

Preliminary Ecological Appraisal

Craigfoot Field Allotments, Milton of Campsie

For

East Dunbartonshire Council

FINAL

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Quality Management

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Executive Summary

Wild Surveys Ltd was commissioned by East Dunbartonshire Council to undertake a Preliminary Ecological Appraisal and desk study at Craigfoot Field Allotments, Milton of Campsie. The aim of the survey was to provide an assessment of the ecological features present, or potentially present, within the site and the surrounding areas to determine whether further dedicated protected species are required to inform a full planning application.

As part of the Preliminary Ecological Appraisal, a Phase 1 habitat survey was completed during the site visit which aimed to provide a description and map of habitats within the site and 30m additional survey area, including a plant species list and target notes (where appropriate) in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010). A walkover survey was undertaken on 6th April 2023 by two ecologists.

The site is located on the eastern edge of the village of Milton of Campsie, East Dunbartonshire. Antermony Road provides the northern boundary to the site whilst the Glazert Water provides the southern boundary. Riparian woodland lies east and west of the site, with open countryside extending further to the east.

From the desk study it has been established that there are no statutory designated sites within 2 km of the proposed development, however the non-statutory Glazert Water Local Nature Conservation Site is located within the site boundary. There are no records of protected species within or adjacent to the site boundary. There are records of the following species within 2 km of the site boundary: common pipistrelle, soprano pipistrelle, great crested newt, otter and red squirrel.

The site is dominated by open grassland, with woodland and scrub at its western and eastern edges. The Glazert Water riverbank located on the southern boundary and the riparian woodland associated with the watercourse extends west, east and south to further native woodland and open fields. Grassland, urban greenspaces, rivers and woodland are priority habitats within the East Dunbartonshire Council Local Biodiversity Action Plan.

The site provides suitable habitat for bats, great crested newt, otter, water vole, reptiles, badger and birds. Six bird species on the Scottish Biodiversity List and/or the BTO Birds of Conservation Concern list were noted within the site. Burrows of a suitable size for water vole were identified within the riverbank, however no field signs were present. No other field signs for protected species were found.

Recommendations have been made within the body of the report in line with the mitigation hierarchy.

As part of the Preliminary Ecological Appraisal, the proposed development was reviewed in relation to the pre-development biodiversity value, taking into account the baseline habitat types, species supported and ecological connectivity within the site and to the surrounding area. Bespoke ecological enhancement recommendations have been outlined in an aim to achieve a positive effect on biodiversity as a result of the proposed development. These measures should be incorporated into the development design and soft landscape plans as commitments. No quantified calculation of biodiversity net gain has been carried out to inform this assessment. Long-term management requirements will require to be determined to ensure long-term success.

1 Introduction

1.1 Project Objectives

- 1.1.1 Wild Surveys Ltd (WSL) was commissioned by East Dunbartonshire Council to undertake a Preliminary Ecological Appraisal (PEA) and desk study at Craigfoot Field Allotments (hereafter referred to as 'the site'), Milton of Campsie (National Grid Reference NS 65393 76609).
- 1.1.2 It is understood that the survey is required to inform a planning application for the creation of community allotments in the form of raised beds, laydown area, multi-user paths and a perimeter fence. Existing informal seating, planting and hardstanding areas within the site boundary will be included within the development. Wild Surveys understands the development does not include artificial lighting.
- 1.1.3 Wild Surveys understands that all trees and scrub within the site will be retained as part of the development, except for a cluster of four mature trees adjacent to Antermony Road, which are earmarked for removal to allow space for a laydown area for the site.
- 1.1.4 It is understood that the scrub, ponds, paths, hardstanding and informal seating areas within the eastern part of the site are being retained as part of the development.
- 1.1.5 The aim of a PEA survey is to provide an assessment of the ecological features present, or potentially present, within the site and the surrounding areas. The survey aims to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate) and also to identify any suitable habitat for protected species and note any field signs of protected species within the survey area. The key objectives are to:

Identify the likely ecological constraints associated with a project;

Identify any mitigation measures likely to be required, following the mitigation hierarchy;

Identify any additional surveys that may be required; and,

Identify the opportunities offered by a project to deliver ecological enhancement with the aim to achieve positive effects on biodiversity.

- 1.1.6 As part of the Preliminary Ecological Assessment, a key objective is to review the proposed development in relation to the pre-development biodiversity value, taking into account the baseline habitat types, species supported and ecological connectivity within the site and to the surrounding area. Bespoke ecological enhancement recommendations should be made as part of a strategy to achieve positive effects on biodiversity as a result of the proposed development. Long-term management requirements will require to be determined to ensure long-term success and to support this strategy.
- 1.1.7 This survey is completed in line with Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017) and comprises a dedicated Phase 1 habitat survey in line with the Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010).

1.2 Site Location

The site is located on the eastern edge of the village of Milton of Campsie, East Dunbartonshire. Antermony Road provides the northern boundary to the site whilst the Glazert Water provides the southern boundary. Riparian woodland lies east and west of the site, with open countryside extending further to the east. The location of the survey can be found in Appendix 1.

2 Legislation and Policy

2.1 Wildlife Legislation

2.1.1 Full consideration has been given to all relevant nature conservation legislation when carrying out this assessment, these include:

The Conservation of Wild Birds (the Birds Directive) 1979 (as amended);

The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended);

Wildlife and Countryside Act 1981 (as amended in Scotland);

Wildlife and Natural Environment (Scotland) Act 2011 (as amended); and

Nature Conservation (Scotland) Act 2004 (referencing the Convention on Biological Biodiversity (1992) and the Scottish Biodiversity Strategy, which are implemented nationally through the Scottish Biodiversity List and locally through Local Biodiversity Action Plans (LBAP)

2.2 Planning Policies

Local Development Plan

- 2.2.1 The policies set out below are those relevant to nature conservation and include those from the Local Development Plan 2 (LDP2, 2022). The Local Development Plan was adopted by East Dunbartonshire Council in November 2022 and is the land use plan which sets out the policies and proposals which the Council wishes to use to guide development across the area up from 2022 and beyond.
- 2.2.2 The Local Development Plan contains the following policies which focus on the natural environment and details how new developments can enhance habitats/biodiversity including through creating, enhancing and better linking habitats and ecosystems:

Policy 17: Natural Environment; and

Policy 18: Water Environment and Flood Risk.

Nature Planning Framework 4 (NPF4) (Scottish Government, 2023)¹

2.2.3 National Planning Framework 4 contains policies of relevance to biodiversity, including Policy 3 a, c and d:

NPF4 Policy 3.a states that development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible.

NPF4 Policy 3.c states that proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity, in accordance with national and local guidance. Measures should be proportionate to the nature and scale of development.

NPF4 Policy 3.d states that any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the

¹ https://www.gov.scot/publications/national-planning-framework-4/documents/

need to reverse biodiversity loss, safeguard the ecosystem services that the natural environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

Developing with Nature guidance (NatureScot, 2023)²

2.2.4 Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c). This guidance has been published in support of policy 3(c) of National Planning Framework 4 in relation to planning applications.

Scottish Pollinator Strategy (NatureScot, revised 2021)

2.2.5 The Pollinator Strategy for Scotland 2017-2027, and the accompanying Implementation Plan, were created to set out how we can make Scotland a place where pollinators can thrive.

