest Box (26mm hole); and
 - 2x 1B Schwegler Nest Box (32mm hole).
- 5.4 The locations of the bird nesting boxes are provided in the Detailed Landscape Design within **Appendix EDP 1**.

Bats

Roosting Bats – Buildings

- 5.5 Due to the presence of bat roosts within B1 and B2, a Natural England EPSML will be required before these buildings are soft-stripped or demolished. The EPSML will need to include measures to avoid harming bats during works and to provide alternative roosting locations habitat provided for bats within the Site, including habitat suitable for both species of bat (brown long eared bats requiring a void roost and common pipistrelle requiring crevice roosts).
- 5.6 In addition to the above, specific measures have been agreed to compensate for the loss of bat roosts through the provision of bat roosting opportunities incorporated on retained trees, to include six Schwegler 1FF bat boxes (or similar) to accommodate common pipistrelle and brown long-eared bat roosting.

- 5.7 An integrated ridge tile incorporated into a new dwelling, to accommodate brown long-eared bat roosting will also be provided within the full planning application to be submitted for the Site.
- 5.8 All bat roost features should be situated on southern facing aspects that face onto green open spaces as far as possible away from any light sources. The locations of proposed bat roosting features are shown in **Appendix EDP 1**. Where bat box locations are shown please assume two boxes are affixed to each tree.

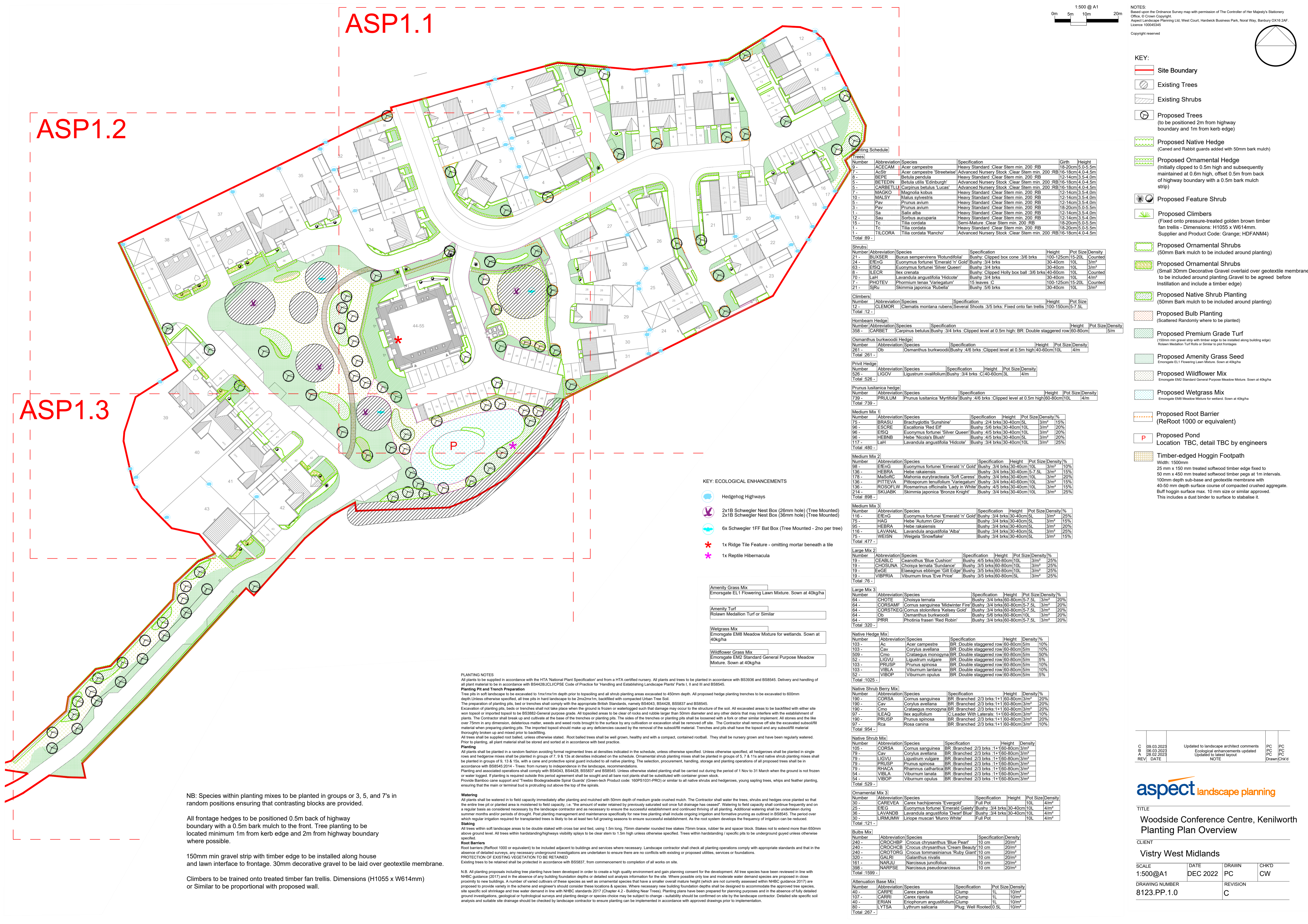
Other Protected Species

- 5.9 During the demolition period, all tracking of machinery, the storage of materials and removal of waste must be contained to within areas of existing hardstanding, to avoid potential harm to habitats such as hedgerows, trees and grassland given that an impact assessment for protected species is not covered within this report.

