

PRELIMINARY ECOLOGICAL APPRAISAL

GILLIES HILL



DATE: 04.04.2024

CONTRACT REF: CVN02.24.3002

SITE LOCATION: TORBEX, CAMBUSBARRON, STIRLING, FK7 9PQ

OS GRID REF: NS 7796 9181

CLIENT: CAMBUSBARRON VILLAGE NURSERY

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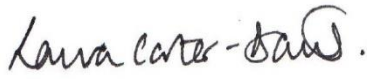


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Document Control

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The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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Executive Summary

Gillies Hill is in Torbex, Cambusbarron, Stirling, FK7 9PQ, central OS grid reference NS 7796 9181. It was the intention of Cambusbarron Village Nursery to construct a permanent childcare facility on the east side of Gillies Hill (hereafter referred to as Site A). The construction for this is currently on hold for the foreseeable future. The current intention is to build a smaller structure to the south-east of the above location at OS grid reference NS 7804 917 (hereafter referred to as Site B), subject to planning permission being approved.

Echoes Ecology Ltd completed a Preliminary Ecological Appraisal (PEA) of Site A on 09.05.2023. Due to the alternative location for Site B, Echoes Ecology Ltd were commissioned to complete a PEA for the new location (Site B), which was completed on 13.03.2024.

Both Sites are located within the community woodland, which is a mixed species woodland with areas of Sitka (*Picea sitchensis*) plantation and stands of broadleaved and mixed plantation. There was limited understorey in all of the stands, and limited ground layer in the woodland to the west of both Sites. The woodland area around Site A and the broadleaved stand to the east of Site A were the most biodiverse. There is a small stream which runs through both of the Sites, starting in the west and heading south-east joining with the old curling ponds.

The Site of Special Scientific Interest (SSSI), Sauchie Craig Wood, is located 1.6 kilometres (km) west of the Site. There are no hydrological connection to Gillies Hill, therefore Sauchie Craig Wood will not be impacted by the works.

There are records for common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), common toad (*Bufo bufo*), hedgehog (*Erinaceus europaeus*) and red squirrel (*Sciurus vulgaris*) within 2km of the Site.

There was no field evidence of protected species found during the survey. There is suitable habitat for nesting birds therefore if proposed works are to be undertaken during the breeding bird season (March to September inclusive), then any areas of the Site that need to be cleared of vegetation must be shown to be free of nesting birds prior to works commencing.

The old garden wall and a couple of trees had potential roost features for bats. The trees are not of concern as Site B is more than 30m away from them. The garden wall is managed by the Community Development Trust and has planned maintenance works which could remove the potential roost features. It is recommended that a Preliminary Roost Assessment is completed on the wall, prior to the infilling of any crevices. With regards to works for the Cambusbarron Village Nursery, care should be taken so as not to disturb any potential bat roosts with lighting or noise.

The ponds, though full of common frog (*Rana temporaria*) spawn, were not suitable for great crested newts (*Triturus cristatus*) as the water level was too shallow (less than 10cm) and there was no suitable vegetation for egg laying.

Native bluebells (*Hyacinthoides non-scripta*) were present throughout the woodland surrounding Site A. Bluebells are listed on Schedule 8 of the Wildlife and Countryside Act, 1981 where they are given protection from collecting from the wild for sale. The bluebells should be retained within the woodland.

Non-native species such as Spanish bluebells (*Hyacinthoides hispanica*) and montbretia (*Crocsmia x crocosmiiflora*) were located within the woodland surrounding Site A. The Code of Practice on Non-Native Species must be adhered to and any soil that may contain non-native plant material must be moved in line with this good practice guidance (Scottish Government, 2012).

An Ecological Constraints and Opportunities Plan is presented in Section 7 of this report and summarises the constraints and opportunities for ecological enhancements at the Site.

Section 1 - Introduction

1.1 Contract Overview

- 1.1.1 Gillies Hill is in Torbex, Cambusbarron, Stirling, FK7 9PQ, central OS grid reference NS 7796 9181. For a Location Plan of Gillies Hill refer to Appendix I.
- 1.1.2 It was the intention of Cambusbarron Village Nursery to construct a permanent childcare facility on the east side of Gillies Hill. The proposal was for a new building including classrooms, storage and sheltered external space (hereafter referred to as Site A). This project has currently been placed on hold, though Cambusbarron Village Nursery are hoping to revisit the proposal in the future. For a potential plan of the proposed development for Site A refer to Appendix II.
- 1.1.3 The new plans for Cambusbarron Village Nursery are to construct a more basic classroom with an outdoor kitchen, approximately 150m to the south-east of the original location (hereafter referred to as Site B). Planning permission has not been granted yet for the building so there is currently no timescale for the works to be undertaken. For a potential plan of the proposed development for Site B refer to Appendix III.
- 1.1.4 Both Sites are located within the community woodland, which is a mixed species woodland with areas of Sitka (*Picea sitchensis*) plantation and areas of broadleaved and mixed plantation. There are the ruins of a walled garden between Site A and Site B which is being developed into a community garden. Beyond the woodlands there is a mixture of arable and pastoral fields. Cambusbarron village is situated 0.5 kilometres (km) north and north-east of the Sites. There are number of small burns and ponds within Gillies Hill, the River Forth is 2km to the north and the North Third Reservoir is 3km south-west of the Sites.
- 1.1.5 Echoes Ecology Ltd was appointed by Cambusbarron Village Nursery to carry out a Preliminary Ecological Appraisal of Site A in May 2023 and of the new location (Site B) in March 2024.
- 1.1.6 Qualifications and competencies of the author and surveyors are provided in Appendix IV.
- 1.1.7 The following documents were provided to Echoes Ecology Ltd in order to assist in carrying out this contract:
- Cambusbarron Village Nursery Development Plan
 - Cambusbarron Village Nursery Business Plan
 - Maps of Gillies Hill Community Woodland
 - Proposed floor plan and image of the original nursery
 - Proposed floor plan of the smaller nursery
 - Tree survey report (TREES, 2023).

1.2 Survey Aims

- 1.2.1 The aims of the survey were:
- To complete a desk study to identify protected or notable sites, habitats or species in the vicinity of the Sites
 - To record the broad habitat types across the Sites and assess their importance
 - To carry out an initial assessment (Habitat Suitability Index) of water bodies within the Sites and a buffer of 250m around the Sites to determine the potential for use by great crested newts (*Triturus cristatus*). A 250m buffer was used due to the lack of records within a 2km of great crested newts and the discrete nature of the proposed works.
 - To assess the likely presence of protected and notable species at the Sites
 - To identify any ecological constraints
 - To recommend any further ecological surveys that may be required
 - To identify opportunities for ecological enhancement.

Section 2 - Relevant Policy

2.1 National Planning Framework 4

2.1.1 National Planning Framework 4 includes policies aiming to protect biodiversity and natural assets, promote expansion and connectivity of blue and green networks and protect and expand forests, woodland and trees, with the over-riding aim of ensuring development will secure positive effects for biodiversity (Scottish Government, 2023a). Key points from the policies are outlined below.

2.1.2 Policy 3 relates to biodiversity and states the following:

- 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.
- 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.
- 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 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.

2.1.3 Policy 4 relates to natural places and states the following:

- Development proposals that affect a site designated as a local nature conservation site or landscape area in the LDP will only be supported where:
 - Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or
 - Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.
- Development proposals that are likely to have an adverse effect on species protected by legislation will only be supported where the proposal meets the relevant statutory tests. If there is reasonable evidence to suggest that a protected species is present on a site or may be affected by a proposed development, steps must be taken to establish its presence.

2.1.4 Policy 6 relates to forestry, woodland and trees and states the following:

- Development proposals that enhance, expand and improve woodland and tree cover will be supported.
- Development proposals will not be supported where they will result in:
 - Any loss of ancient woodlands, ancient and veteran trees, or adverse impact on their ecological condition
 - Adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value, or identified for protection in the Forestry and Woodland Strategy
 - Fragmenting or severing woodland habitats, unless appropriate mitigation measures are identified and implemented in line with the mitigation hierarchy
- Development proposals on sites which include an area of existing woodland or land identified in the Forestry and Woodland Strategy as being suitable for woodland creation will only be supported where the enhancement and improvement of woodlands and the planting of new trees on the site (in accordance with the Forestry and Woodland Strategy) are integrated into the design.

2.2 Stirling Local Development Plan

2.2.1 The Stirling Local Development Plan (LDP) Policy A. Placemaking and Implementing the Spatial Strategy 1.1: Site Planning (Stirling Council, 2018), states that all new development should contribute to the quality of the surrounding buildings and natural environment.