Scottish Biodiversity List

2.2.6 Scottish Ministers created the Scottish Biodiversity List (SBL) in 2005 in order to satisfy the requirements under Section 2(4) of the Nature Conservation (Scotland) Act 2004 and to assist public bodies in carrying out conservation of biodiversity, and to provide the general public with information regarding conservation within Scotland. The list contains habitats, plants and species which are deemed to be of principal importance to the Scottish population and meet the social criteria, defined as being "important for any reason including for conservation reasons, for their own personal enjoyment, as economically important, simply their favourites, as symbols of Scottish identity or just that they are nice to see" (Blake, 2005).

Local Biodiversity Action Plan

- 2.2.7 The East Dunbartonshire Local Biodiversity Action Plan (LBAP) (2017 2021) incorporates the local authority area of East Dunbartonshire and focuses attention on the conservation and enhancement of the region's natural heritage and to address its decline.
- 2.2.8 The adopted LBAP outlines the following as priority species of relevance to the site (include but are not limited to): Badger (Meles meles), Brown Long-eared Bat (Plecotus auratus), Common Pipistrelle Bat (Pipistrellus pipistrellus), Daubenton's Bat (Myotis daubentoniid), Otter (Lutra lutra), Soprano Pipistrelle Bat (Pipistrellus pygmaeus), Water Vole (Arvicola amphibius), Fieldfare (Tardus pilaris), House Sparrow (Passer domesticus), Kingfisher (Alcedo atthis), Swift (Apus apus), Buff-Tailed Bumblebee (Bombus terrestris) and Hedgehog (Erinaceus europaeu).
- 2.2.9 In addition, the LBAP incorporates Habitat Action Plans and the following are of relevance to the site:

Semi natural grassland (lowland meadows);

Boundary features (hedgerows);

Urban (parks and greenspaces);

Freshwater (rivers, streams); and,

Woodland.

² https://www.nature.scot/doc/developing-nature-guidance

3 Methodology

3.1 Desk Study

- 3.1.1 A data search was undertaken by WSL to review information available within the public domain. Publicly available databases, such as the National Biodiversity Network NBN Atlas, Habitat Map of Scotland (HabMoS) and our own internal records were consulted for historical evidence of protected and notable species and habitats in within 2km of the site. Listings in SBL and LBAP was also checked. This information was gathered to identify the status of these notable or protected species or habitat within 2 km of the site.
- 3.1.2 In addition, a search using NatureScot sitelink and the relevant Local Authority nature conservation sites was carried out to discover any statutory or non-statutory designated sites within 2 km. Designated sites included within the desk study include:

Local Nature Reserves (LNR);

Local Authority designated site, e.g. Local Nature Conservation Sites (LNCS);

Wildlife Nature Reserves (Scottish Wildlife Trust, Royal Society for the Protection of Birds, etc.);

Ancient Woodland Inventory (AWI);

Native Woodland;

Sites of Special Scientific Interest (SSSI);

Special Area for Conservation (SAC); and,

Special Protection Areas (SPA).

3.2 Phase 1 Habitat Survey

- 3.2.1 An extended Phase 1 habitat survey was carried out by an experienced ecologist on 6th April 2023 in line with the Handbook for Phase 1 Habitat Survey methodology (JNCC, 2010), to provide a description and map of habitats within the survey area, including a plant species list and target notes (where appropriate).
- 3.2.2 The condition of habitat types were recorded using the DEFRA Biodiversity Metric 3.0 habitat condition assessment sheets (Natural England, 2022) accorded to the specified criteria for each habitat type.

3.3 Protected Species

- 3.3.1 The survey was extended to identify any suitable habitat for protected/ notable species and field signs within the survey area were noted on an opportunistic basis in order to make recommendations for further survey effort, retention, avoidance and/ or mitigation, as appropriate. The survey area comprised of the site itself plus an additional 100 m for otter, and all ponds within 500m for great crested newt (Triturus cristatus), where access allowed, unless otherwise noted. Legal context with regards to protected species can be found in Appendix 2 6.
- 3.3.2 Given the habitat types likely to be present within the survey area, particular attention was given to the potential presence of the following species: bats (Chiroptera), great crested newt, otter (Lutra lutra), water vole (Arvicola amphibius), red squirrel (Sciurus vulgaris), pine marten (Martes martes), reptiles (Squamata), badger (Meles meles) and habitat suitable for use by birds. Methodologies are detailed below for each of these species.

3.3.3 There is no habitat within the survey area suitable for wildcat (Felis silvestris) and this species are not discussed further.

Bats

3.3.4 The survey area was assessed for its potential to support foraging and commuting bats and specifically, any buildings within the survey area were assessed for their potential to support bat roosts. Evidence of bat activity can be detected by searching for the following signs:

Bat droppings (faeces), for example, on the building or on the ground;

Polishing, scratching or staining resulting from bats entering or exiting the buildings;

Live or dead bats; and,

Any insect remains which may indicate feeding.

- 3.3.5 Though the suitability of structures to support bat roosts can be carried out at any time of year, external evidence of use can be washed away by prolonged rainfall.
- 3.3.6 The survey area was inspected in accordance with current best practice guidance from the Bat Conservation Trust 3rd Edition (Collins, J. 2016) on 6th April 2023, in order to identify the suitability of the ZoI to support roosting, commuting and foraging bats. Guidelines for determining suitability of habitat features for bats is presented in the following table:

Table 1: Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape (to be applied using professional judgement) (adapted from Table 4.1 on Page 35 of current BCT, 2016):

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain Potential Roost Features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.	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.

Moderate	A structure or tree 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 – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	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.
High	A structure or tree 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.	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, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Great Crested Newt

3.3.7 An assessment of the suitability of any ponds within 500 m (where accessible) of the proposed site to support great crested newt was carried out. The method of carrying out this assessment followed the criteria first set out in the Habitat Suitability Index (HSI) (Oldham, 2000). The criteria used to determine the HSI are:

Geographic location;

Pond surface area;

Pond permanence;

Water quality;

Shade;

Whether waterfowl are present;

Whether fish are present;

The number of ponds within 1 km of the survey's target pond (excluding ponds with significant barriers such as main roads);

The quality of the terrestrial habitat surrounding the pond; and,

The percentage of macrophyte cover.

3.3.8 A score is assigned to each attribute and a total score of between 0 and 1 and is determined according to the scale set out below, in Table 1. Using this score a predicted suitability of habitat can be made and in turn the likelihood of presence of great crested newt can be made. Pond locations can be found in Appendix 9.

Table 1 - HSI Score and Suitability to Support Great Crested Newt (Adapted from ARG 2010, UK Advice Note 5).

HSI Score	Pond Suitability
< 0.5	Poor
0.5 – 0.59	Below Average
0.6 - 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

3.3.9 It should be noted that the HSI is a measure of habitat suitability for great crested newt only. A full survey for great crested newt was not carried out.

Otter

3.3.10 The Glazert Water was surveyed to assess the survey area's potential to support otter and to search for any field signs which would indicate use. The survey area consisted of 100 m either side of the watercourse, adjacent to the site boundary, where accessible. Field signs include:

Holts – below ground resting places;

Couches - above ground resting places;

Prints; and,

Spraints – faeces used as territorial markers.

3.3.11 Otters can be surveyed for at any time of year; however, it is good practice to leave at least two dry days before surveying a watercourse, as heavy rain can wash away evidence.

Red Squirrel

3.3.12 An assessment was made of the site and 100 m survey area for its potential to support red squirrels. Signs of red squirrel include:

Squirrel dreys within trees;

Feeding remains (e.g. chewed cones, split nuts); and,

Sightings of red squirrels.