SUMMARY AND CONCLUSIONS

- 5.10 EDP concludes that subject to the full implementation of the additional measures summarised above, the proposed demolition of the buildings is capable of compliance with relevant planning policy and legislation and can deliver net benefits for wildlife and biodiversity.

Appendix EDP 1
Detailed Landscape Design
(Drawing Number: 8123.PP.1.0, Revision C, December 2022)



ASP1.1

ASP1.2

ASP1.3



- KEY:**
- Site Boundary
 - Existing Trees
 - Existing Shrubs
 - Proposed Trees
(to be positioned 2m from highway boundary and 1m from kerb edge)
 - Proposed Native Hedge
(Cane and Rabbit guards added with 50mm bark mulch)
 - Proposed Ornamental Hedge
(Initially clipped to 0.5m high and subsequently maintained at 0.6m high, offset 0.5m back from highway boundary with a 0.5m bark mulch strip)
 - Proposed Feature Shrub
 - Proposed Climbers
(Fixed onto pressure-treated golden brown timber fan trellis - Dimensions: H1055 x W614mm. Supplier and Product Code: Grange, HDFANM4)
 - Proposed Ornamental Shrub
(50mm Bark mulch to be included around planting)
 - Proposed Ornamental Shrubs
(Small 30mm Decorative Gravel overlaid over geotextile membrane to be included around planting. Gravel to be agreed before installation and include a timber edge)
 - Proposed Native Shrub Planting
(50mm Bark mulch to be included around planting)
 - Proposed Bulb Planting
(Scattered Randomly where to be planted)
 - Proposed Premium Grade Turf
(100mm min gravel strip with timber edge to be installed along building edge)
 - Proposed Amenity Grass Seed
(Emergate EL1 Flowering Lawn Mixture. Sown at 40g/ha)
 - Proposed Wildflower Mix
(Emergate EM2 Standard General Purpose Meadow Mixture. Sown at 40g/ha)
 - Proposed Wetgrass Mix
(Emergate EM8 Meadow Mixture for wetlands. Sown at 40g/ha)
 - Proposed Root Barrier
(ReRoot 1000 or equivalent)
 - Proposed Pond
Location TBC, detail TBC by engineers
 - Timber-edged Hoggin Footpath
Width: 1500mm
25 mm x 150 mm treated softwood timber edge fixed to 50 mm x 450 mm treated softwood timber pegs at 1m intervals.
100mm depth sub-base and geotextile membrane with 40-50 mm depth surface course of compacted crushed aggregate.
Buff hoggin surface max. 10 mm size or similar approved. This includes a dust binder to surface to stabilise it.

Planting Schedule

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
9	ACECAM	Acer campestre	Heavy Standard Clear Stem min. 200 RB	18-20cm	15-20L	Counted
7	AcStr	Acer campestre 'Streetwise'	Advanced Nursery Stock Clear Stem min. 200 RB	16-18cm	4.0-4.5m	
6	BEPEF	Betula pendula	Heavy Standard Clear Stem min. 200 RB	17-14cm	3.5-4.0m	
5	BETEDIN	Betula ulula 'Edinburgh'	Advanced Nursery Stock Clear Stem min. 200 RB	16-18cm	4.0-4.5m	
5	CARBETLU	Carpinus betulus 'Lucas'	Advanced Nursery Stock Clear Stem min. 200 RB	16-18cm	4.0-4.5m	
7	MAGKO	Magnolia kobus	Heavy Standard Clear Stem min. 200 RB	12-14cm	3.5-4.0m	
10	MALSY	Malus sylvestris	Heavy Standard Clear Stem min. 200 RB	12-14cm	3.5-4.0m	
5	Pav	Prunus avium	Heavy Standard Clear Stem min. 200 RB	12-14cm	3.5-4.0m	
1	Sa	Salix alba	Heavy Standard Clear Stem min. 200 RB	18-20cm	5.0-5.5m	
12	Sau	Sorbus aucuparia	Heavy Standard Clear Stem min. 200 RB	12-14cm	3.5-4.0m	
15	Tc	Tilia cordata	Semi-Mature Clear Stem min. 200 RB	18-20cm	5.0-5.5m	
1	Tc	Tilia cordata	Heavy Standard Clear Stem min. 200 RB	18-20cm	5.0-5.5m	
1	TILCORA	Tilia cordata 'Rancho'	Advanced Nursery Stock Clear Stem min. 200 RB	16-18cm	4.0-4.5m	
Total	89					

Shrubs

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
21	BUXSER	Buxus sempervirens 'Rotundifolia'	Bushy Clipped box cone 3/6 brks	100-125cm	15-20L	Counted
24	EIEG	Euonymus fortunei 'Emerald 'n' Gold'	Bushy 3/4 brks	30-40cm	10L	3/m²
63	EISO	Euonymus fortunei 'Silver Queen'	Bushy 3/4 brks	30-40cm	10L	3/m²
8	IIECR	Ilex crenata	Bushy Clipped Holly box ball 3/6 brks	40-60cm	10L	Counted
70	LaH	Lavandula angustifolia 'Hidcote'	Bushy 3/4 brks	30-40cm	10L	4/m²
7	PHOTEV	Phoridium tenax 'Variegatum'	15 leaves 1c	100-125cm	15-20L	Counted
21	SIRu	Skimmia japonica 'Rubella'	Bushy 5/6 brks	30-40cm	10L	3/m²
Total	12					

Climbers

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
12	CLEMOR	Clematis montana rubens	Several Shoots 3/5 brks: Fixed onto fan trellis	100-150cm	5-7.5L	
Total	12					

Hornbeam Hedge

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
358	CARBET	Carpinus betulus BR	Clipped level at 0.5m high; BR: Double staggered row	60-80cm	5m	
Total	358					