- 2.2.2 Policy A1.3: Green Infrastructure and Open Space, states that developments should safeguard existing green infrastructure and contribute to the Central Scotland Green Network principles, and local Green Network.
- 2.2.3 Policy C. Conservation of Historic and Natural Heritage 7.2: Development within and out with Conservation Area states that developments should preserve or enhance the character, appearance and setting of the area and that features should be retained which contribute to the character of an area.
- 2.2.4 Policy C8.1 Biodiversity Duty. Developments will only be supported if they do not create a significant loss of biodiversity and that if loss is to occur provision should be made to maintain species populations and/or create or enhance habitat to ensure the status quo is maintained.
- 2.2.5 Policy C9.3: Landscaping and Planting in Association with Development states that existing landscape and features which contribute to the local character and biodiversity should be identified and safeguarded.
- 2.2.6 Policy D. Managing and Utilising Local Resources 10.1: Development Impact on Trees and Hedgerows. Trees and hedgerows which contribute to local amenity and/ or nature conservation should be protected.

2.3 Scottish Biodiversity Strategy

- 2.3.1 The Scottish Government has published their draft strategy for biodiversity, which sets out ambitions for Scotland to be Nature Positive by 2030 and to have restored and regenerated biodiversity across the country by 2045 (Scottish Government, 2022).
- 2.3.2 The strategy outlines the outcomes that are to be achieved across our land and seascapes by 2045, which includes the following:
- Ecosystems will be diverse, healthy, resilient and deliver a wide range of ecosystem services
 - The abundance and distribution of species will have recovered and there will be no loss of diversity within species
 - Scotland's internationally important species will have increased in numbers and have healthy resilient populations
 - Nature-Based Solutions, such as tree-planting, will be central to the efforts to deliver NetZero and adapt to climate change
 - Harmful invasive non-native species (INNS) will be managed so that established INNS no longer degrade native habitats and species or impede their restoration and regeneration and new introductions are managed quickly and effectively
 - Nature Networks across our landscapes will underpin the resilience and health of species and habitats.

2.4 Scottish Biodiversity List

- 2.4.1 The Scottish Biodiversity List (SBL) was published in 2005 and last updated in 2012 (NatureScot, 2020). The aim of the list is to help public bodies carry out their 'Biodiversity Duty', as required by the Nature Conservation (Scotland) Act 2004, by identifying the species and habitats which are the highest priority for biodiversity conservation in Scotland.

2.5 Local Biodiversity Action Plan

- 2.5.1 Local Biodiversity Action Plan (LBAP) Partnerships were established in the UK following the ratification of the Convention on Biological Diversity in 1992. Each local partnership publishes biodiversity action plans which identify the habitats or species selected as priorities for targeted conservation work. The survey area is situated within Stirlingshire, for which the current LBAP is encompassed within the Alive with Nature Plan 2021-2045 (Stirling Council, 2021).

Section 3 - Methodology

3.1 Survey Methodology

- 3.1.1 The survey methods employed were taken from 'Guidelines for Preliminary Ecological Appraisal' (CIEEM, 2017) and 'Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit' (JNCC 2010).

3.2 Desk Study

- 3.2.1 A search for nearby designated sites, protected species and species listed on the Scottish Biodiversity List was carried out. This desk study allowed for data within a 2km radius of the Site to be considered and assisted in evaluating the ecological value of habitats and features present within the survey area. Only species records from the last 10 years were considered. Species Core Sustainment Zones (CSZs) for likely bat species present were taken into account (Collins, 2023) and the desk study allowed up to a 4km radius of the Site to be considered for bats. Due to the habitats located within the site, an extended 20km radius for Special Protection Areas (SPAs) was not considered necessary. The following resources were consulted:
- Scottish Biodiversity List (NatureScot, 2020)
 - NBN Atlas (NBN Atlas Partnership, 2024)
 - SiteLink (NatureScot, 2023)
 - Echoes Ecology Ltd's 'ScoMam' Database (a database of over 6,000 records of protected species collected by Echoes Ecology Ltd and associate surveyors over 10 years of surveys).

3.3 Preliminary Ecological Appraisal (PEA)

- 3.3.1 The PEA for Site A was carried out on 09.05.23 by Heather Simpson CEnv MCIEEM and Kay Paul Qualifying member of CIEEM. The weather was dry, with 50% cloud cover, Force 1 wind (Beaufort scale) and a temperature of 16°C.
- 3.3.2 The PEA for Site B was carried out on 13.03.24 by the same surveyors. The weather was dry, with 100% cloud cover, Force 3 wind (Beaufort scale) and a temperature of 9°C.
- 3.3.3 All habitats within the Sites were surveyed, plus a buffer of up to 100 metres (m) outwith the Sites boundary, where access permitted. Target Notes were used to identify the presence and location of features of particular interest or those too small to map. The abundance of each plant species was recorded using the DAFOR scale (D= Dominant, A= Abundant, LA= Locally Abundant, F= Frequent, O= Occasional, R= Rare. Habitat features indicating the presence, or likely presence, of protected species or other species of nature conservation were also noted.
- 3.3.4 Habitats were mapped using ArcGIS software in line with Phase 1 habitat survey methodology. Aerial photography and OS maps were referred to with a view to aid in the assessment of boundary features and habitat boundaries.
- 3.3.5 A GPS, and digital camera were used to help map and document the habitats and a hand lens x10 and x20 and plant ID books were used to identify plant species.
- 3.3.6 Nomenclature used for higher plants was taken from Stace (2019) and for bryophytes, Blockeel *et al.* (2021).

3.4 Limitations to Survey Work

- 3.4.1 A comprehensive species list could not be compiled due to the time of year of the survey. However, the species list obtained was sufficient to determine the habitats present.

Section 4 - Desk Study Results

4.1 Scottish Biodiversity List (SBL)

4.1.1 Species listed in the SBL which may be present within or around the Site are as follows:

- Daubenton's bat (*Myotis daubentonii*)
- Whiskered bat (*Myotis mystacinus*)
- Natterer's bat (*Myotis nattereri*)
- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Brown long-eared bat (*Plecotus auritus*)
- European hedgehog (*Erinaceus europaeus*)
- Otter (*Lutra lutra*)
- Water vole (*Arvicola amphibius*)
- Pine marten (*Martes martes*)
- Red squirrel (*Sciurus vulgaris*)
- Great crested newt (*Triturus cristatus*)
- Slow worm (*Anguis fragilis*)
- Common lizard (*Zootoca vivipara*)
- Adder (*Vipera berus*)
- Common toad (*Bufo bufo*)
- Birds associated with (broadleaved and coniferous woodland, farmland and gardens).
- Invertebrates associated with (broadleaved and coniferous woodland).

4.2 Local Biodiversity Action Plan

4.2.1 There are no specific priority habitats and species highlighted within Alive with Nature Plan 2021-2045 (Stirling Council, 2021).

4.3 Designated Sites

4.3.1 A search for nearby designated sites was carried out in May 2023. The only statutory designated site located within 2km is Sauchie Craig Wood, Site of Special Scientific Interest (SSSI), which is located 1.6km to the west. Full details of the designated site is shown in Table 4.1 below.

Table 4.1 - Search results for nearby designated sites (NatureScot, 2023)

Name and Distance from Site	Details
Sauchie Craig Wood: 1.6km to the west.	Designation: SSSI An area of mixed ash woodland.

4.4 Protected Species

4.4.1 The NBN Atlas and ScoMam were consulted for records of protected species in March 2024, the results of which are shown in Table 4.2 below. It should be noted that a lack of records should not be interpreted as an indication that these species are not present in the area.

Table 4.2 - Resources search results for protected species (only records from the last 10 years are displayed)

Species	Record type*	Location
Common toad	Record provided by IRecord, accessed through NBN Atlas website ²	2km to the east of the Sites

Species	Record type*	Location
Western European hedgehog	Records provided by HogWatch Scotland Project, accessed through NBN Atlas website ¹	2km to the south-east of the Sites
Badger (<i>Meles meles</i>)	Word of mouth and local websites	Within Gillies Hill Community Woodland
Soprano pipistrelle (3km CSZ radius)	Record provided by BCT Field Count, accessed through NBN Atlas website ¹	2km east of the Sites
	ScoMam roost record	Within 2km of the Site
Common pipistrelle (2km CSZ radius)	Records provided by SNH Bat Casework records 2015-2016 and Field surveys for BCT, accessed through NBN Atlas website ¹	2km east and 1km north of the Sites
	ScoMam roost record	Within 2km of the Site
Red squirrel	154 records provided by The Scottish Squirrel Database accessed through NBN Atlas website ²	Within all of the 2km radius, focused on the woodland to the north-west and west of the sites
Pipistrelle species (<i>Pipistrellus</i> sp.) (3km CSZ radius)	ScoMam roost record	Within 2km of the Sites
Chiroptera species (4km)	ScoMam roost record	Within 4km of the Sites
<p>Notes: * The Data Provider, Original Recorder (where identified), and the NBN Trust bear no responsibility for any further analysis or interpretation of that material, data and/or information.</p> <p>¹dataset covered by an Open Government Licence (OGL): http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/</p> <p>²data set covered by a Creative Commons with Attribution 4.0 Licence (CC-BY): https://creativecommons.org/licenses/by/4.0/legalcode</p>		