3.3.13 Surveys for red squirrel signs are best carried out in the season which corresponds to food availability for the tree crop present. For example, broadleaved tree seeds are usually available from autumn, declining through winter and spring.

Pine Marten

3.3.14 An assessment was made of the survey area for its potential to support pine marten. The following field signs were recorded, if encountered during the PEA walkover:

Droppings (faeces);

Prints; Paths; Resting sites; and, Feeding remains.

Water Vole

3.3.15 All suitable habitat (including terrestrial and riparian habitat) within the survey area were surveyed for water vole and the following field signs were searched for:

Droppings – faeces recognisable by their size, shape and content, and (if not too dried out) also distinguishable from rat droppings by their smell;

Latrines – faeces are often deposited at discrete locations know as latrines;

Feeding stations – food items are often brought to feeding stations along pathways and haul out platforms, recognizable by neat piles of chewed vegetation up to 10 cm long;

Burrows – appear as a series of holes along the water's edge or on land, distinguishable from rat burrows by size and position;

Tumuli – small earth mounds left behind by water vole when digging;

Lawns - may appear as grazed areas around land holes;

Nests - where the water table is high, above ground woven nests may be found;

Footprints – tracks may occur at the water's edge and lead into vegetation cover, may be distinguishable from rat by size; and,

Runways in vegetation – low tunnels pushed through vegetation near the water's edge or in terrestrial habitat, less obvious than rat runs.

- 3.3.16 Although water voles do not hibernate, they are not very active above ground during the winter; therefore, surveys are best carried out between March and October. An assessment of bank suitability and habitats present on site can, however, be made outwith the active season.
- 3.3.17 A full survey of suitable habitat for water vole requires at least two surveys within the optimal period, therefore this survey should be considered a preliminary assessment of the site for water vole.

Reptiles

- 3.3.18 The habitat within the survey area was evaluated for suitability to support reptiles, additionally barriers to colonisation by reptiles from the wider area were noted if present.
- 3.3.19 The assessment of habitat does not definitively show presence or absence of reptiles, but incidental sightings of reptiles are recorded when found.

Badger

3.3.20 The survey area included a habitat assessment for badger and the following fields signs were searched for:

Presence of holes with evidence of badgers such as footprints, discarded hairs; etc.;

Presence of dung pits or latrines;

Presence of well-used runs with subsidiary evidence of badger activity; and

Presence of other indications of badger activity such as signs of foraging, snuffle marks and footprints.

3.3.21 Badger surveys can be carried out at any time of the year. However, the optimum period is between November and March when vegetation has died-back, and signs can be more easily seen.

Birds

3.3.22 The habitats within the survey area were evaluated for their suitability to support notable bird species and, in particular, nesting and wintering birds.

Invasive Non-native Species

3.3.23 Particularly common, invasive non-native species, such as giant hogweed (Heracleum mantegazzianum), Japanese knotweed (Fallopia japonica), and Himalayan balsam (Impatiens glandulifera) will have been noted, where found. Other non-native invasive species such as rhododendron (Rhododendron ponticum), cotoneaster (Cotoneaster spp) and snowberry (Symphoricarpos albus) will be noted where incidentally encountered.

Other Notable Species or Habitats

- 3.3.24 Any suitable habitat for and field signs of SBL species brown hare (Lepus europaeus), hedgehog (Erinaceus europaeus) and common toad (Bufo bufo) will be recorded where present. No survey was undertaken specifically for SBL invertebrates or bird species, however, species were recorded where incidentally observed during the survey.
- 3.4 Limitations

Physical Limitations

- 3.4.1 Access to two private ponds approximately 385m south of the site was not possible due to their being within private gardens.
- 3.4.2 Access to stretches of the southern bank of the Glazert Water was somewhat limited by dense, overhanging vegetation and geological features.

Seasonal Limitations

- 3.4.3 Ecological surveys provide a snapshot of the broad habitats and species present within the survey area at the time the survey is undertaken. Faunal species are transient in nature and can move in and out of an area. A lack of field signs of any particular species does not confirm absence, only that no field signs were present at the time of survey. Suitability for protected species and variation in use of the site by protected species on a seasonal basis has been considered based on the broad habitat types present.
- 3.4.4 There are seasonal limitations to all species and habitats surveys. A table of optimal survey periods can be found in Appendix 6.

4 Results

4.1 Desk study

- 4.1.1 There are no statutory designated sites within 2 km of the proposed development.
- 4.1.2 There are a total of 64 non-statutory designated sites within 2 km of the proposed development. The closest site is Glazert Water Local Nature Conservation Site (LNCS) located within the site boundary, and the adjacent riparian corridor. Native woodland is also within the site (to the east) and continues outside the site boundary along the same riparian corridor to the south and west of the site. Both designated sites are ecologically connected to the proposed development site (Designated sites with ecological connectivity to the site are shown in Appendix 7).
- 4.1.3 From the desk study it has been established that there are no records of protected species within or adjacent to the site boundary (within 100 m). There are records of the following species within 2 km of the site boundary: common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pygmaeus), great crested newt, otter and red squirrel. The closest record to the site is a record for red squirrel located approximately 650 m from the site boundary.
- 4.1.4 LBAP and SBL species of relevance to the site identified in the desk study include bats, otter, hedgehog and brown hare.
- 4.1.5 Additionally, seven publicly available records for swift (Apus apus) can be found within 1 km of the site. Swift is a Scottish Biodiversity List species, a red listed BTO Birds of Conservation Concern species and an LBAP species for East Dunbartonshire Council.
- 4.1.6 The full desk study results can be found in Appendix 7.
- 4.2 Phase 1 Habitat Survey

Habitat Types

4.2.1 This section should be read in conjunction with the Phase 1 habitat map, species list and target notes in Appendix 8. The following habitat was noted to be present within the survey area boundary:

Semi-natural broadleaved woodland;

Dense / continuous scrub;

Scattered trees;

Semi-improved neutral grassland;

Continuous bracken;

Standing water; and

Other habitat.

Semi-natural broadleaved woodland

4.2.2 Broadleaved tree species including alder (Alnus glutinosa), sycamore (Acer pseudoplatanus) and oak (Quercus spp.) associated with the Glazert Water enter the site from the west. Outside of the site to the east the woodland is largely untouched, however within the site boundary there are obvious areas of bare ground between the trees, adjacent to areas of informal

seating. Ramsons (Allium ursinum) carpet the ground, giving way eastward to grasses, bracken (Pteridium aquilinum), bramble (Rubus fruticosus agg.) and deadwood. Some mature tree roots enter the watercourse on soft sandy banks, within dense vegetation.

- 4.2.3 Broad-leaved woodland immediately adjacent to the western site boundary shows some areas of bare ground, mainly associated with informal paths, and the ground flora is dominated by ramsons, few-flowered leeks (Allium paradoxum) and mind-your-own-business (Soleirolia soleirolii).
- 4.2.4 Invasive non-native species Japanese knotweed (Fallopia japonica) is evident within the woodland floor; notably within the bare ground / beach area on the riverbank. Japanese Knotweed is found growing on the boundary of the woodland and grassland, as well as along the riverbank to the west. Some clumps of this species appear to have been dug up and 'dumped' on the riverbank west of the site.
- 4.2.5 No potential roost features for bats (PRFs) were found within any of the woodland trees due to their age, condition and species.
- 4.2.6 This part of the site has been designated as 'nearly native' lowland mixed deciduous woodland within the Native Woodland Survey of Scotland and links to native woodland to the south and west of the site (an area of more than 12 hectares). However, the condition of the habitat was recorded as poor.