Osmanthus burkwoodii Hedge

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
261	Ob	Osmanthus burkwoodii	Bushy 4/6 brks: Clipped level at 0.5m high	40-60cm	10L	4/m²
Total	261					

Privet Hedge

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
526	LIGOV	Ligustrum ovalifolium	Bushy 3/4 brks	40-80cm	3L	4/m²
Total	526					

Prunus lusitanica hedge

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
739	PRULUM	Prunus lusitanica 'Myrtifolia'	Bushy 4/6 brks: Clipped level at 0.5m high	60-80cm	10L	4/m²
Total	739					

Medium Mix 1

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
75	BRASU	Brachyglottis 'Sunshine'	Bushy 2/4 brks	30-40cm	5L	3/m²
95	ESCRE	Escallonia 'Red Elf'	Bushy 5/6 brks	30-40cm	10L	3/m²
95	EISO	Euonymus fortunei 'Silver Queen'	Bushy 4/5 brks	30-40cm	10L	3/m²
96	HEBNB	Hebe 'Nicola's Blush'	Bushy 4/5 brks	30-40cm	10L	3/m²
117	LaH	Lavandula angustifolia 'Hidcote'	Bushy 3/4 brks	30-40cm	10L	3/m²
Total	480					

Medium Mix 2

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
98	EIEG	Euonymus fortunei 'Emerald 'n' Gold'	Bushy 3/4 brks	30-40cm	10L	3/m²
136	HEBRA	Hebe rakaiensis	Bushy 3/4 brks	30-40cm	5-7.5L	3/m²
178	MaSOFM	Mahonia eurybrachata 'Soft Caraxes'	Bushy 3/4 brks	30-40cm	10L	3/m²
136	PITTEVA	Pittosporum tenuifolium 'Variegatum'	Bushy 3/4 brks	30-40cm	10L	3/m²
136	ROSOFLV	Rosmarinus officinalis 'Lady in White'	Bushy 4/5 brks	30-40cm	10L	3/m²
214	SKUJABK	Skimmia japonica 'Bronze Knight'	Bushy 3/4 brks	30-40cm	10L	3/m²
Total	898					

Medium Mix 3

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
116	EIEG	Euonymus fortunei 'Emerald 'n' Gold'	Bushy 3/4 brks	30-40cm	5L	3/m²
75	HAG	Hebe 'Autumn Glory'	Bushy 3/4 brks	30-40cm	5L	3/m²
95	HEBRA	Hebe rakaiensis	Bushy 3/4 brks	30-40cm	5L	3/m²
116	LAVANAL	Lavandula angustifolia 'Alba'	Bushy 3/4 brks	30-40cm	5L	3/m²
75	WEISN	Weigela 'Snowflake'	Bushy 3/4 brks	30-40cm	5L	3/m²
Total	477					

Large Mix 2

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
19	CEABLC	Ceanothus 'Blue Cushion'	Bushy 4/5 brks	60-80cm	10L	3/m²
19	CHOSUNA	Choisya ternata 'Sundance'	Bushy 3/5 brks	60-80cm	10L	3/m²
19	EaGE	Elaeagnus ebbingei 'Gill Edge'	Bushy 3/5 brks	60-80cm	10L	3/m²
19	VIBPRIA	Viburnum tinus 'Eve Price'	Bushy 3/5 brks	60-80cm	5L	3/m²
Total	76					

Large Mix 3

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
64	CHOTE	Choisya ternata	Bushy 3/4 brks	60-80cm	5-7.5L	3/m²
64	CORSAME	Cornus sanguinea 'Midwinter Fire'	Bushy 3/4 brks	60-80cm	5-7.5L	3/m²
64	CORSTKEG	Cornus stolonifera 'Kelsey Gold'	Bushy 3/4 brks	60-80cm	5-7.5L	3/m²
64	Ob	Osmanthus burkwoodii	Bushy 5/6 brks	60-80cm	10L	3/m²
64	PIRR	Photinia fraseri 'Red Robin'	Bushy 3/4 brks	60-80cm	5-7.5L	3/m²
Total	320					

Native Hedge Mix

Number	Abbreviation	Species	Specification	Height	Density
103	Ac	Acer campestre	BR Double staggered row	60-80cm	5/m
103	Cav	Corylus avellana	BR Double staggered row	60-80cm	5/m
509	Cmo	Crataegus monogyna	BR Double staggered row	60-80cm	5/m
52	LIGVU	Ligustrum vulgare	BR Double staggered row	60-80cm	5/m
103	PRUSP	Prunus spinosa	BR Double staggered row	60-80cm	5/m
103	VIBLA	Viburnum lanata	BR Double staggered row	60-80cm	5/m
52	VIBOP	Viburnum opulus	BR Double staggered row	60-80cm	5/m
Total	1025				

Native Shrub Berry Mix

Number	Abbreviation	Species	Specification	Height	Density
190	CORSA	Cornus sanguinea	BR Branched 2/3 brks	1+1	60-80cm
190	Cav	Corylus avellana	BR Branched 2/3 brks	1+1	60-80cm
190	Cmo	Crataegus monogyna	BR Branched 2/3 brks	1+1	60-80cm
97	LEAO	Ilex aquifolium	C Leader With Lateralis	1+1	60-80cm
190	PRUSP	Prunus spinosa	BR Branched 2/3 brks	1+1	60-80cm
97	Rca	Rosa canina	BR Branched 2/3 brks	1+1	60-80cm
Total	954				