Section 5 - Field Survey Results

5.1 Habitats within the Survey Area

- 5.1.1 The Phase 1 habitat survey map is presented below in Figure 5.1 and Target Notes are presented in Table 5.1.
- 5.1.2 The survey area (the two Sites plus 100m buffer) consisted of four areas of different woodland and a walled garden between the two Sites, managed by the Cambusbarron Community Development Trust.
- 5.1.3 The area surrounding Site A consisted of semi-natural broadleaved woodland (Figure 5.2), with a wet depression in the centre (Figure 5.3). There was a more open area to the south-west, currently the children's play area (Figure 5.4). The species list obtained during the survey for Site A is provided in Target Note (TN) 1 and TN 2 for the more open area.
- 5.1.4 The woodland to the west of Site A was broadleaved plantation woodland dominated by sycamore (*Acer pseudoplatanus*) (TN 3 and Figure 5.5).
- 5.1.5 To the north-west of Site A was the most mature stand within the survey area. A mixed coniferous and broadleaved plantation (TN4, Figure 5.6) consisting of larch (*Larix decidua*), Douglas fir (*Pseudotsuga menziesii*), birch (*Betula sp.*) and rowan (*Sorbus aucuparia*).
- 5.1.6 The woodland to the north of Site A is also dominated by sycamore but had a more species rich ground layer than the other woodland areas (TN5, Figure 5.7).
- 5.1.7 Site B was located in an area of wet broadleaved plantation woodland (TN 6 and Figure 5.8), consisting of oak (*Quercus sp.*), birch, sycamore, and ash (*Fraxinus excelsior*). Rhododendron (*Rhododendron sp.*) dominated the understory and it is being actively cleared by volunteers.
- 5.1.8 In all areas, wood-sorrel (*Oxalis acetosella*) was identified (Figure 5.9). This is an ancient woodland indicator species, showing this area has been wooded for a considerable length of time. The survey area except the stand to the east of Site B is classed as long-established woodland (of plantation origin) (Scottish Government, 2023).

5.2 Non-Native Plant Species

- 5.2.1 Non-native species such as Spanish bluebells (*Hyacinthoides hispanica*) and montbretia (*Crocsmia x crocosmiiflora*) were located within the woodlands.

5.3 Protected Plant Species

- 5.3.1 Native bluebells (*Hyacinthoides non-scripta*) were present in the woodland surrounding Site A the survey area. Bluebells are listed on Schedule 8 of the Wildlife and Countryside Act, 1981 where they are given protection from collecting from the wild for sale.

5.4 Badger

- 5.4.1 No conclusive badger field signs were found during the walkover surveys, although the surrounding woodland habitats are suitable for use by badger. The proposed works would not disturb the surrounding area outside of the 100m buffer therefore badgers are not considered further in this report.

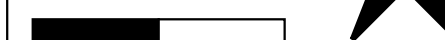
Figure 5.1 - Phase 1 habitat survey map

Key

-  Potential site area
-  100m buffer
-  Target Note
-  Broadleaved woodland - semi-natural
-  Broadleaved woodland - plantation
-  Coniferous woodland - plantation
-  Mixed woodland - plantation
-  Running water
-  Grassland/new housing development
-  Walled garden
-  Buildings
-  Track
-  Residential
-  Standing water

1:1500 @ A3

0 25 50 m



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Preliminary Ecological Appraisal (PEA)