Dense / continuous scrub

- 4.2.7 The western boundary of the site is dominated by a sloping area of dense bramble scrub, with patches of lesser celandine (Ficaria verna ssp fertilis), common comfrey (Symphytum officinale) and few-flowered leeks encroaching towards the lower part of the slope. Invasive non-native species buddleia (Buddleia davidii) is evident in the higher reaches of the slope, adjacent to the building and Antermony Road.
- 4.2.8 A small patch of scrub consisting of hawthorn (Crataegus monogyna), elder (Sambucus nigra), raspberry (Rubus idaeus), broad-leaved dock (Rumex obtusifolius), common comfrey and bramble lies in the centre of the site, close to the top of the slope.
- 4.2.9 Bumblebee species and small tortoiseshell (Aglais urticae) butterflies were noted foraging within the scrub and woodland edge.

Scattered trees

- 4.2.10 A cluster of four individual trees lies on the northern boundary of the site, consisting of two sycamore, one wych elm (Ulmus glabra) and one Norway maple (Acer platanoides). The cluster sits back from the road verge, with closely mown grass providing the understorey.
- 4.2.11 Other scattered trees, of varying maturity, are found across the site, including two mature sycamore trees overhanging the main wood chip path which show signs of historical ivy encroachment treatment.
- 4.2.12 No PRFs were found within any scattered trees. The condition of the tree cluster and the two sycamores was recorded as moderate in relation to all three species.

Semi-improved neutral grassland

4.2.13 The sloping site is dominated (over 67%) by semi-improved neutral grassland of varying sward heights. The majority of the site is open, rough grassland of mainly cock's-foot (Dactylis glomerata), with two small patches of raspberry along its southern edge. Occasional, self-seeded willow (Salix spp.) is evident in a handful of small, scattered trees. A metal, wire mesh

fence runs along its southern fringe, separating the grassland from the narrow, eroding riverbank. Some informal paths are evident, and dog-walkers were noted here.

- 4.2.14 The grassland along the northern boundary, adjacent to Antermony Road, appears regularly mown, with some wildflowers evident, such as cuckoo flower (Cardamine pratensis). This is a narrow strip of grass, with low metal barriers spaced out along the road verge.
- 4.2.15 The grassy slope within the eastern part of the site features scattered mature trees and scrub, as well as herbaceous vegetation such as naturalised daffodil (Narcissus pseudonarcissus) and large areas of lesser celandine and green alkanet (Pentaglottis sempervirens).
- 4.2.16 Areas of this steep slope have been given over to some hard standing, wood chip paths and informal seating areas. The condition of the habitat was recorded as good.

Continuous bracken

4.2.17 Dense stands of bracken dominate the grassland to the east, grading to broadleaved woodland east of the site boundary.

Standing water

4.2.18 A small informal pond lies east of the grassland, adjacent to the informal seating areas, within a low-lying wetland area at the foot of the slope. Marginal vegetation and sedge species are found within the body of water and an informal rustic fence surrounds them, with a small overarching footbridge in the centre. Both frog and toad spawn was noted with the pond.

Other habitat

4.2.19 The eastern part of the site is largely hard standing, consisting of multiple informal seating areas, gravel, wood chip, brick and mono-block paths, rubble piles, log piles, rustic fencing, barbeque, a stone feature wall and arch, with various small structures and benches along the paths including two sheds on the steep grassy slope. Shrubs and other planting are found within raised beds and borders. A main wood chip path leads up the slope from the seating areas to Antermony Road.

4.3 Protected Species

4.3.1 This section should be read in conjunction with Protected Species Target Note Location Map and target notes in Appendix 9 of this report.

Bats

- 4.3.2 The site was assessed as providing moderate suitability for foraging and commuting bats due to the presence of open grassland and woodland within the site, plus a watercourse and domestic housing adjacent. The woodland also provides ecological connectivity to the wider environment, consisting of riparian woodland, open countryside and hedgerows, most especially to the east.
- 4.3.3 No PRFs were identified within the site or survey area. The building adjacent to the western boundary was assessed as providing negligible suitability for roosting bats.

Great Crested Newt

- 4.3.4 The site provides suitable terrestrial habitat for great crested newt due to the presence of open, tufted grassland and woodland which can act as a wildlife corridor for newt movement.
- 4.3.5 The suitability for great crested newt of the small pond within the site was assessed as average, scoring an HSI score of 0.67 due to the presence of macrophyte cover, good water quality and the absence of fish or waterfowl.

- 4.3.6 Two private garden ponds located approximately 385m south of the site were assessed as poor, scoring an HSI score of 0.38 due to being mainly duck ponds.
- 4.3.7 The Glazert Water adjacent to the site was noted as fast flowing on the day of survey. Table 2: HSI Results (to be read in conjunction with Appendix 9)

Assessment Variable	Freshwater Feature Score	er Feature Score				
	Pond 1	Pond 2	Pond 3			
Geographical location	Zone B	Zone B	Zone B			
Pond area	1,000 m2	800m2	150m2			
Permanence	Rarely dries	Rarely dries	Sometimes dries			
Water quality	Poor	Poor	Moderate			
Shade	80%	80%	0-60%			
Waterfowl	Major	Major	Absent			
Fish	Possible	Possible	Absent			
Pond count	2	2	2			
Terrestrial habitat quality	Moderate	Moderate	Good			
Macrophytes	5%	5%	40%			
HSI Score	0.38 (poor)	0.38 (poor)	0.67 (average)			

4.3.8 In accordance with Oldham et al (2000), all ponds with a HSI score of 0.6 and higher should be considered for a great crested newt survey.

Otter

4.3.9 The site was assessed as providing suitable habitat for otter, being part of the riparian corridor of the Glazert Water connectivity to the wider countryside. However, no field signs for otter were identified within the survey area.

Red Squirrel

4.3.10 The site was assessed as providing a less favourable habitat for this species due to the dominance of broadleaved woodland and lack of species-rich scrub. Publicly available records show a dominance of grey squirrel (Sciurus carolinensis) in the region, though not an absence of red squirrel, as shown in the desk study.

Pine Marten

4.3.11 The site was assessed as providing limited suitable habitat for this species due to the small scale of suitable woodland habitat and lack of connectivity to further suitable habitat which could support a viable territory (average 2 km within resource-rich lowland woodland (Cresswell, 2012)). As such, this species will not be considered further within this report.

Water Vole

4.3.12 The site was assessed as providing suitable habitat for this species. A small number of burrows were identified within the riverbank. Some were of a suitable size for water vole, however no other field signs were found within the survey area. Personal communication with a local resident reported observations of American mink (Neovison vison) on the riverbank adjacent to the site (unconfirmed).

Reptiles

4.3.13 The site was assessed as offering suitable habitat for reptiles due to the presence of log and rubble piles to the east of the site, which are adjacent to woodland and ponds.

Badger

4.3.14 The site was assessed as providing suitable foraging habitat for badger and for sett creation, due to the open grassland and woodland adjacent, and the steep slopes of the scrub. No field signs were identified for this species within the site or within woodland adjacent.