Native Shrub Mix

Number	Abbreviation	Species	Specification	Height	Density
105	CORSA	Cornus sanguinea	BR Branched 2/3 brks	1+1	60-80cm
73	Cav	Corylus avellana	BR Branched 2/3 brks	1+1	60-80cm
79	LIGVU	Ligustrum vulgare	BR Branched 2/3 brks	1+1	60-80cm
79	PRUSP	Prunus spinosa	BR Branched 2/3 brks	1+1	60-80cm
79	RHACA	Rhamnus cathartica	BR Branched 2/3 brks	1+1	60-80cm
54	VIBLA	Viburnum lanata	BR Branched 2/3 brks	1+1	60-80cm
54	VIBOP	Viburnum opulus	BR Branched 2/3 brks	1+1	60-80cm
Total	529				

Ornamental Mix 3

Number	Abbreviation	Species	Specification	Height	Pot Size	Density
30	CAREVEA	Carex hachioensis 'Evergold'	Full Pot	10	20m²	
25	EIEG	Euonymus fortunei 'Emerald Gauty'	Bushy 3/4 brks	30-40cm	10L	4/m²
36	LAVANDB	Lavandula angustifolia 'Dwarf Blue'	Bushy 3/4 brks	30-40cm	10L	4/m²
30	LIRUMUMV	Liloupe muscari 'Munro White'	Full Pot	10L	4/m²	
Total	121					

Bulbs Mix

Number	Abbreviation	Species	Specification	Density
240	CROCHBP	Crocus chrysanthus 'Blue Pearl'	10 cm	20/m²
240	CROCHCB	Crocus chrysanthus 'Cream Beauty'	10 cm	20/m²
240	CROTORG	Crocus tommasinianus 'Ruby Giant'	10 cm	20/m²
320	GALRI	Galanthus nivalis	10 cm	20/m²
161	NARJU	Narcissus jonifolius	10 cm	20/m²
388	NARPE	Narcissus pseudonarcissus	10 cm	20/m²
Total	1599			

Attenuation Base Mix

Number	Abbreviation	Species	Specification	Pot Size	Density
40	CARPE	Carex pendula	Clump	1L	10/m²
107	CARRI	Carex spargana	Clump	1L	10/m²
40	ERIAN	Eriophorum angustifolium	Clump	1L	10/m²
80	LYTSA	Lythrum salicaria	Plug Well Rooted	0.5L	10/m²
Total	267				

- KEY: ECOLOGICAL ENHANCEMENTS**
- Hedgehog Highways
 - 2x1B Schwegler Nest Box (26mm hole) (Tree Mounted)
 - 2x1B Schwegler Nest Box (30mm hole) (Tree Mounted)
 - 6x Schwegler 1FF Bat Box (Tree Mounted - 2no per tree)
 - 1x Ridge Tile Feature - omitting mortar beneath a tile
 - 1x Reptile Hibernacula

- Amenity Grass Mix**
Emergate EL1 Flowering Lawn Mixture. Sown at 40g/ha
- Amenity Turf**
Rotawn Medallion Turf or Similar
- Wetgrass Mix**
Emergate EM8 Meadow Mixture for wetlands. Sown at 40g/ha
- Wildflower Grass Mix**
Emergate EM2 Standard General Purpose Meadow Mixture. Sown at 40g/ha

PLANTING NOTES

All plants to be supplied in accordance with the HTA 'National Plant Specification' and from a HTA certified nursery. All plants and trees to be planted in accordance with BS3938 and BS8545. Delivery and handling of all plant material to be in accordance with BS4428/JCL/CPSE Code of Practice for 'Handling and Establishing Landscape Plants' Parts I, II and III and BS8545.

Planting Pit and Trench Preparation

Tree pits in soft landscape to be excavated to 1m x 1m x 1m depth prior to topsoiling and all shrub planting areas excavated to 450mm depth. All proposed hedge planting trenches to be excavated to 600mm depth. Unless otherwise specified, all tree pits in hard landscape to be 2m x 2m x 1m, backfilled with compacted Urban Tree Soil.

The preparation of planting pits, bed or trenches shall comply with the appropriate British Standards, namely BS6043, BS4428, BS5837 and BS8545.

Excavation of planting pits, beds or trenches shall not take place when the ground is frozen or waterlogged such that damage may occur to the structure of the soil. All excavated areas to be backfilled with either wet topsoil or imported topsoil to be BS3882-General purpose grade. All topsoiled areas to be clear of rocks and rubble larger than 50mm diameter and any other debris that may interfere with the establishment of plants. The Contractor shall break up and cultivate at the base of the trenches or planting pits. The sides of the trenches or planting pits shall be loosened with a fork or other similar implement. All stones and the like over 75mm in any dimension, deleterious matter, weeds and weed roots brought to the surface by any cultivation or excavation shall be removed off site. The Contractor shall remove off site the excavated subsoil/mulch material when preparing planting pits. The imported topsoil should make up any deficiencies caused by the removal of the subsoil/mulch material. Trenches and pits shall have the topsoil and any subsoil/mulch material thoroughly broken up and mixed prior to backfilling.

All trees shall be supplied root balled, unless otherwise stated. Root balled trees shall be well grown, healthy and with a compact, contained rootball. They shall be nursery grown and have been regularly watered. Prior to planting, all plant material shall be stored and sorted in accordance with best practice.