Potential Cambusarron Village Nursery Sites, Gillies Hill

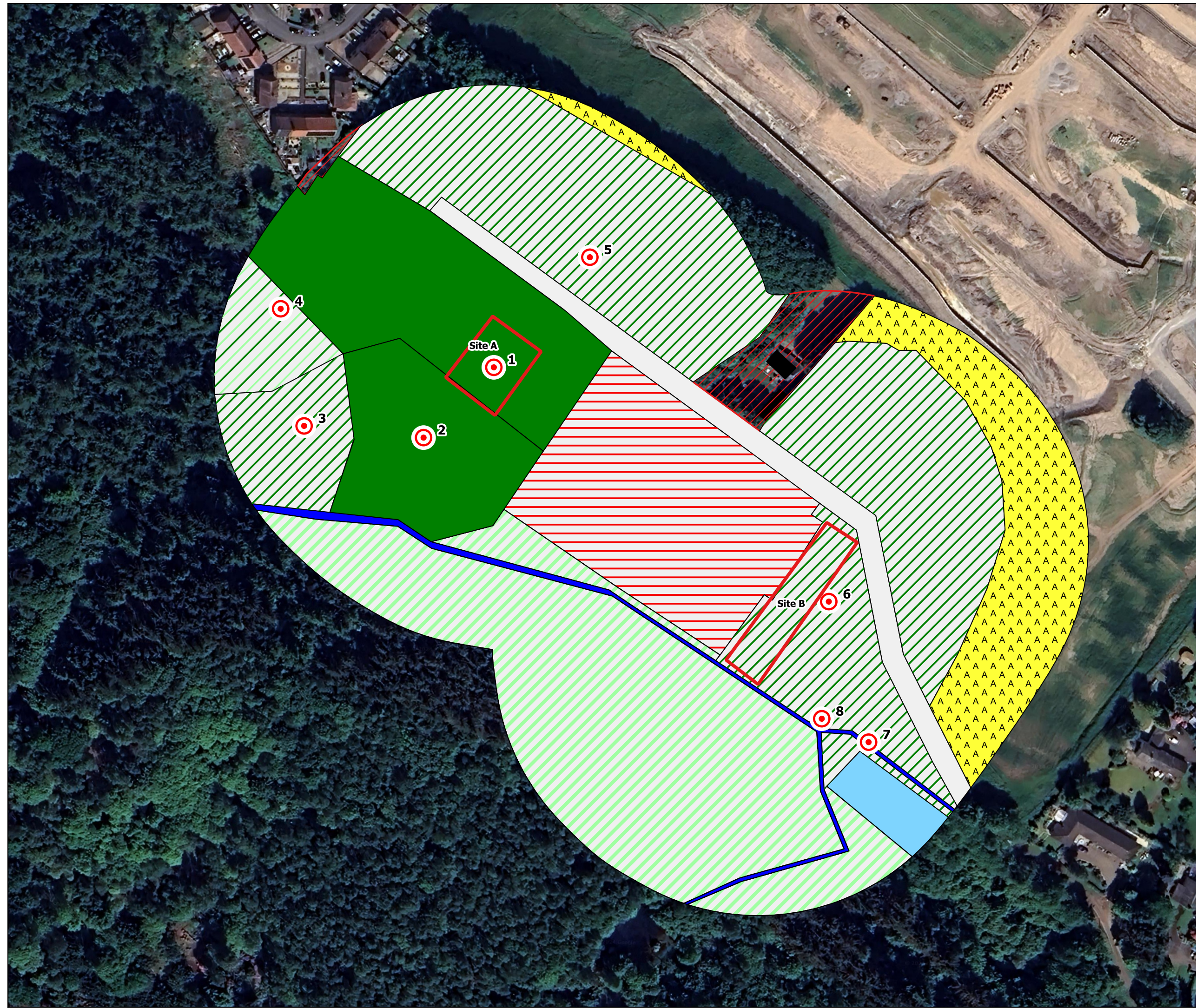


Table 5.1 - Target Notes

TN	OS Grid Reference	Description																																																																																																												
1	NS 7790 9186	<p>Birch and sycamore with scattered larch, willow and hawthorn. Wet depression in the middle created a biodiverse woodland ground flora (Figure 5.2). The species list obtained during the survey is outlined below:</p> <table border="1"> <thead> <tr> <th>English</th> <th>Latin</th> <th>DAFOR</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">Canopy</td> </tr> <tr> <td>Silver birch</td> <td><i>Betula pendula</i></td> <td>A</td> </tr> <tr> <td>Sycamore</td> <td><i>Acer pseudoplatanus</i></td> <td>A</td> </tr> <tr> <td>Larch</td> <td><i>Larix decidua</i></td> <td>O</td> </tr> <tr> <td colspan="3" style="text-align: center;">Understorey</td> </tr> <tr> <td>Bramble</td> <td><i>Rubus fruticosus</i></td> <td>O</td> </tr> <tr> <td>Hawthorn</td> <td><i>Crataegus monogyna</i></td> <td>O</td> </tr> <tr> <td>Rhododendron</td> <td><i>Rhododendron</i> sp.</td> <td>O</td> </tr> <tr> <td>Willow</td> <td><i>Salix</i> sp.</td> <td>O</td> </tr> <tr> <td colspan="3" style="text-align: center;">Ground Layer</td> </tr> <tr> <td>Bluebell</td> <td><i>Hyacinthoides non-scripta</i> and <i>Hyacinthoides x massartiana</i></td> <td>LA</td> </tr> <tr> <td>Bracken</td> <td><i>Pteridium aquilinum</i></td> <td>F</td> </tr> <tr> <td>Springy turf moss</td> <td><i>Rhytidiadelphus squarrosus</i></td> <td>F</td> </tr> <tr> <td>Ash seedlings</td> <td><i>Fraxinus excelsior</i></td> <td>F</td> </tr> <tr> <td>Common tamarisk moss</td> <td><i>Thuidium tamariscinum</i></td> <td>F</td> </tr> <tr> <td>Mouse-tail moss</td> <td><i>Isoetes macrospora</i></td> <td>F</td> </tr> <tr> <td>Swan's-neck thyme moss</td> <td><i>Mnium hornum</i></td> <td>F</td> </tr> <tr> <td>Rough stalked feather moss</td> <td><i>Brachythecium rutabulum</i></td> <td>F</td> </tr> <tr> <td>Common feather moss</td> <td><i>Kinderbergia praelonga</i></td> <td>F</td> </tr> <tr> <td>Common nettle</td> <td><i>Urtica dioica</i></td> <td>O</td> </tr> <tr> <td>Tufted hair-grass</td> <td><i>Deschampsia cespitosa</i></td> <td>O</td> </tr> <tr> <td>Cleavers</td> <td><i>Galium aparine</i></td> <td>O</td> </tr> <tr> <td>Creeping buttercup</td> <td><i>Ranunculus repens</i></td> <td>O</td> </tr> <tr> <td>Cock's-foot</td> <td><i>Dactylis glomerata</i></td> <td>O</td> </tr> <tr> <td>Tormentil</td> <td><i>Potentilla erecta</i></td> <td>O</td> </tr> <tr> <td>Wood avens</td> <td><i>Geum urbanum</i></td> <td>O</td> </tr> <tr> <td>Climbing corydalis</td> <td><i>Ceratocarpus claviculata</i></td> <td>O</td> </tr> <tr> <td>Ivy</td> <td><i>Hedera helix</i></td> <td>O</td> </tr> <tr> <td>Broad buckler-fern</td> <td><i>Dryopteris dilatata</i></td> <td>O</td> </tr> <tr> <td>Common male fern</td> <td><i>Dryopteris filix</i></td> <td>O</td> </tr> <tr> <td>Yorkshire-fog</td> <td><i>Holcus lanatus</i></td> <td>O</td> </tr> <tr> <td>Wood sorrel</td> <td><i>Oxalis acetosella</i></td> <td>O</td> </tr> <tr> <td>Raspberry</td> <td><i>Rubus</i> sp.</td> <td>R</td> </tr> <tr> <td>Foxglove</td> <td><i>Digitalis purpurea</i></td> <td>R</td> </tr> <tr> <td>Daffodil</td> <td><i>Narcissus</i> sp.</td> <td>R</td> </tr> </tbody> </table>	English	Latin	DAFOR	Canopy			Silver birch	<i>Betula pendula</i>	A	Sycamore	<i>Acer pseudoplatanus</i>	A	Larch	<i>Larix decidua</i>	O	Understorey			Bramble	<i>Rubus fruticosus</i>	O	Hawthorn	<i>Crataegus monogyna</i>	O	Rhododendron	<i>Rhododendron</i> sp.	O	Willow	<i>Salix</i> sp.	O	Ground Layer			Bluebell	<i>Hyacinthoides non-scripta</i> and <i>Hyacinthoides x massartiana</i>	LA	Bracken	<i>Pteridium aquilinum</i>	F	Springy turf moss	<i>Rhytidiadelphus squarrosus</i>	F	Ash seedlings	<i>Fraxinus excelsior</i>	F	Common tamarisk moss	<i>Thuidium tamariscinum</i>	F	Mouse-tail moss	<i>Isoetes macrospora</i>	F	Swan's-neck thyme moss	<i>Mnium hornum</i>	F	Rough stalked feather moss	<i>Brachythecium rutabulum</i>	F	Common feather moss	<i>Kinderbergia praelonga</i>	F	Common nettle	<i>Urtica dioica</i>	O	Tufted hair-grass	<i>Deschampsia cespitosa</i>	O	Cleavers	<i>Galium aparine</i>	O	Creeping buttercup	<i>Ranunculus repens</i>	O	Cock's-foot	<i>Dactylis glomerata</i>	O	Tormentil	<i>Potentilla erecta</i>	O	Wood avens	<i>Geum urbanum</i>	O	Climbing corydalis	<i>Ceratocarpus claviculata</i>	O	Ivy	<i>Hedera helix</i>	O	Broad buckler-fern	<i>Dryopteris dilatata</i>	O	Common male fern	<i>Dryopteris filix</i>	O	Yorkshire-fog	<i>Holcus lanatus</i>	O	Wood sorrel	<i>Oxalis acetosella</i>	O	Raspberry	<i>Rubus</i> sp.	R	Foxglove	<i>Digitalis purpurea</i>	R	Daffodil	<i>Narcissus</i> sp.	R
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The species list obtained during the survey is outlined below:</p> <table border="1"> <thead> <tr> <th data-bbox="496 416 794 450">English</th> <th data-bbox="847 416 970 450">Latin</th> <th data-bbox="1209 416 1310 450">DAFOR</th> </tr> </thead> <tbody> <tr> <td colspan="3" data-bbox="847 461 951 495">Canopy</td> </tr> <tr> <td data-bbox="496 501 564 535">Birch</td> <td data-bbox="847 501 970 535"><i>Betula sp.</i></td> <td data-bbox="1209 501 1230 535">O</td> </tr> <tr> <td data-bbox="496 539 628 573">Sycamore</td> <td data-bbox="847 539 1102 573"><i>Acer pseudoplatanus</i></td> <td data-bbox="1209 539 1230 573">O</td> </tr> <tr> <td colspan="3" data-bbox="847 577 1007 611">Understorey</td> </tr> <tr> <td data-bbox="496 616 603 649">Bracken</td> <td data-bbox="847 616 1082 649"><i>Pteridium aquilinum</i></td> <td data-bbox="1209 616 1230 649">F</td> </tr> <tr> <td data-bbox="496 654 603 687">Bramble</td> <td data-bbox="847 654 1050 687"><i>Rubus fruticosus</i></td> <td 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8	NS 7804 9171	Alder with knot hole on the main stem, north facing at 4m above ground level, creating a PRF (Figure 5.11).																																																

5.5 Otter and Water Vole

5.5.1 The watercourse to the south-west of the Sites is a small stream with no vegetation and gradual sloping banks, therefore had limited potential for water vole. There were no ponds or watercourses located within the survey area which would offer suitable resting areas or food sources for otters. The watercourse would be unlikely to be used by otter for commuting as the water level was shallow (less than 10cm), not connected to other water bodies, and there is limited potential for otter within the Site. Therefore, these species are not considered further in this report.

5.6 Red Squirrel

5.6.1 There are numerous historical field records of red squirrel within the woodland, but none within the survey area. During the survey no field signs were found and the trees within the survey area had limited potential for dreys, therefore red squirrels are not considered further in this report.

5.7 Pine Marten

5.7.1 The woodlands may provide suitable habitat, but there are no historical records for pine martens and there were no field signs found within the survey area. Therefore, pine marten are not considered further in this report.

5.8 Amphibians

- 5.8.1 There are no records of great crested newt within 2km of the Site. The old curling ponds were found to be too shallow (less than 10cm in depth) and contain no suitable vegetation for egg laying. There are no other suitable water bodies within 250m of the two sites. A 250m buffer was considered adequate due to the lack of records and discrete nature of the works. Therefore, this species is not considered further in this report.
- 5.8.2 The woodland within the survey area would provide limited habitat for common toad, which is an SBL priority species, due to the lack of understorey but the curling ponds would provide suitable spawning grounds. Due to the nature of the works, there is limited potential for impact on this species, therefore it is not considered further in this report.
- 5.8.3 The old curling ponds situated to the south-east of the survey area were not suitable for great crested newts as the water level was less than 10cm deep and there was no vegetation which was suitable for egg laying present (Figure 5.10). Therefore, great crested newts are not considered further within this report.
- 5.8.4 There was large amounts of common frog (*Rana temporaria*) spawn recorded 13.03.2024 and the curling ponds would be suitable for both common frog and common toad. As both of the proposed developments will not have an impact on these water bodies, these species will not be considered further within this report.

5.9 Bats

- 5.9.1 There were a couple of mature trees located to the south-east of Site B which had bat roost potential present. An oak (TN7) contained a tear out wound and an alder (TN8) contained a knot hole which could provide potential roost features for bats (Figure 5.11). The garden wall adjacent to Site B had potential roost features due to missing mortar creating gaps between the bricks. Bats may also use the woodlands for foraging and flight-lines, and the community garden and water bodies for foraging.

5.10 Reptiles

- 5.10.1 There was limited suitable habitat within the survey area and no historical records of reptiles. The numerous dead wood piles could be used as refuges and hibernacula. There were no reptile sightings during the survey and due to the discrete nature of the works these species are not considered further in this report.