Birds

- 4.3.15 During the site visit the following species were noted: blue tit (Cyanistes caeruleus), great tit (Parus major), blackbird (Turdus merula), robin (Erithacus rubecula), magpie (Pica pica), goosander (Mergus merganser), dunnock (Prunella modularis) (BOCC Amber listed species) (SBL species), mallard (Anas platyrhynchos) (BOCC Amber listed species), wren (Troglodytes troglodytes) (BOCC Amber listed species), grey wagtail (Motacilla cinerea) (BOCC Amber listed species), rook (Corvus frugilegus) (BOCC Amber listed species), and mistle thrush (Turdus viscivorus) (BOCC Red listed species).
- 4.3.16 An active rook nest was identified within a sycamore tree. A blackbird was observed exhibiting nesting and foraging behaviour adjacent to a shed. A mistle thrush pair were observed foraging within the open grassland. Other historical nests were noted across the site.
- 4.3.17 Multiple artificial nest boxes were noted in the eastern part of the site, adjacent to the informal seating and riverbank.

Invasive, Non-native Species

4.3.18 Mature Japanese knotweed was noted in two parts of the site. Regeneration of this species (in the form of young shoots) was noted as widespread within the eastern part of the site.

5 Discussion and Recommendations

5.1 Discussion

- 5.1.1 The Glazert Water LNCS and near native woodland within the site will be affected by the development, but not significantly so due to the nature of the development. Ancient woodland 250m to the north will not be affected by the development due to its distance from the site.
- 5.1.2 The site is dominated by open grassland, with woodland and scrub at its western and eastern edges. The Glazert Water riverbank provides the southern boundary of the site and the riparian woodland associated with the watercourse extends west, east and south to further native woodland and open fields. Grassland, urban greenspaces, rivers and woodland are priority habitats within the East Dunbartonshire Council LBAP.
- 5.1.3 The site provides suitable habitat for bats, great crested newt, otter, water vole, reptiles, badger and birds, with limited suitable habitat for red squirrel and pine marten. Six bird species on the Scottish Biodiversity List and/or the BTO Birds of Conservation Concern list were noted within the site.
- 5.1.4 Otter and water vole may be directly affected by the development given the proximity of the site boundary to the riverbank. Foraging badger will be affected by the development due to the loss of open grassland.
- 5.1.5 Burrows of a suitable size for water vole were identified, however no other field signs were found. The potential presence of American mink reduces the likelihood of water voles being successful in the area.
- 5.1.6 Great crested newt may be affected by the development, due to the loss of terrestrial habitat. A small pond within the site was assessed as average quality habitat for great crested newt. Two duck ponds approximately 385m south of the site were assessed as poor-quality habitat for this species. The Glazert Water watercourse was noted as fast-flowing, presenting a significant barrier to newt movement from the south.
- 5.1.7 Wild Surveys understands that a cluster of four individual trees adjacent to Antermony Road are earmarked for removal to facilitate a new laydown area. National Planning Framework 4, Policy 6, Forestry, woodland and trees Policy (NatureScot, 2023), outlines the need 'To protect and expand forests, woodland and trees' for the benefit of biodiversity.
- 5.1.8 Within the site boundary the condition of grassland habitat was recorded as good, woodland habitat was recorded as poor, and scattered trees were recorded as poor to moderate.

5.2 Recommendations

Licensing Requirements

- 5.2.1 No licence is currently required but may be required following further survey work.
- 5.2.2 All site staff should be made aware of the risk of finding protected species and what to do if signs of protected species are found. A Tool Box Talk should be given to all contractors. If any signs of protected species are found during site works, then all works must cease immediately, and a suitably experienced bat ecologist contacted.
- 5.2.3 A summary of the legal position in relation to protected species is contained within Appendix 2 5.

Further Survey

- 5.2.4 Should the development works take place within 10m of the riverbank, further survey for water vole will be necessary. A full survey of suitable habitat for water vole requires at least two surveys within the optimal period, therefore this survey should be considered a preliminary assessment of the site for water vole. If deemed necessary, as above, a second survey should take place between July and September.
- 5.2.5 Further survey for great crested newt is recommended for the small pond within the site, to determine the presence or absence of the species within the survey area. An eDNA test is recommended for this purpose. eDNA testing can only be undertaken between mid-April and June.

Nesting Birds

5.2.6 Should avoidance of the nesting bird season (March-September) not be possible a nesting bird survey should be undertaken no more than 48 hours prior to any work being undertaken on site by a suitably experienced ecologist.

Mitigation - Avoidance and Retention Measures

Protected and Notable Species

Protection Areas

- 5.2.7 A protection area of 10m should be established from the riverbank to minimise a negative impact on water vole or otter.
- 5.2.8 Works within the LNCS should be limited and the riparian habitat protected from run off, siltation or other pollution.

Sensitive Timing

5.2.9 Tree and vegetation removal should be avoided during the nesting bird season (March – September).

Reptiles

5.2.10 As determining presence or absence of reptiles is labour intensive it should be assumed that reptiles may be present within any suitable habitat. Prior to construction, vegetation deeper than 10cm within proposed work areas should be subject to a two-stage strim with vegetation being strimmed to a depth of 10cm on one day, and then strimmed to ground level the following day. This work should take place in temperatures warmer than 10oC and strimmer operators should work outwards from the middle which will move reptiles to suitable habitat adjacent. Clearance or construction works should commence as soon as possible after the strimming has been completed.

Mammals

5.2.11 The following methods should be employed during construction in avoid injury, obstruction or disturbance of any mammal species using the survey area:

A temporary ramp to be placed in trenches over 0.5 m deep in order to allow a potentially trapped animal to exit the trench;

Any open pipes should be capped to prevent animals gaining access;

All excavations and pipe systems should be checked at the start of each working day;

Site construction fencing should not interfere with the passage of animals through watercourses;

Existing vegetation along the watercourses should be retained wherever possible.

Protected and Ecological Sensitive Habitats

Tree Protection

5.2.12 All trees, including scattered trees, within the site should be retained and protected in line with BS5837:2012 Trees in relation to design, demolition and construction. Advice should be sought from a qualified arboriculturist to determine the condition of the trees / woodland within the site and establish any root protection which may be required to avoid damage to the tree root systems.

Watercourse or Waterbody Protection

5.2.13 Scottish Environmental Protection Agency (SEPA) Pollution Prevention Measures should be followed to avoid run off or contamination of the Glazert Water.

Non-native Invasive Species

- 5.2.14 Measures to be taken to avoid the spread of non-native invasive species. Advice should be sought from a specialist contractor for the assessment, treatment and removal of non-native invasive species from the site.
- 5.2.15 Annex B in Developing with Nature guidance, Guidance on securing positive effects for biodiversity from local development to support NPF4 policy 3(c)³ (NatureScot, 2023) provides a list of plant species that are commonly considered to be invasive and should be avoided. If they are found to be present on site you are encouraged to remove them, and any invasive plant material or contaminated soils disposed of appropriately.

Biodiversity Enhancement Measures

5.2.16 Biodiversity enhancement measures should be committed to by incorporation into the development plans that are appropriate and submitted with the planning application. Biodiversity measures incorporated into the design are outlined below and the full biodiversity strategy can be found in Appendix 10 which explains how appropriate measures have been included to deliver positive effects for biodiversity. Long-term management requirements will require to be determined to ensure long-term success and to support this strategy.