Planting

All plants shall be planted in a random fashion avoiding formal regimented lines at densities indicated in the schedule, unless otherwise specified. Unless otherwise specified, all hedges shall be planted in single rows and hedgehog mixes shall be planted in groups of 7, 9 & 13s at densities indicated on the schedule. Ornamental shrub planting mixes shall be planted in groups of 5, 7 & 11s and native shrub planting mixes shall be planted in groups of 9, 13 & 15s in a cane and protective spiral guard included to all native planting. The selection, procurement, handling, storage and planting operations of all proposed trees shall be in accordance with BS8545:2014 - Trees: from nursery to independence in the landscape, recommendations.

Planting and associated operations shall comply with BS4043, BS4428, BS5837 and BS8545. Unless otherwise stated planting shall be carried out during the period of 1 Nov to 31 March when the ground is not frozen or water logged. If planting is required outside this period agreement shall be sought and all bare root plants shall be substituted with container grown stock.

Provide Bamboo cane support and 'Treebio Biodegradable Spiral Guards' (Green-tech Product code: 160PS1031-PRO) or similar to all native shrubs and hedges, young sapling trees, whips and feather planting, ensuring that the main or terminal bud is protruding out above the top of the spirals.

Watering

All plants shall be watered in to field capacity immediately after planting and mulched with 50mm depth of medium grade crushed mulch. The Contractor shall water the trees, shrubs and hedges once planted so that the entire tree pit or planted area is moistened to field capacity, i.e. "the amount of water retained by previously saturated soil once full drainage has ceased". Watering to field capacity shall continue frequently and on a regular basis as considered necessary by the landscape contractor and as necessary to ensure the successful establishment and continued thriving of all planting. Additional watering shall be undertaken during summer months and/or periods of drought. Post planting management and maintenance specifically for new tree planting shall include ongoing irrigation and formative pruning as outlined in BS8545. The period over which regular irrigation required for transplanted trees is likely to be at least two full growing seasons to ensure successful establishment. As the root system develops the frequency of irrigation can be reduced.

Staking

All trees within soft landscape areas to be double staked with cross bar and tied, using 1.5m long, 75mm diameter rounded tree stakes 75mm brace, rubber tie and spacer block. Stakes not to extend more than 650mm above ground level. All trees within hard landscape/highways visibility shall be to clear stem to 1.5m high unless otherwise specified. Trees within hard landscaping / specific pits to be underground guyed unless otherwise specified.

Root Barriers

Root barriers (ReRoot 1000 or equivalent) to be included adjacent to buildings and services where necessary. Landscape contractor shall check all planting operations comply with appropriate standards and that in the absence of detailed surveys, any necessary underground investigations are undertaken to ensure there are no conflicts with existing or proposed utilities, services or foundations.

PROTECTION OF EXISTING VEGETATION TO BE RETAINED

PROTECTION OF EXISTING VEGETATION TO BE RETAINED

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PROTECTION OF EXISTING VEGETATION TO BE RETAINED

NB: Species within planting mixes to be planted in groups of 3, 5, and 7's in random positions ensuring that contrasting blocks are provided.

Appendix EDP 2 Bat Surveys

METHODOLOGY

A2.1 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 good practice guidelines published by the Bat Conservation Trust⁹.

Bat Roost Surveys

Preliminary Assessment of Buildings

A2.2 Owing to the presence of potentially suitable buildings within the Site, a preliminary visual assessment of these buildings was undertaken to record any evidence of roosting bats or any features capable of supporting roosting bats.

A2.3 The survey was completed on 25 May 2022 by a bat licensed ecologist in accordance with the good practice guidelines referred to above. All external features considered potentially suitable for bats were assessed using a high-powered torch, from all aspects, where access allowed. In addition, an internal inspection of the buildings (including roof voids) was undertaken where access was possible. (note if any/all buildings were not inspected internally due lack of access, or safety concerns e.g., asbestos or structural issues).

A2.4 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 in soffits, barge boards or fascias; and
- Cavity walls with potential bat access.

A2.5 Signs of roosting bat presence recorded (where present) include the following:

- Bat(s) roosting *in situ*;
- Bat droppings within or beneath a feature;
- Staining around or beneath a feature;

⁹ Collins, J. (ed.) (2016). *Bat Surveys: for Professional Ecologists: Good Practice Guidelines (3rd edition)*. The Bat Conservation Trust, London

- Oily marks (staining around roost access points);
- Audible squeaking from the roost;
- Large/regularly used roosts or regularly used sites may produce an odour; and
- Flies around the roost, attracted by the smell of guano.

A2.6 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;
- 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.

A2.7 Bat droppings were identified in a roof void of B1, which were collected and sent to EcoWarwicker Ecological Forensics for Polymerase Chain Reaction (PCR) analysis to identify the species.

A2.8 To supplement the information provided by the lab analysis, an Anabat Express detector (hereafter referred to as 'automated detectors'), was deployed on 03 August 2022 and collected on the 17 August 2022, within the same roof void, which automatically triggers and records bat echolocation calls over multiple nights at a time.

Limitations

A2.9 Internal inspections of the buildings were as thorough as possible, however, where access was unsafe (i.e., unsupported flooring) then a visual assessment from a safe distance was carried out. Where access was not possible in some roof spaces, emergence re-entry surveys were carried out if suitable roost features were identified externally.

Bat Hibernation Survey

A2.10 A winter hibernation survey was undertaken on 27 February 2023 by a bat licensed ecologist in accordance with the good practice guidelines referred to above, comprising a

detailed inspection of B1, which had been identified as having low hibernation potential during the preliminary visual assessment in May 2022.

A2.11 The survey involved a detailed inspection to look for and identify hibernating bats or other evidence of occupation. This included a systematic inspection of all cracks, crevices and voids using torches, mirrors and endoscope, as well as a visual inspection for droppings and oil staining around suitable roost features.