5.11 Birds

- 5.11.1 The habitat within the Site boundary is such that it would be expected to hold potential for bird species associated with woodland and scrub. Species recorded during the surveys included woodpigeon (*Columba palumbus*), blackbird (*Turdus merula*), robin (*Erithacus rubecula*), great tit (*Parus major*), wren (*Troglodytes troglodytes*), chaffinch (*Fringilla coelebs*), chiffchaff (*Phylloscopus collybita*), blue tit (*Cyanistes caeruleus*), and magpie (*Pica pica*). There were inactive nests situated in some of the more mature trees within the survey area.

5.12 Invertebrates

- 5.12.1 The taller swards of grassland and plants associated with the wetland surrounding Site A could provide suitable food plants for larval moths and butterflies, and the wildflowers will provide sources of nectar for foraging pollinators.

5.13 Hedgehog

- 5.13.1 The woodlands could provide suitable habitat for hedgehog, which is an SBL species. As there is to be limited impact on the woodland the proposed buildings are not considered to have an adverse

impact upon this common and widespread SBL species. Therefore, hedgehog is not considered further within this report.

Figure 5.2 - Semi-natural broadleaved woodland (TN1).



Figure 5.3 - Wet area in the semi-natural broadleaved woodland.



Figure 5.4 - Open area in the semi-natural broadleaved woodland (TN2).



Figure 5.5 - Broadleaved plantation woodland to the south-west of Site A (TN3).



Figure 5.6 - Mixed plantation woodland to the west of Site A (TN4)



Figure 5.7 - Sycamore dominated woodland to the north of Site A (TN5).

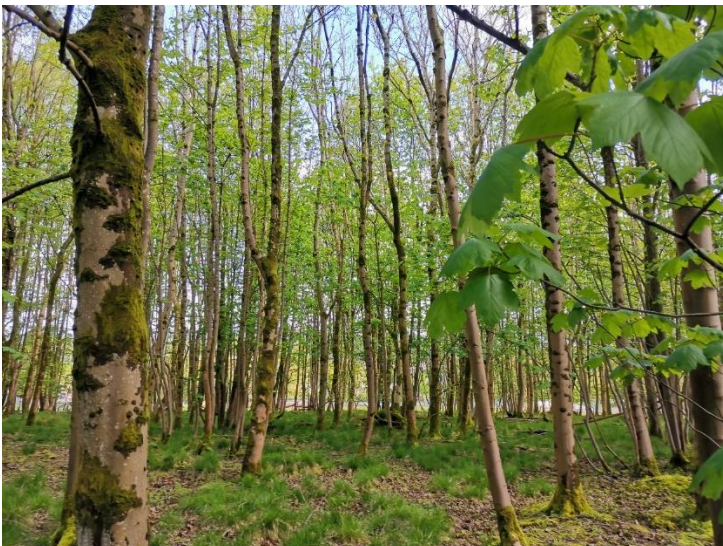


Figure 5.8 - Wet broadleaved plantation woodland around Site B (TN6)



Figure 5.9 - Wood sorrel.



Figure 5.10 - Old curling ponds



Figure 5.11 - Alder with knot hole



Figure 5.12 - Suggested location for the original nursery.



Figure 5.13 - Potential location for the smaller nursery.



Section 6 - Discussion

6.1 Ecological Constraints and Required Mitigation

- 6.1.1 The following ecological constraints associated with the Sites are listed in paragraphs 6.2 to 6.6 below. Legislation with regards to these species is presented in Appendix V.

6.2 Designated Sites

- 6.2.1 Sauchie Craig Wood, a SSSI for mixed ash woodland, is located 1.6km to the west of the Sites.
- 6.2.2 As there are no hydrological connections between Gillies Hill and this protected site, it will not be impacted upon by the proposed works. There are no ecological constraints with regards to designated sites.

6.3 Habitats

- 6.3.1 The small water course and curling ponds would be considered SBL habitats. Therefore, Guidance for Pollution Prevention (NetRegs, Various Dates) should be adhered to on Site, to prevent any impact upon these habitats.
- 6.3.2 For Site A it is recommended that the wet depression within the semi-natural woodland (NS 7790 9186) is avoided as it is the most species rich area of the survey area and has the greatest potential for enhancement.
- 6.3.3 For Site A the two locations which would cause the least impact on the habitats would be the grassland area by the current children's play area NS 7787 9183 (TN2), and the area that has already been disturbed by the felling operations NS 7787 9190 (Figure 5.12). These two areas are both less biodiverse than the wetter depression and therefore would be most suitable for development.
- 6.3.4 If either of these two areas were used, then due to the nature of the proposed works there would be limited impact on the habitats within the area. Therefore, the potential loss of habitat is not considered to have a significant adverse ecological impact and there are no ecological constraints regarding the value of the habitats.
- 6.3.5 The location of Site B has not been finalised yet but is likely to be near the walled garden (Figure 5.13). This would result in the discrete loss of broadleaved plantation woodland. Given the footprint of the proposed building, the adverse impact would be minimal. However, it is still recommended that to reduce the impacts, Root Protection Areas are installed around the adjacent trees that are to be retained. The RPAs should be installed in line with The British Standards Institution (2012), where the radius of the RPAs equate to 12 times the diameter at breast height. Based upon the size of the trees in this area of woodland, the RPAs would need to have a radius of between 4 to 7.3m.

6.4 Non-Native Plant Species

- 6.4.1 Non-native species were present within the woodland. The potential works may result in the spread of non-native plants and it should be noted that it is an offence to cause any non-native plant species to grow in the wild.
- 6.4.2 The Code of Practice on Non-Native Species (Scottish Government, 2012) must be adhered to. Any soil that may contain any non-native plant material must be moved in line with this good practice guidance. Removing regeneration of non-natives, deadheading plants after they have flowered and using root barrier fabrics can all help to contain the spread of non-native plants.

6.5 Protected Plant Species

- 6.5.1 Native bluebells were present in the woodland surrounding Site A. Bluebells are listed on Schedule 8 of the Wildlife and Countryside Act, 1981 where they are given protection from collecting from the wild for sale. The bluebells should be retained within the woodland.

6.6 Bats

- 6.6.1 There are two trees with potential roost features to the south-east of Site B. As these trees are situated over 50m away from the potential location of the smaller classroom they will not be impacted by the construction.
- 6.6.2 The wall surrounding the old garden had missing mortar creating gaps which could be used by roosting bats. The garden wall is managed by the Community Development Trust and has planned maintenance works which could remove the potential features. It is recommended that a Preliminary Roost Assessment is completed on the wall, prior to the infilling of any crevices. With regards to works for the Cambusbarron Village Nursery, care should be taken so as not to disturb any potential bat roosts with lighting or noise.
- 6.6.3 Although the habitat is suitable for foraging and commuting bats, as the Site cover less than 1 hectare (ha), and any planned felling would be limited to only a few trees within the survey area, no significant adverse impact is predicted due to habitat loss. However, inappropriate lighting could have impacts that extend beyond the Site boundary. If artificial lighting is unavoidable, measures must be taken to prevent light trespass into surrounding habitats. Artificial light is known to cause a significant impact on local bat populations in terms of commuting routes across the landscape, habitat connectivity, as well as insect prey availability and foraging habits (Voigt *et al.*, 2018). Where possible, 'warm white' spectrum (<2700 Kelvin) or wavelengths peaking higher than 550nm should be used, rather than 'cool white' (>5700 Kelvin) lights (Institution of Lighting Professionals and BCT, 2023). Whilst the Site is under construction lights should be switched off during the night. Any permanent lighting that is to be installed should be directional and pointing away from the surrounding habitats to avoid the light overspill and resulting impacts on invertebrates, potential disturbance to commuting and foraging routes.

6.7 Birds

- 6.7.1 There is potential for nesting birds in the scrub and woodland within the Site. The breeding bird season for the species associated with the habitats on Site runs from February to March. Removal of vegetation during the breeding bird season could lead to the destruction of a nest and potential breach in legislation. If any vegetation removal or felling works are required, it is recommended to be completed outside the breeding bird season (October to February). If this is not possible and works are to commence within the breeding bird season (March to September), then any areas of the Site that need to be worked upon should be shown to be free of nesting birds immediately prior to works commencing. Checks would occur as close as possible to the commencement of planned works, and no more than three days prior to such activity. If any evidence of breeding is detected, a suitable buffer would be installed within which no works can occur until the chicks have fledged and the nest is confirmed as inactive.

6.8 Survey Lifespan

- 6.8.1 The survey work reported upon within this document was completed on 13.03.2024. If works at the Site do not commence prior to 13.09.2025, then further surveys should be commissioned in order to ascertain that the situation at the Site has not changed and thus the conclusions of this report are still valid.

6.9 Opportunities for Enhancement

- 6.9.1 The Scottish Biodiversity Strategy's objective for species and habitats is to halt the loss of biodiversity and continue to reverse previous losses through targeted action.