Planting for Wildlife

- 5.2.17 The plants, where possible, will be locally grown to reduce the risk of introducing pests and disease. Non-natives, other than those trees and plants on a Wildlife and Countryside Act 1981 exemption list that can be planted anywhere, can only be planted in areas designated as "non-wild" (such as private gardens, amenity greenspace, public parks and gardens, civic and play space). Plants should be native species or species of benefit to wildlife.
- 5.2.18 The following measures have been selected for use within the site:

Planting for Pollinators

Wildflower planting

Enhancement of scrub structure and diversity – wildflower seeding or using plug plants to enhance existing scrub, with management of the existing bramble and grassland margins.

Boundary Hedges

³ https://www.nature.scot/doc/developing-nature-guidance

Native mixed hedge around allotment fence

Wych Elm boundary hedge

Planting design to maintain and enhance ecological connectivity.

Providing Homes for Wildlife

- 5.2.19 The best homes for nature are natural ones. Prior to installing artificial homes for wildlife, action will be taken to keep or provide natural features. This includes retaining mature trees and nesting features, planting new trees and hedgerows, and replicating existing or lost natural features. Artificial homes will be used to provide a valuable alternative and augment existing or lost natural features.
- 5.2.20 The following measures have been selected for use within the site:

Log and Leaf Piles

Rock Pile

Homes for Bees

Homes for Bugs

Hedgehog Highways

Homes for Small Birds

Managing Water with Nature

- 5.2.21 Working with natural hydrological processes, existing water features and wetland areas should be retained where possible and managed for biodiversity.
- 5.2.22 The following measures have been selected for use within the site:

Ponds for Wildlife

Wildlife Pond

Rivers and Burns (safeguarding, restoring and enhancing)

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Appendix 2 – European Protected Species and the Law

Bats, otters, great crested newts, natterjack toad, wildcat, cetaceans, and several other animals are protected under European law, in Annexes II and IV of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive 1992). The Habitats Directive is translated into Scots law under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended in Scotland), often referred to as the Habitats Regulations, with these species being classified as European protected species. Under these regulations it is an offence to:

Damage or destroy a breeding site or resting place of such an animal; and to, deliberately or recklessly: Capture, injure or kill a wild animal of a European protected species; Harass a wild animal or group of wild animals of a European protected species; Disturb such an animal while it is occupying a structure or place which it uses for shelter or protection; Disturb such an animal while it is rearing or otherwise caring for its young; Obstruct access to a breeding site or resting place of such an animal, or otherwise to deny the animal use of the breeding site or resting place; Disturb such an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; and, Disturb such an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young.

There are also several plant, fungi, and lichen species protected under this legislation. EPS animals can potentially return to the same resting site every year; therefore, bat roosts, otter holts, etc. are protected even if there are no animals there all year round. These laws are not designed to prevent work, but to minimize its impact on the long-term survival of EPS. As such, some activities affecting EPS or their places of shelter may need to be done under and in accordance with the terms of a licence issued by the licensing authority, NatureScot. Licenses allow certain otherwise illegal actions to be undertaken legitimately. Such activities might include:

Blocking, filling or installing grilles over old mines or tunnels; Building, alteration or maintenance work; Getting rid of unwanted bat colonies; Tree felling; Re-roofing; Remedial timber treatment; Rewiring or plumbing in roofs; Demolition; Maintenance or construction of watercourse crossings (e.g. culverts under roads, bridges); Vegetation clearance along riparian corridors; Any disturbing (e.g. loud or night works) within proximity to watercourses; Dewatering or infilling ponds; Removal of woodpiles and debris near waterbodies; and, Translocation of species.

If a licence is required:

Further survey will be required in order to gain sufficient information in order to supply a sufficient baseline and to inform the necessary mitigation plan required to support a licence application. Application forms can be found on the NatureScot website along with guidance: https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/species-licensing-z-guide/bats/bats-licences-development

Please note the need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with

a detailed mitigation plan specific to the bat interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

A Habitats Regulations licence may be granted by NatureScot if the following three tests are met:

1. That the licence application must demonstrably relate to one of the purposes specified in Regulation 44(2) of the Habitats Regulations. These purposes include, among others:

Preserving public health or public safety; Other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment; or, Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber or any other form of property, or to fisheries.

- 2. That there is no satisfactory alternative; and
- 3. That the development will not be detrimental to maintenance of the populations of the species at a favourable conservation status.

If an EPS is found during the period of development:

Appendix 3 – Wildlife and Countryside Act Species and the Law

Red squirrel, pine marten, water vole, freshwater pearl mussel, as well as some species of fish and other invertebrates protected under national legislation, the Wildlife and Countryside Act (1981) (as amended in Scotland) Schedule 5. Several plants are also protected under this piece of legislation under Schedule 8. Species such as pine marten and red squirrel are fully protected, making it an offence to intentionally or recklessly:

Kill, injure, or take any wild animal included in Schedule 5;

Damage or destroy any structure or place which any wild animal specified in Schedule 5 uses for shelter or protection;

Disturb any such animal while it is occupying a structure or place which it uses for shelter or protection; and

Obstruct access to any structure or place which any such animal uses for shelter or protection.

The water vole, though in sharp decline in the UK, and is listed on Schedule 5 in respect of section 9(4) only, i.e. their habitat is protected but the animals themselves are not, except while they are in their shelters. So while it is not an offence to kill, injure or take a water vole in Scotland, the other offences regarding damage to shelter and disturbance still apply. Although water voles are not currently protected from killing or taking in Scotland, England and Wales gave water vole full protection in April 2008, and they are expected to receive full protection in Scotland in the near future.

If a licence is required:

The recent Wildlife and Natural Environment (Scotland) Act 2012 provided a new licensing purpose to apply to Schedules 5 and 8 species listed in the Wildlife and Countryside Act. The new purpose is designed to mimic the tests required for EPS species. Therefore, there is still a need to provide clear justifications as to the purpose of the licence and any alternatives which may have been considered. Supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the Schedule 5 interest on this site and to the works proposed. NatureScot also generally require that all other consents, such as planning permission and historic building consent, are in place before a licence will be considered.

The relevant purposes for which a licence can be granted include:

Preserving public health or public safety;

Preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, or any other form of property or to fisheries; or

For any other social, economic or environmental purpose; provided that

- a. Undertaking the conduct authorized by the licence will give rise to or contribute towards the achievement of, a significant social, economic or environmental benefit; and,
- b. There is no other satisfactory solution.

Application forms can be found on the NatureScot website along with guidance:

https://www.nature.scot/professional-advice/protected-areas-and-species/licensing/licensing-forms-and-guidance

If a Schedule 5 species is found during the period of development:

Appendix 4 – Badgers and the Law

Badgers are protected by the Protection of Badgers Act 1992 (as amended in Scotland). The purpose of the Act is to protect the animals from deliberate cruelty and from the incidental effect of lawful activities which could cause them harm. Under this legislation it is an offence to deliberately or recklessly:

Kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so; Damaging or destroying it; Obstruct access to, or any entrance of, a badger sett; and, Disturb a badger whilst it is occupying a sett.

If a licence is required:

Application forms can be found on the NatureScot website along with guidance: <u>https://www.nature.scot/badgers-licence-forms-and-guidance-documents</u>

Please note supporting information will be required to specifically support an application and depending on the findings of this survey, further survey work may be required, along with a detailed mitigation plan specific to the badger interest on this site and to the works proposed. NatureScot also generally require that planning permission is in place before a licence will be considered.