A2.12 The deployment of automated detectors can also be used gain information about the species of hibernating bats, however, in this instance it was not considered necessary.

Dusk Emergence/Dawn Re-entry Surveys

A2.13 Owing to the presence of buildings with features suitable for roosting bats which are at risk of impacts from development, dusk emergence and dawn re-entry surveys of these buildings were conducted in accordance with the good practice guidelines referred to above. The date and type of surveys conducted on each relevant building (see **Plan EDP 2** for building reference numbers) are set out in **Table EDP A2.1**.

Table EDP A2.1: Dusk Emergence and Dawn Re-entry Surveys

Building Reference	Date	Dusk/Dawn	Number of Surveyors
B1	27.06.22	Dusk	10 surveyors, 2 infrared cameras
	15.07.22	Dawn	10 surveyors, 2 infrared cameras
	03.08.22	Dusk	10 surveyors, 2 infrared cameras
B2	28.06.22	Dusk	8 surveyors, 2 infrared cameras
	02.08.22	Dawn	8 surveyors, 3 infrared cameras
B3	28.06.22	Dusk	2 surveyors
	02.08.22	Dawn	2 surveyors

A2.14 During each survey, suitably qualified ecologists were positioned in appropriate locations, **Plan EDP 2**, 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, and the dawn surveys started at least an hour and a half before sunrise and finished 15 minutes after sunrise, as per good practice guidelines. The surveyors used Elekon Batlogger M bat detectors to record the echolocation calls of the bats on-site during the survey. The weather conditions were generally suitable for such surveys, as detailed in **Table EDP A2.2**.

Table EDP A2.2: Weather Conditions During Emergence Re-entry Surveys

Date	Sunset/ Sunrise Time	Start/ Finish Time	Temperature (°C)	Cloud Cover (%)	Wind (Beaufort)	Precipitation
27.06.22	21.32	21.20/ 23.02	17	0	0	Nil
28.06.22	21.32	21.20/ 23.02	18	100	2-3	Nil
15.07.22	05.02	03.02/ 05.17	11-13	5-10	1	Nil
02.08.22	05.27	03.57/ 05.27	18	90-100	2-4	Light shower
03.08.22	20.55	20.40/ 22.25	20-25	30-40	0-2	Nil

A2.15 All sonogram recordings made during the dusk/dawn surveys were later analysed using BatExplorer sound analysis software to confirm species identification.

A2.16 During the dawn re-entry surveys for B1 and B2, two Canon XA11 infrared capable video cameras were set up at positions shown on **Plan EDP 2** to cover additional potential roost features. Both cameras had external infrared lighting arrays (JC Infrared Illuminator 12-Led 90° Wide Angle High-Power IR Illuminator) and were set to record on its own. Both sets of recordings were subsequently checked using media player software to confirm whether bats were filmed emerging/re-entering the building.

Limitations

A2.17 The re-entry survey undertaken on the 02 August 2022 concluded at sunrise, earlier than the recommended guidance. However, this was due to the lack of activity for a significant period prior to sunrise, and it was assumed all bats had already returned to roost.

RESULTS


Preliminary Assessment of Buildings



A2.18 The visual assessment/inspection of buildings identified that all three buildings, B1, B2 and B3, had suitable features for bat roosting, and B1 also contained evidence of roosting bats in the form of droppings. B1 was classified as a confirmed roost, and B2 and B3 were found to be of Moderate suitability.

A2.19 The ecological value of the buildings relates specifically to roosting bats, which is considered separate and therefore they are considered to be of Negligible ecological importance.

A2.20 Further details on each of the buildings inspected are provided in **Table EDP A2.3** and their locations are shown on **Plan EDP 2**.

Table EDP A2.3: Preliminary Bat Roost Assessment of Buildings

Building Ref.	Photograph	Potential Bat Features	Roosting Suitability
B1		<p>Internal (16 roof voids) - bitumen lined with timber/steel beams, rafters and truss. Wooden boarding backing bitumen present in several voids. Vaulted ceilings present in two of the voids. Newer extension had a false ceiling covered with ceiling tiles.</p> <p>External features - lifted/cracked/missing tiles, missing bricks, ornate vent, door into roof void gaps under fascia board and gaps around windows.</p> <p>Feeding remains and droppings (brown long-eared bat) present in roof void.</p>	Confirmed Roost

Building Ref.	Photograph	Potential Bat Features	Roosting Suitability
B2		<p>Internal (7 roof voids) – bitumen lined with wooden beams/rafters/truss. Rockwool insulation on floor.</p> <p>External features - lifted/cracked/missing tiles and hanging tiles, wooden panelling, holes into void in soffit box and collapsed roof.</p>	Moderate
B3		<p>Internal (1 roof void) – bitumen lined with wooden beams and rafters.</p> <p>External features - lifted/cracked/missing tiles, holes into void in soffit box and open door.</p>	Moderate

A2.21 The PCR analysis determined that the droppings identified in the roof void of B1, as shown in **Plan EDP 2**, belonged to brown-long eared bat. The droppings were found next to a chimney in the centre of the void, and an external access point is present at the eaves and an internal hole in the gable end connects to the adjacent void, which has three additional external access points. Feeding remains were also identified in this area and within another void in the building, as shown in **Plan EDP 2**. The results for the analysis are provided in **Appendix EDP 3**. No evidence of bat activity was recorded on the automated detector deployed within the roof void, which suggests that this roost is infrequently used by a low number of bats.

Bat Hibernation Survey

A2.22 The bat hibernation survey involved a detailed inspection of all suitable hibernation features including the loft voids and basement of B1.