- 6.9.2 Wildflower meadow creation should be considered, where practical. This would involve sowing a wildflower meadow mix (Scotia Seeds MG5 Meadow Mix, or similar) with no fertiliser or topsoil applied during the ground preparation. The seed mix will comprise perennials that may not flower in their first growing season and so there is often a flush of annual weeds. Therefore, during the first growing season the meadow would need to be cut regularly (up to four cuts) to 50mm. In subsequent years, the meadow should only be cut once in autumn (ideally November) for at least a 10-year aftercare period. All arisings from the cuttings should be removed from site. Weeds (e.g. common nettle (*Urtica dioica*), thistle (*Cirsium* sp.), ragwort (*Jacobaea vulgaris*) and docks (*Rumex* sp.)) may need to be treated by either spot spraying with herbicide or pulled up by hand for at least the first three years after creation, but the widespread use of herbicide or pesticide should be avoided. Log, leaf and brash piles could also be incorporated into the wildflower meadow areas to provide a diverse range of habitats.
- 6.9.3 The Scottish Government's Policy on Control of Woodland Removal (Forestry Commission Scotland, 2009) signals a strong presumption in favour of protecting Scotland's woodland resources and supports the retention and expansion of woodlands. Removal will only be permitted where it would achieve significant and clearly-defined additional public benefits. Where woodland is removed in association with development, developers will generally be expected to provide compensatory planting.
- 6.9.4 Goals for woodland and forestry aim to improve the management of semi-natural woodlands, improve riparian habitat, encourage alternatives to clear-felling and extend and enhance native woodlands by developing forest habitat networks. The Scottish Forestry Strategy 2019-2029 (Scottish Government, 2019) set a target to create 3000 - 5000 hectare of new native woodland per year.
- 6.9.5 It is recommended that the woodlands are thinned to encourage development of the understorey and ground layer. Possible enhancement with suitable planting such as hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) could also be considered.
- 6.9.6 It is recommended that the cut dead wood and sectioned trees are piled in suitable locations at woodland or scrub edges and retained, in order to create refuges and hibernacula for reptiles, as well as increase the biodiversity by providing suitable habitats for a variety of invertebrates and wood-decay fungi
- 6.9.7 Enlarging the wet areas within the woodlands by creating ponds and scrapes would encourage invertebrates, amphibians and reptiles. Placing a boardwalk over the area would protect the wetland but also enable safe access for members of the public and nursery children.
- 6.9.8 Possible enhancements to the Site could involve the installation of bird boxes of a range of sizes throughout the Site.
- 6.9.9 The installation of bat boxes would also increase the suitability of the survey area for roosting bats. Woodcrete boxes are recommended, and they should be installed on trees at a height of 2-7m above ground in a location where the access is not illuminated by artificial light. Summer roosting bats tend to utilise south to west facing roosts for solar heating, while winter roosts tend to be north facing. As such it is recommended to install boxes in both south to west and north facing locations so that bats can utilise the Site throughout the year.

Section 7 - Ecological Constraints and Opportunities Plan

7.1 Ecological Constraints and Opportunities Plan

7.1.1 The following table (Table 7.1) summarises the ecological constraints and opportunities relating to the development at the Site, for which Cambusbarron Village Nursery and appointed contractors are responsible for delivering.

Table 7.1 - Ecological Constraints and Opportunities Plan

Action Point	Ecological Constraints and Opportunities	Target Date
Ecological Constraints		
AP1	Non-Native Species Non-native species were identified within the Site. The Code of Practice on Non-Native Species (Scottish Government, 2012) should be adhered to and any soil that may contain any non-native plant material should be moved in line with good practice guidance.	During Site clearance
AP2	Protected Plant Species Native bluebells were present in the woodland surrounding Site A. Bluebells are listed on Schedule 8 of the Wildlife and Countryside Act, 1981 where they are given protection from collecting from the wild for sale. The bluebells should be retained within the woodland.	During Site clearance
AP3	Nesting Birds If any vegetation removal or felling works are required, it is recommended to be completed outside the breeding bird season (October to February). If this is not possible and works are to commence within the breeding bird season (March to September), then any areas of the Site that need to be worked upon should be shown to be free of nesting birds prior to works commencing. This should be done through a nesting bird check completed by a suitably qualified ecologist. Checks would occur as close as possible to the commencement of planned works, and no more than three days prior to such activity. If any evidence of breeding is detected, a suitable buffer would be installed within which no works can occur until the chicks have fledged and the nest is confirmed as inactive.	During vegetation removal
AP4	Tree Root Protection During construction RPAs should be installed around the adjacent trees that are to be retained, in line with The British Standards Institution (2012). Based upon the size of the trees, the RPAs would need to have a radius of between 4 to 7.3m.	During construction
AP5	Lighting Any lighting incorporated into the plans should ensure that it is placed so that it does not illuminate any roost access points or tree lines that may be used by foraging or commuting bats. Where possible, 'warm white' spectrum (<2700 Kelvin) or wavelengths peaking higher than 550nm should be used, rather than 'cool white' (>5700 Kelvin) lights (Institution of Lighting Professionals and BCT, 2023).	During and after works

AP6	<p>Survey Lifespan The survey work reported upon within this document was completed on 13.03.2024. If works at the Site do not commence prior to 13.09.2025, then further surveys should be commissioned in order to ascertain that the situation at the Site has not changed and thus the conclusions of this report are still valid.</p>	13.09.2025
Ecological Enhancements		
AP7	<p>Wildflower Meadow Wildflower meadow creation should be considered, where practical. This would involve sowing a wildflower meadow mix (Scotia Seeds MG5 Meadow Mix, or similar) with no fertiliser or topsoil applied during the ground preparation. The seed mix will be comprised of perennials that may not flower in their first growing season and so there is often a flush of annual weeds. Therefore, during the first growing season the meadow would need to be cut regularly (up to four cuts) to 50mm. In subsequent years, the meadow should only be cut once in autumn (ideally November) for at least a 10-year aftercare period. All arisings from the cuttings should be removed from site. Weeds (e.g. common nettle (<i>Urtica dioica</i>), thistle (<i>Cirsium</i> sp.), ragwort (<i>Jacobaea vulgaris</i>) and docks (<i>Rumex</i> sp.)) may need to be treated by either spot spraying with herbicide or pulled up by hand for at least the first three years after creation, but the widespread use of herbicide or pesticide should be avoided. Log, leaf and brash piles could also be incorporated into the wildflower meadow areas to provide a diverse range of habitats.</p>	During and after works
AP8	<p>Deadwood refuge and hibernacula Cut dead wood and sectioned trees piled in suitable locations at woodland or scrub edges and retained, in order to create refuges and hibernacula for reptiles.</p>	After works are completed
AP9	<p>Wetland creation and boardwalk Enlarging the wet areas within the woodland by creating ponds and scrapes would encourage invertebrates, amphibians and reptiles. Placing a boardwalk over the area would protect the wetland but also enable safe access for members of the public and nursery children</p>	During and after the works
AP10	<p>Thinning of woodland and planting Woodlands could be thinned to encourage development of the understorey and ground layer. Possible enhanced with suitable planting such as hazel (<i>Corylus avellana</i>), hawthorn (<i>Crataegus monogyna</i>) and blackthorn (<i>Prunus spinosa</i>) could also be considered.</p>	After works are completed
AP11	<p>Installation of bird boxes and bat boxes The inclusion of bird boxes throughout the Site would be beneficial by providing nesting opportunities. Bat boxes are recommended to be installed on the structures or mature trees to increase the suitability of the Site for roosting bats.</p>	After works are completed