If a badger is found during the period of development:

Appendix 5 – Birds and the Law

All species of wild bird and their nests are also protected under the Wildlife and Countryside Act 1981 (as amended in Scotland), which makes it illegal if any person intentionally or recklessly:

Kills, injures or takes any wild bird;
Takes, damages or destroys the nest of any wild bird while that nest is in use or being built;
At any other time takes, damages, destroys or otherwise interferes with any nest habitually used by any wild bird included in Schedule A1;
Obstructs or prevents any wild bird from using its nest; and,
Takes or destroys an egg of any wild bird.

There are also further offences for birds listed on Schedule 1 of the Act which includes intentionally or recklessly:

Disturbing any wild Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; and,

Disturbing dependent young of such a bird.

You should note that there is no licensable purpose of development for birds.

Should there be a risk of one of the above offences it is strongly advised that works are either micro-sited to avoid the nests or timed to avoid the nesting season (1 March to 31 August), depending on the species and type of work.

If live nests are found:

Appendix 6 – Guidance on Optimal Survey Periods

Protected Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Habitats & Vegetation	Surveys f	for mosses ar only	nd lichens		Recommended time to undertake Phase 1 habitat surveys					Surveys for mosses and lichens only		
Badgers		Best time for	⁻ field surveys			Surveys p	oossible, but s	sub-optimal if v	egetation is high	l	Best time surv	for field eys
Bats	Inspection ł	of hibernatic building roos	on, tree and ts	Activity surveys; invasive surveys avoided	Activity sur	Activity surveys and inspection of building roosts. Emergence counts. Activity surveys only; invasive surveys to be avoided build		Inspect hibernatior building	ion of n, tree and roosts			
Birds	Winte	er birds	Breeding	birds/migra	nt species	Breeding birds Breeding birds/migrant species Winter b		birds				
Otters	Year-round weath	d surveying, † er can limit v	though wet isibility.	et Surveys for otters can potentially be conducted all year round, preferably when weather condition are stable, though dense vegetation cover can be limiting			Year-round surveying, though wet weather can limit visibility.					
Pine Martens	Sub-o	ptimal	Survey	vey for breeding dens Optimal spring to summer Sub-optimal								
Red Squirrels	Survey br	/ at any time reeding fema	of year, Iles	Survey at	any time of ye Breeding fema	ear weather ales can be si	permitting, op urveyed Dece	ptimal in spring mber to Septer	and summer. nber	Survey at any	time of year	Breeding females
Water Voles	ſ	Reduced WV	activity		First surv	еу		Second Surve	ey	Redu	iced WV activit	у
Great Crested Newt	No survey in hibe	/s as newts ernation	Pond Sury June. Must mid-April mid-Jun	J Surveys for adults: mid-March to mid- Must include visits undertaken between April and mid-May. Egg surveys April to d-June. Larvae surveys from mid-May Terrestrial habitat surveys				No Surveys hibern	– newts in ation			
Fish	For coasta	For coastal, river and stream dwelling species, timing of surveys will depend on the migration pattern of the species. Breeding surveys will need to coincide within the breeding period of that species. This may be the summer or winter depending on the species.										

Appendix 7 – Desk Study Search Results

Location	Craigfoot Field Allotments, Milton of Campsie	OS Grid Squares	NS 65393 76609	Date of Search	12.04.23	DG
NBN Species Protected and Notable Species	No of Records within 2 km	Approximate distance in km	Site name/Grid R	ef	Date	Data Licence
Otter	2	950m northwest	NS6476 / Brash Burn		March 2021	CC-BY / Wild Surveys
Great Crested Newt	1	1 km north	NS653777 / "nr. Ashenwell Dams" - "Dead on road"		Sept 2014	CC-BY / Highland Biological Records Centre
Red Squirrel	2	650m west	NS64627660 / Milton of Campsie		Dec 2010	CC-By / Scottish Wildlife Trrust
Hedgehog	1	2km northwest	NS634773 / Milton of Campsie		Sept 2018	CCO / TCV
Brown Hare	1	1.6km southwest	NS67		April 2022	CC-BY / The Mammal Society
Wild Surveys Data Protected Species	No of Records within 2 km	Approximate distance in km	Site name/Grid R	ef	Date	
Otter	4	1.7 km southeast	NS 55602 35802 / Forme Broomhill Hospital	er	Oct 2019	
NBN Bat Species Data	No of Records within 2 km	Approximate distance in km	Site name/Grid Ref		Date	Data Licence
Common Pipistrelle	1	680m southwest	NS6576		Aug 2015	OGL / Naturescot
Soprano Pipistrelle	1	1.5 km southeast	NS6574		No date (see below)	CC-BY / Wild Surveys

Wild Surveys Bat Data	No of Records within 2 km	Approximate distance in km	Site name/Grid Ref	Date			
Soprano Pipistrelle	1	1.9km south	NS 65710 74726 / Kirkintilloch	Aug 2015			
East Dunbartonshire	Local Biodiversity Action F	Plan (2017-2021)					
Ecosystem Approach:	cosystem Approach:						
Species action plans Badger Tree sparrow Redwing Fieldfare Bumblebee Small pearl H Green hairst Bats (all spe House sparr Swift Otter Water vole Green hairst Dragon and Tufted loose Bluebell	Species action plans with relevance to the site / survey area (Priority species): Badger Tree sparrow Redwing Fieldfare Bumblebee spp. Small pearl bordered fritillary Green hairstreak Bats (all species) House sparrow Swift Otter Water vole Green hairstreak Dragon and damselflies Tufted loosestrife						
Habitat action plans with relevance to the site / survey area: Semi natural grassland - Lowland meadows Boundary features - Hedgerows Urban - Parks and greenspaces Freshwater - Rivers, Streams Woodland -Lowland mixed deciduous woodland, Wet woodland, Upland birchwood, Upland oak and upland mixed ashwood							
Bat species known to be present within the LBAP area: Soprano pipistrelle Common pipistrelle Daubenton's bat Whiskered bat Natterer's bat Brown long eared bat							

Designated Site Search- Statutory, Non-statutory and Local Nature Reserves within 2 km					
Number of Sites Within 2km	Closest Site Name and Grid Reference	Closest Site Distance			
11 in total	Local Nature Conservation Site	Glazert Water (eastern half of site and the southern boundary)	Within and adjacent to the site		
46 in total	Native woodland	ID: 961: Lowland mixed deciduous woodland / NS6544676571. (Adjacent to the west side, within the far eastern edge of the site and along the Glazert Water)	Within and adjacent to the site		
7 in total	Ancient Woodland	WOOD ID: 29722 / NS654772 (Long-Established (of plantation origin))	Approx. 250m north- east		

Data Licenses

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Designations Map



Appendix 8 – Phase 1 Habitat Survey Map, Species List, Target Notes and Photographs

Phase 1 Habitat Map



Target Note	Grid Reference	Notes
1	NS 65376 76656	Cluster of mature trees earmarked for removal
2	NS 65320 76628	Japanese knotweed. Stand of approx. 8m x 4m
3	NS 65427 76577	Area of informal seating areas, hardstanding, wood chip paths, bridges and sheds
4	NS 65472 76574	Japanese knotweed. In separate patches along embankment, approx. 30m x 1m