A2.23 No evidence of hibernating bats was identified within any of the loft voids, all of which were confirmed to be of low suitability to support hibernating bats. The basement of the building provided ideal hibernating conditions for bats, however, given that the basement is well sealed with no external access, it was deemed to be of negligible suitability to support hibernating bats.

Dusk Emergence/Dawn Re-entry Surveys

A2.24 The roost emergence and re-entry surveys identified one bat emerging from B1 on the 03 August 2022 and from B2 on the 02 August 2022, recorded by IR camera.

A2.25 **Table EDP A2.4** provides a summary of the roosts confirmed during the surveys and the roost locations are also shown on **Plan EDP 2**.

Table EDP A2.4: Bat Roosts Identified Within Buildings

Building Number	Bat Species	Estimated Number	Roost Location/Access Point	Roost Status
B1	Common pipistrelle	1	Eastern aspect of the building from under the barge board on the gable end.	Occasional Day Roost, Low Numbers
B2	Common pipistrelle	1	South-west aspect of the building under window.	Occasional Day Roost, Low Numbers

Appendix EDP 3 Bat Dropping Analysis



12 July 22

Re: Identification Results for Eleanor Delaney, The Environmental Dimension Partnership

Job number 18297, received 29 June 2022

Sample labelled: edp7182

PCR amplification successful. DNA sequence:

ATGACCAACATTCGAAAGTCCCACCCTCTCATAAAAATTATCAATGATTCATTCATTGA
CTTACCTGCTCCCTCAAATATTTTCATCATGGTGAAACTTTGGGTCTCTTCTAGGTATT

Phylogenetic analysis identification: *Plecotus auritus*

Confirmed by maximum likelihood, maximum parsimony, bootstrap 100%.

Best regards,

Professor Robin Allaby

The results and conclusions in this report are based on an investigation of mtDNA sequence analysis. The results obtained have been reported with accuracy. The interpretation represents the most probable conclusion for the DNA sequence obtained rather than the sample provided given current levels of species data. It should be borne in mind that different circumstances might produce different results. Therefore, care must be taken with interpretation of the results especially if they are used as the basis for commercial recommendations.

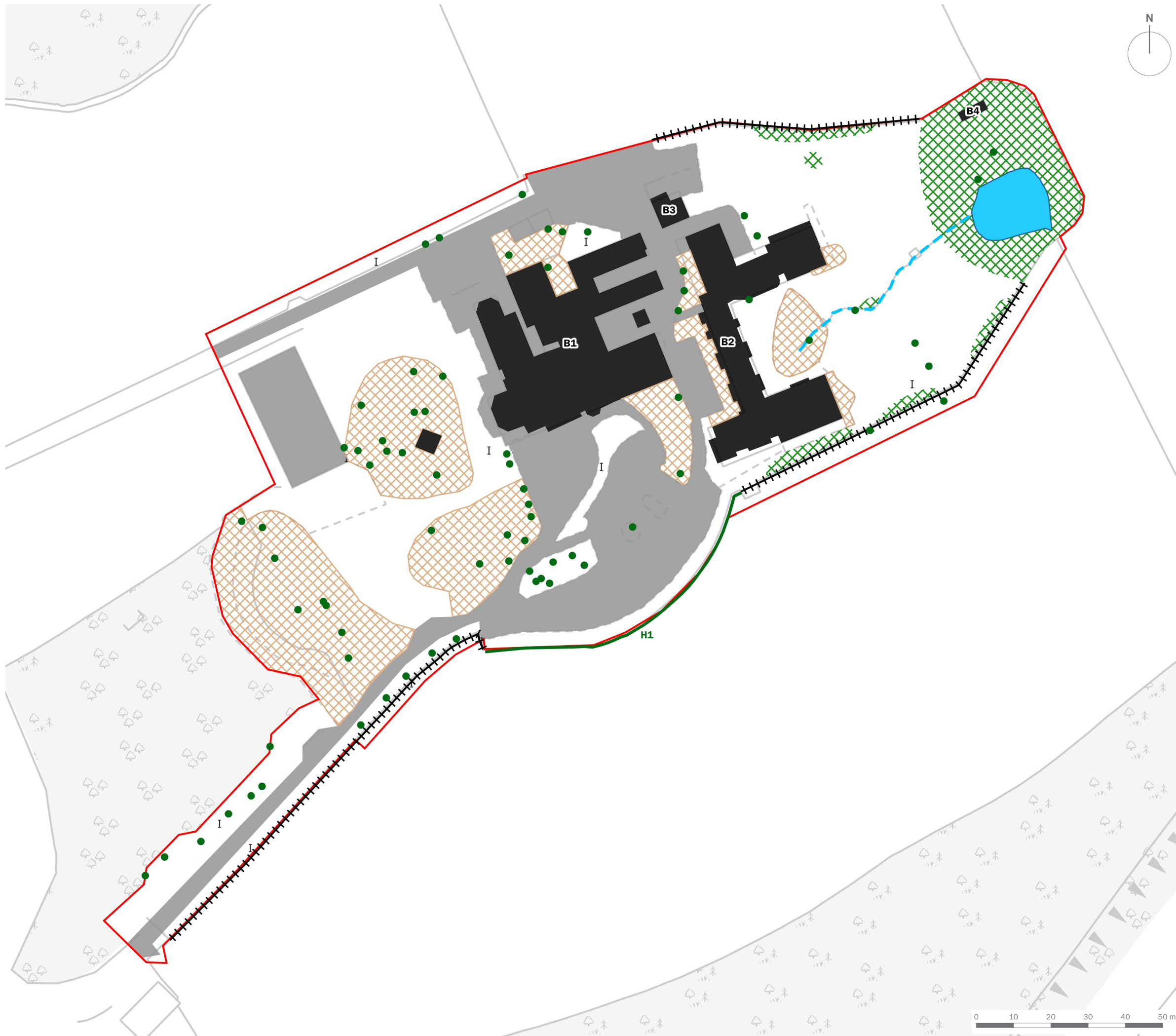
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Plans