Section 8 - References

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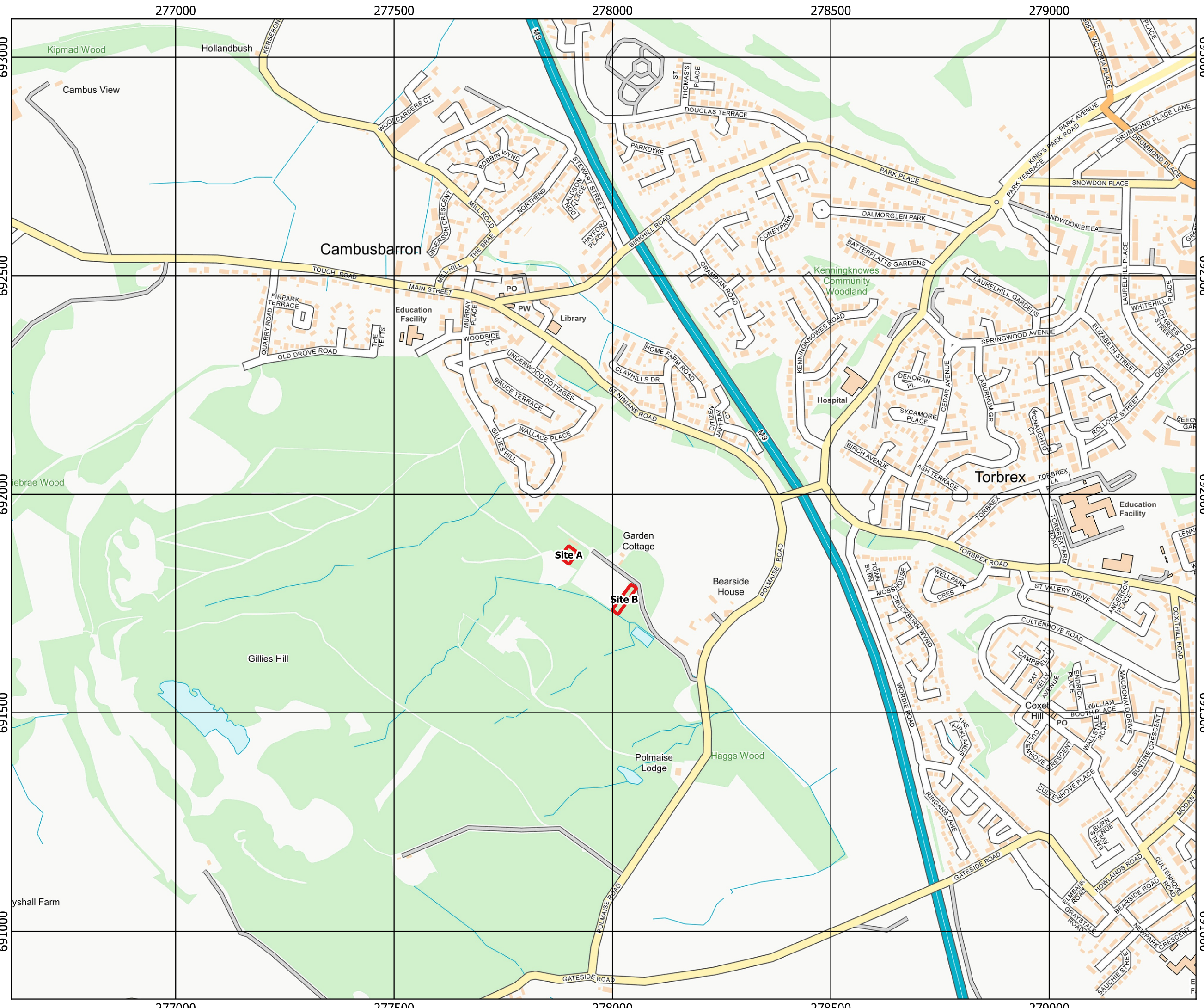
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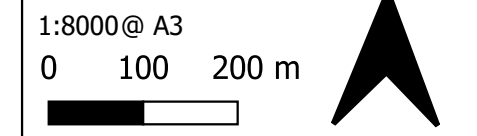
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Appendix I: Location Plan



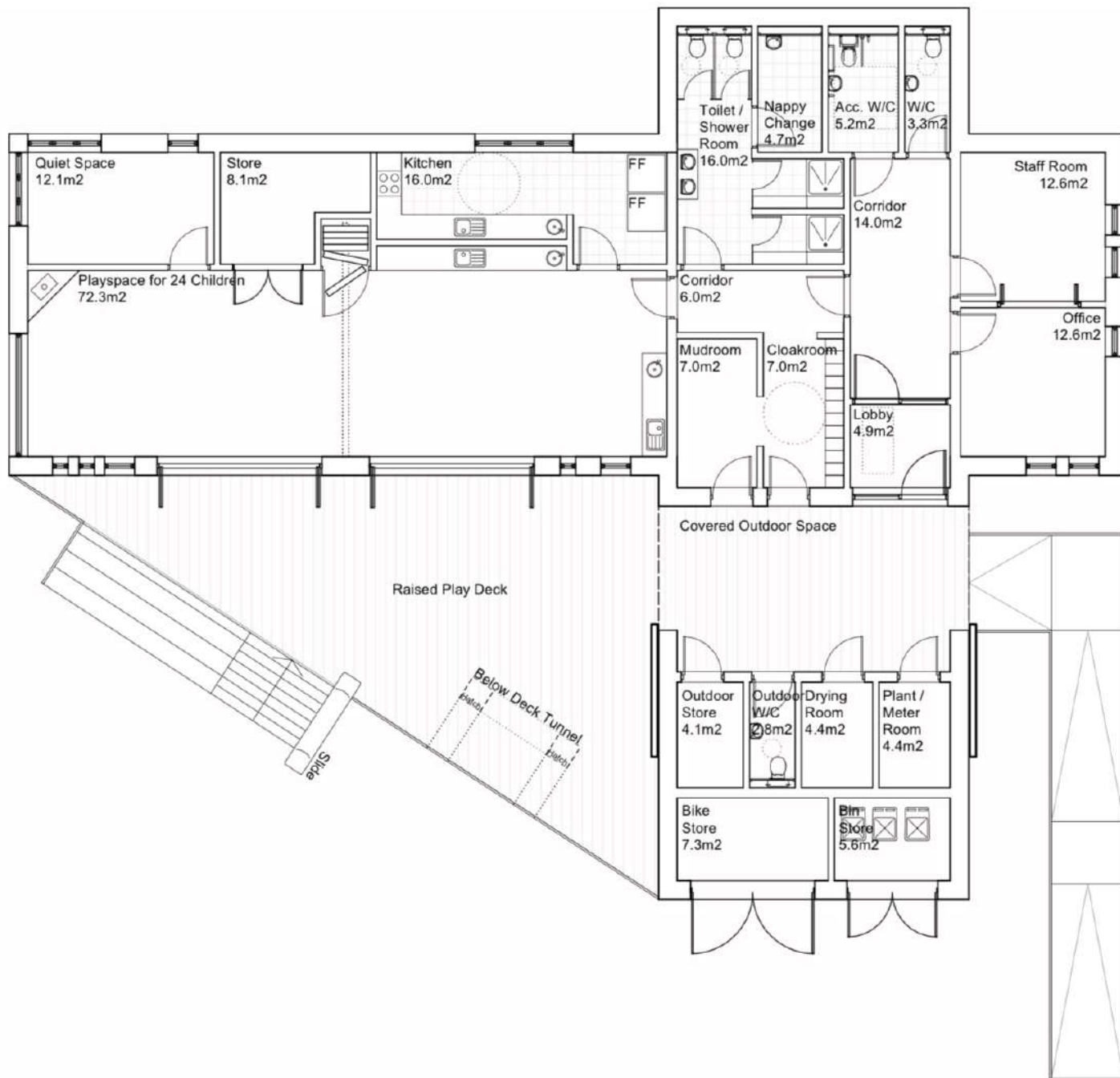
Legend
 Potential site boundary



Produced: KP
 Reviewed: HS
 Ref: CVN02.24.3002 | Revision: B
 Date: 02.04.2024

Preliminary Ecological Appraisal (PEA)
Potential Cambusbarrow Village Nursery Site, Gillies Hill

Appendix II: Proposed Works Original Nursery



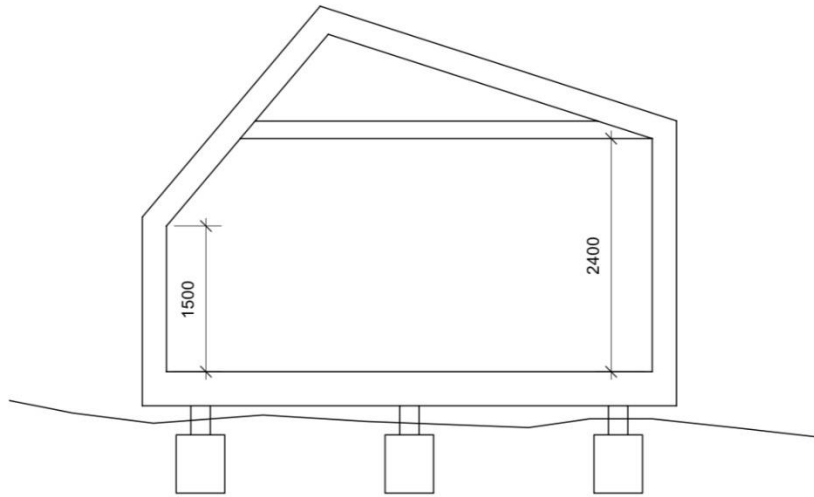
Appendix III: Proposed Work Smaller Nursery

ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO MANUFACTURE / FABRICATION OF ALL ELEMENTS AND CONSTRUCTION

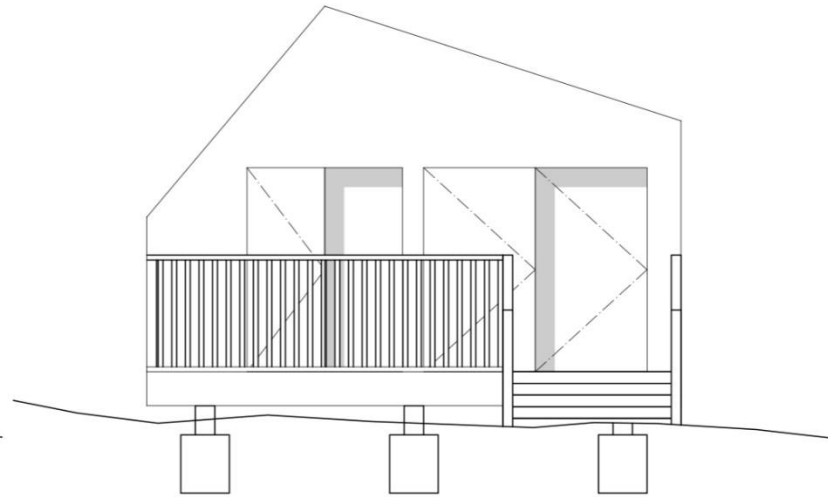
FOLLOWING ELECTRONIC TRANSFER OF DRAWING INFORMATION, IT IS THE RESPONSIBILITY OF THE RECIPIENT TO ENSURE SCALE.