Species list	
Plant species	
Bracken	Pteridium aquilinum
Bramble	Rubus fruticosus agg.
Broad-leaved dock	Rumex obtusifolius
Buddleia	Buddleia davidii
Cleavers	Galium aparine
Cocksfoot	Dactylis glomerata
Common comfrey	Symphytum officinale
Common hogweed	Heracleum sphondylium
Common nettle	Urtica dioica
Common sorrel	Rumex acetosa
Cow parsley	Anthriscus sylvestris
Cuckcoo flower	Cardamine pratensis
Daffodil	Narcissus pseudonarcissus
Daisy	Bellis perennis
Dandelion	Taraxacum agg.
Dogwood	Cornus sanguinea
Few-flowered Leek	Allium paradoxum
Foxglove	Digitalis purpurea
Garlic-mustard	Alliaria petiolata
Green alkanet	Pentaglottis sempervirens
Ground-elder	Aegopodium podagraria
Ground-ivy	Glechoma hederacea
lvy	Hedera helix
Japanese knotweed	Fallopia japonica
Lesser celandine	Ficaria verna ssp fertilis
Mind-your-own-business	Soleirolia soleirolii
Nipplewort	Lapsana communis
Opposite-leaved golden-saxifrage	Chrysosplenium oppositifolium
Perennial rye-grass	Lolium perenne
Ramsons	Allium ursinum
Raspberry	Rubus idaeus
Sharp-flowered rush	Juncus acutiflorus
Soft rush	Juncus effusus
Yarrow	Achillea millefolium
Yorkshire-fog	Holcus lanatus
Tree / Shrub species	
Alder	Alnus glutinosa
Elder	Sambucus nigra

Hawthorn	Crataegus monogyna
Holly	llex aquifolium
Norway maple	Acer platanoides
Oak	Quercus spp.
Sycamore	Acer pseudoplatanus
Willow	Salix spp.
Wych elm	Ulmus glabra

Photographs







Photograph 11: Eastern part of site, where informal seating areas meet open grassland – north facing



Photograph 12: Example of hardstanding seating areas – north facing (Target note 3)



Photograph 13: Example of paths and informal planting borders – NE facing. (Target note 3)



Photograph 14: Area used by local nursery school for lessons



seating area and stone Photograph 16: Informal seating with

Photograph 15: Example of informal seating area and stone piles





Photograph 17: Eroded 'beach' on the Glazert Water riverbank, within woodland of the eastern part of the site



Photograph 18: Woodland within eastern part of the site, and beyond eastern boundary – east facing



Photograph 19: Established path leading to Antermony Road



Photograph 20: Example of memorial bench within the seated area



Photograph 21: Mown grassland verge and barrier on Antermony Road – east facing



Photograph 22: Grassland and mature trees on northern boundary, adjacent to Antermony Road – west facing (Target note 1)



Photograph 23: Stand of Japanese Knotweed (8m x 4m) on western boundary at woodland edge. (Target note 2)



Photograph 24: Area where Japanese Knotweed becomes more evident on embankment, stretching, in patches, towards the west, beyond the site boundary (Target note 4)

Appendix 9 – Protected Species Target Note Locations and Photographs



Protected Species Target Note Locations Map

Target Note	Grid Reference	Notes
1	NS 65346 76588	Burrows within riverbank of a suitable size for water vole
2	NS 65442 76573	Rock and log piles within seating area suitable for use by reptiles

Pond Number	Grid Reference
1	NS 65316 76178 (private land)
2	NS 65365 76121 (private land)
3	NS 65415 76587 (within site)

Photographs





Appendix 10 – Biodiversity Enhancement Strategy

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
Protection and enhancement of existing habitats on or adjacent to the site	All trees, including scattered trees, will be retained within and immediately adjacent to the site. Trees to be retained will be protected in line with BS5837:2012 Trees in relation to design, demolition and construction, during all phases of construction. Paths will be surfaced with wind dust material, with no digging required. Areas of scrub within the site will be avoided and protected during construction. Ponds within the site will be retained as part of the development.	Two areas of scrub within the site (western and northern edges) will be enhanced by the addition of native tree, shrub and flower planting to increase their structural and species diversity. Periodical management of the scrub will follow to maintain diversity. A low impact path will limit the damage to the soil structure and its impact on the grassland area. No lighting will be used on the path. Flower-rich margins will be allowed to form along the edges of scrub areas to encourage wildflowers to flourish within adjacent grassland, providing nectar and shelter for biodiversity. Pesticides and herbicides will be avoided in these areas. A varied structure and mixture of plant species will be introduced in the marginal and submerged vegetation of the ponds to increase the range of places available for invertebrates to shelter and breed in. Boggy areas will be allowed to form to create shallow, muddy margins where invertebrates thrive. Ponds also provide drinking water for birds and bees. Invertebrates within the log and stone piles provide food for birds.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
	Areas of stone and log piles will be retained within the site.	
Creation of new habitat on the site	Organically managed, raised bed allotment plots will form the basis of the development. These provide an abundance of opportunities for biodiversity enhancement. They also present a low impact on the existing habitat, being temporary structures requiring no digging to establish. It will be necessary to install fencing around the allotment plots as part of the development. This presents opportunities for a new hedgerow within the site. Bird nesting boxes will be installed within woodland. A new hedgerow along the boundary of Antermony Road will be planted, consisting of Wych Elm.	Raised beds will be of wooden construction. Gaps within the raised bed frames will be created and bug boxes installed to provide homes for invertebrates which will also benefit the allotment users. A hedge of native hedgerow species will be planted around the allotment fence which provides screening for the allotments, as well as food and shelter for birds and invertebrates. This will include species which provide seeds and berries for birds such as the mistle thrush noted within the site. Nesting boxes will be sited where appropriate within the woodland, to provide for bird species such as blue tits. Wych Elm is particularly well suited for hedging and provides opportunities for birds, moths and butterflies, including the hairstreak species which is an LBAP priority species. A Wych elm hedge reflects the Wych elm tree which already exists within the site. This additional wildlife corridor will also provide for other species including hedgehog and foraging bats.
Protection and enhancement of	The low impact nature of raised beds will help limit any loss of connectivity across the site to nearby woodland or the riverbank.	Additional hedgerows within the site will create new corridors for wildlife across the site and establish new links between the areas of woodland which surround the site.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
connectivity through the site and with its surroundings	The lack of artificial lighting will also benefit any bat species foraging or commuting within the riparian woodland and open grassland. Protection of the woodland will minimise any further loss of habitat.	Holes within the perimeter fence will allow hedgehog movement through the allotments and across the site.
Protection and enhancement of existing species on or adjacent to the site	A 10m protection zone will be established to minimise the development's impact on water vole or otter which may use the Glazert Water watercourse. Scottish Environmental Protection Agency (SEPA) Pollution Prevention Measures will be followed to avoid run off or contamination of the Glazert Water.	Use of natural fertiliser (such as horse manure) within the allotment plots will be monitored by the local authority to ensure no negative impact on the nutrient levels of the watercourse.
Avoidance, control and removal of invasive species from the site	Treatment of non-native species will form part of the development.	Advice from a specialist contractor will be sought to determine the extent, method of treatment and removal of all non-native invasive plant species within the site. Treatment and removal will protect the existing habitats from further loss or deterioration.

ACTIONS CONSIDERED	MITIGATION: Measures included to avoid and minimise impacts	ENHANCEMENT: Measures included to enhance biodiversity (or explanation for not applying)
SUMMARY: Positive effects that will be delivered		The proposed development will have a positive effect on biodiversity with appropriate protection zones for species and habitats, the creation of new hedgerows, artificial homes for nature and enhancement of scrub. The allotments will have a low impact on the site, being temporary structures, with no lighting, no digging required and organically managed. Allotments, by their nature, are hugely beneficial to wildlife and actively encourage biodiversity which further brings benefits for growing fruit, flowers and vegetables.



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