Plan EDP 1: Extended Phase 1 Habitat Survey
(edp7182_d002a 15 March 2023 GYo/CNe)

Plan EDP 2: Bat Roosting – Buildings
(edp7182_d006a 15 March 2023 GYo/CNe)



- Site Boundary
- Dense Continuous Scrub
- Introduced Shrub
- Improved Grassland
- Standing Water
- Building
- Hardstanding
- Intact Species-poor Hedgerow
- Dry Ditch
- Fence
- Scattered Trees (Broadleaved)

client
Vistry Group

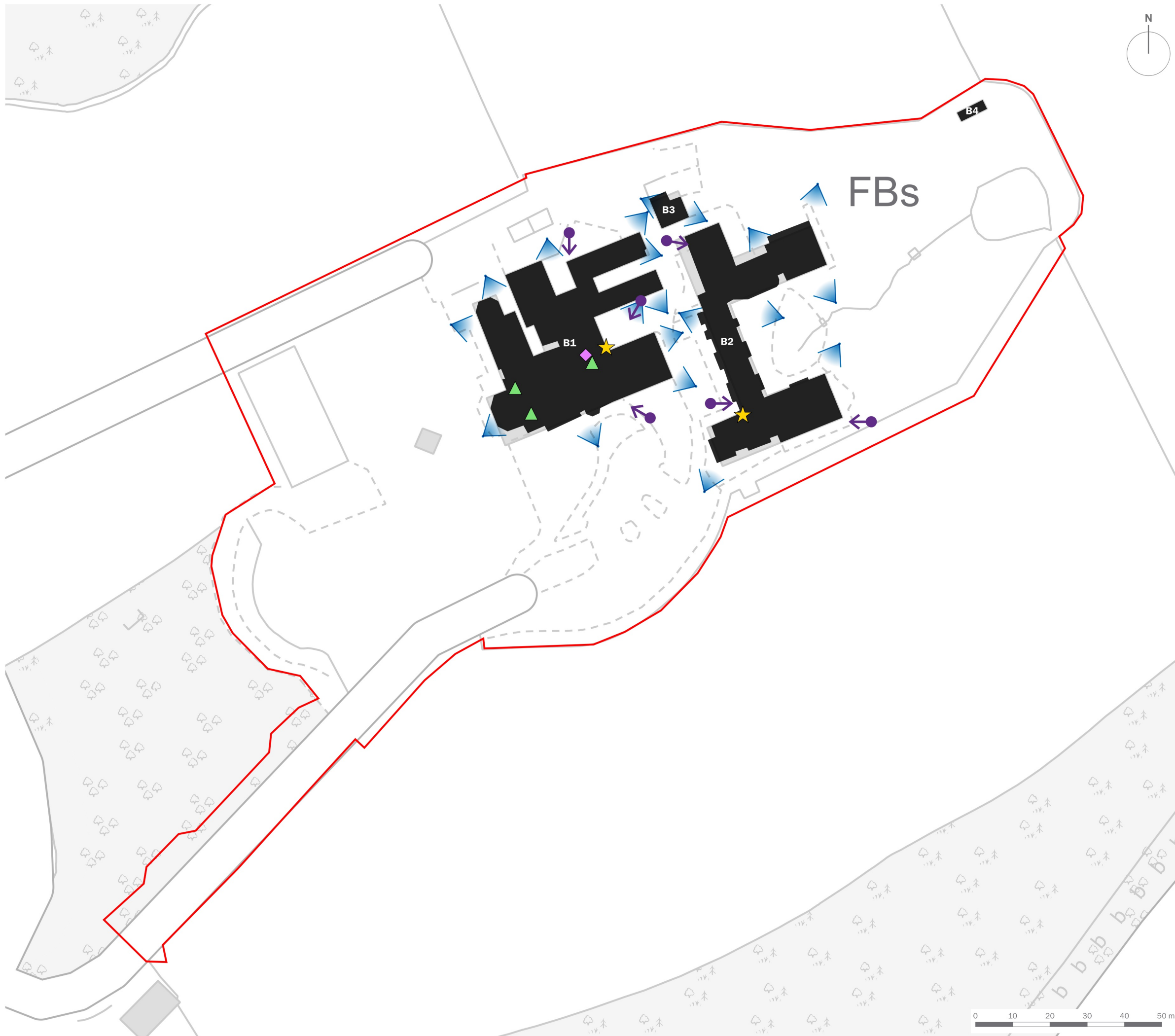
project title
Woodside Training Centre

drawing title
Extended Phase 1 Habitat Survey

date	15 MARCH 2023	drawn by	GYo
drawing number	edp7182_d002a	checked	CNe
scale	1:1,000 @ A3	QA	JFr



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- Site Boundary
- ➔ IR Camera Location
- Surveyor Location
- ★ Common Pipistrelle Emergence
- ▲ Bat Feeding Remains
- ◆ Brown Long-eared Bat Droppings

client
Vistry Group

project title
Woodside Training Centre

drawing title
Bat Roosting – Buildings

date	15 MARCH 2023	drawn by	GYo
drawing number	edp7182_d006a	checked	CNe
scale	1:1,000 @ A3	QA	JFr



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