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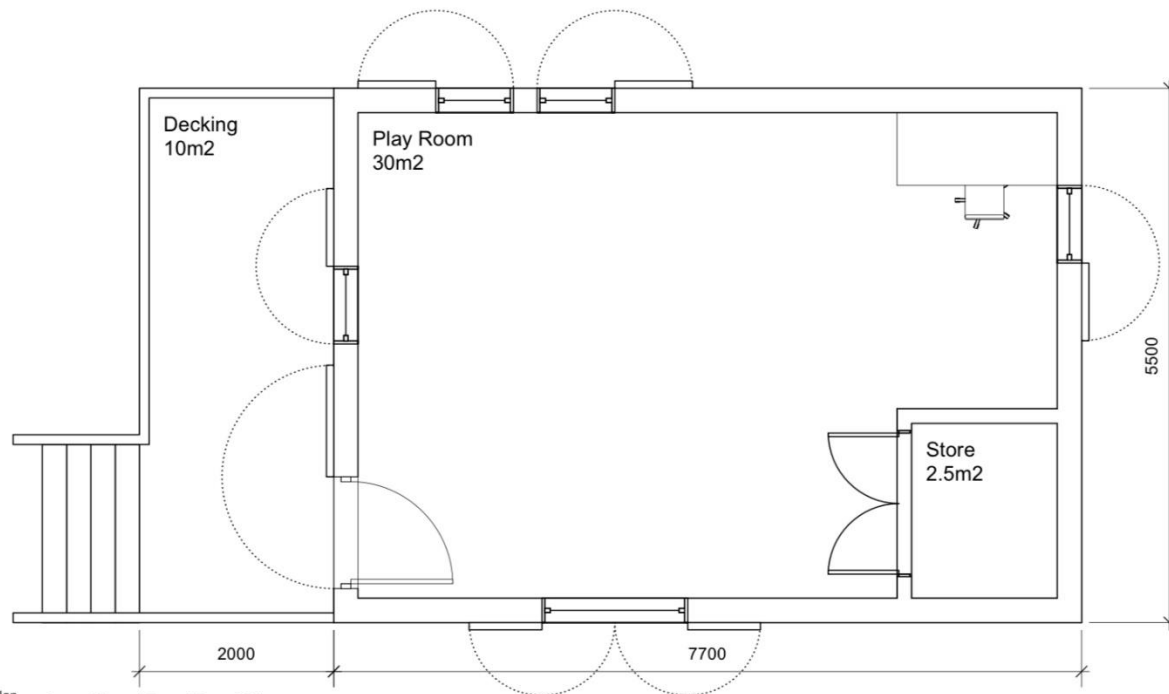
General Notes



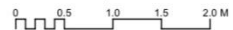
Proposed Section
1:50 @ A3



Proposed Elevation
1:50 @ A3



Proposed Plan
1:50 @ A3



Rev	Date	Note

A 11/01/2024 Floor plan revised following development. Indicative section & elevation added.

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Project Description:
Cambusbarron Village Nursery

Drawing Description:
Shelter_Floor Plan as Proposed

Job No: **320** Drawing No: **AL(1)10** Revision: **A**
Status: **Information**
Drawn By: AM
Checked By: ~19/12/23
Date Created:
Scale: 1:50 @ A3

Appendix IV: Qualifications and Competencies

IV.1.1 The table below contains the relevant qualifications, competencies and experience in relation to the surveyors present on the Site and the author of the report:

Table IV.1: Staff qualifications and competencies

Surveyor and Role	Qualifications	Relevant Experience
Kay Paul, Author, Lead Surveyor	Qualifying member of CIEEM	Kay is a capable habitat surveyor and has a two years' experience of carrying out habitat and species surveys and reporting on surveys.
Heather Simpson, Surveyor	BSc (Hons), MSc, CEnv, MCIEEM	Heather is an accomplished habitat surveyor with over nine years of experience in carrying out Phase 1 and PEAs and reporting on surveys.

Appendix V: Relevant Legislation

V.1 Wild Plants

- V.1.1 Wild plants are protected under the following UK Legislation:
- The Conservation (Natural Habitats, &c.) Regulations 1994, as amended
 - The Wildlife and Countryside Act 1981, as amended
- V.1.2 A small number of wild plants occurring within the UK are regarded as European Protected Species (EPS), under The Conservation (Natural Habitats, &c.) Regulations 1994 as amended. Under these regulations, it is an offence to:
- Intentionally or recklessly pick, collect, cut, uproot or destroy such a plant or anything derived from it. This applies to all stages of the biological cycle.
 - Possess specimens of these plants or derivatives of them.
- V.1.3 Under Schedule 8 of the Wildlife and Countryside Act 1981 as amended, it is an offence for:
- Any person to intentionally or recklessly pick, uproot or destroy any wild plant included in Schedule 8
 - An unauthorised person to intentionally or recklessly uproot any wild plant not included in Schedule 8.
- V.1.4 With regards to invasive species, the Wildlife and Natural Environment (Scotland) Act 2011 makes it an offence to cause any non-native plant species to grow in the wild.

V.2 European Protected Species

- V.2.1 Bats are European Protected Species. European Protected Species and their places of rest/shelter are protected under UK and European Legislation. In Scotland, this is mainly provided by the Conservation (Natural Habitats, &c.) Regulations 1994, as amended.
- V.2.2 It is an offence to deliberately or recklessly disturb an EPS (including injuring, capturing and/or killing), or damage, obstruct, alter or destroy an EPS shelter/resting place. An EPS shelter/resting place is protected at all times irrespective as to whether any EPS are using the shelter/resting place at a given time.
- V.2.3 If the work proposed affects an EPS or their resting place/shelter, a Habitats Regulations licence, issued by the licensing authority NatureScot under Regulation 44 will be required so as to permit an otherwise illegal activity. There are three tests that must be satisfied before a licence will be granted, in addition to which mitigation and/or compensation will almost certainly be required. The three tests are:
- V.2.4 The activity must fall within one of the licensable purposes listed in Regulation 44 (including preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment, and preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, property or fisheries)
- There must be no satisfactory alternative
 - The action authorised will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range.

V.3 Birds

- V.3.1 Birds are protected under UK and European Legislation, including, amongst others, the following:
- Wildlife and Countryside Act 1981 (as amended)
 - The Nature Conservation (Scotland) Act 2004

- V.3.2 All wild birds (defined as 'any species which is ordinarily resident in or is a visitor to 'the European Territory of any member state' (of the EU)'), their nests and their eggs are protected by law unless an exception is specified in the legislation.
- V.3.3 Basic protection afforded to wild birds makes it an offence, unless specifically excluded, to:
- Intentionally or recklessly kill, injure or take a wild bird
 - Intentionally or recklessly take, damage or destroy or otherwise interfere with a nest whilst being built or in use
 - Intentionally or recklessly at any other time take, damage, destroy or otherwise interfere with a nest habitually used by any wild bird included in Schedule A1
 - Intentionally or recklessly obstruct or prevent any wild bird from using its nest
 - Intentionally or recklessly take or destroy an egg of a wild bird
 - Have in possession or control any wild bird, dead or alive, or any part of a wild bird taken in contravention to the Wildlife and Countryside Act 1981 or whilst the Protection of Wild Birds Act 1954 was in force
 - Have in possession any live bird of prey of any species in the world unless it is registered and ringed
 - Have in possession or control any bird of a species occurring on Schedule 4 of the Wildlife and Countryside Act 1981 unless registered and in most cases ringed (in accordance with the Secretary of State's regulations)
 - Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or in, on or near a nest containing eggs or young, or disturb the dependent young of such a bird.
 - Intentionally or recklessly or knowingly cause or allow any wild bird which leks included in Schedule 1 to be disturbed while it is doing so
 - Intentionally or recklessly or knowingly cause or allow any wild bird included in Schedule 1A to be harassed
 - Use traps to kill, injure or take wild birds.