Report

Preliminary Ecological Appraisal Report

Proposed Battery Energy Storage System, Corriemoillie

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Status / Revisions

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C01	01.03.24	For issue	LH	LM	RWS
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This report and its findings should be considered in relation to the terms and conditions proposed and scope of works agreed between Sweco and the client.

Interpretations and recommendations contained in the report represent our professional opinions, which were arrived at in accordance with currently accepted industry practices at the time of reporting and based on current legislation in force at that time.

This report is prepared and written in the context of the proposals stated in the introduction to this report and should not be used in a differing context. Furthermore, alterations to the initial proposals or changes in conditions on site over time may necessitate an alteration to the report in whole or in part after its submission. Therefore, in the event of any change in proposals or lapse of one year or more from the date of the report, the content of the report should not be relied upon unless referred to Sweco for validation and, if necessary, re-appraisal.

Scientific survey data will be shared with local biological records centre in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) professional code of conduct. This report was prepared only for our client and is not intended to be relied on by any other party. Third parties should not rely on the facts, matters or opinions set out in this report without the express written permission of Sweco.

Please note that Sweco does not purport to provide specialist legal advice.

Unless stated specifically, drawings and plans are indicative only. As such, the position of features marked on the plans or drawings should not be taken as 100% accurate.

Preliminary ecological appraisal does not assess the presence or absence of species but is used to assess the potential for habitat to support them. Where a species is seen or there is clear and recent evidence of the presence of a species, this is reported.

With reference to the CIEEM guidelines [1], a preliminary ecological appraisal report is not suitable to support a planning application. This is because where there is the potential for ecological constraints, further survey work is necessary to determine if an actual constraint is present and establish baseline conditions. Once all ecological constraints have been confirmed following any further surveys or assessments that may be required, the effect of the proposals in relation to each of these constraints should be assessed in an ecological impact assessment report, which should be suitable to support a planning application.

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1 Non-technical Summary

This preliminary ecological appraisal report has been prepared by Sweco for Virmati Energy Ltd, and relates to proposed development at Corriemoillie sub-station for which planning permission will be sought.

The purpose of this report is to identify potential ecological constraints to development, inform recommendations for design change, highlight opportunities for ecological enhancement and determine the need for further survey work and/or assessment to confirm baseline ecological conditions.

A UK habitat classification survey was carried out on 22 February 2024, to map the habitats present on site and within the offsite area, and assess their potential to support notable/protected species.

The UK habitat classification survey found that the site comprises the broad habitat types coniferous plantation, wet heathland, acid grassland, bracken, ditches, a pond, and artificial unsealed surface. The offsite area comprises wet heathland, inland rock and coniferous woodland. Of these habitats, wet heathland is a priority habitat. Groundwater Dependent Terrestrial Ecosystems may also be present.

The site has the potential to support common reptiles and amphibians, breeding and wintering bird assemblages, commuting and foraging bats, water vole, otter, badger, pine marten, red squirrel and mountain hare. The invasive non-native species rhododendron was recorded just outside the site boundary.

The following further survey work is therefore recommended at the appropriate time (and prior to any planning application) to establish an ecological baseline for these taxa:

- Botanical survey / National Vegetation Classification assessment (one visit; May-July inclusive)
- Great crested newt eDNA survey (one visit; mid-April-June inclusive)
- Reptile surveys (eight visits; April-October, dependent on weather conditions)
- Breeding bird survey (six visits; March-July inclusive)
- Wintering bird survey (four visits; November-February inclusive)
- Bat transect surveys (seven visits; April-October inclusive)
- Bat remote monitoring surveys (seven visits; April-October inclusive)
- Water vole and otter survey (up to two visits; mid-April to June inclusive, then July to September inclusive)
- Badger walkover survey (one visit; no timing constraint)
- Pine marten / red squirrel transect survey (one visit; February-September)
- Mountain hare (one visit; September to November inclusive)
- Invasive species walkover survey (one visit; May-July inclusive)

It is a **mandatory requirement** that nesting birds (or their nests or eggs), including ground nesting birds in the grassland, are not killed or injured or their active nests destroyed as a result of activities on site. It is **recommended** that clearance of vegetation that is suitable for nesting birds is undertaken outside the core nesting bird season (March to August inclusive) and if the works programme cannot be amended to facilitate this, that a pre-works check for nesting birds be undertaken by suitably

qualified ecologist one week prior and then no more than 48 hours prior to works. If active nests were found, there would be no other option but to delay works in this immediate area until chicks have fledged which could be a period of up to ten weeks.

The following enhancement opportunities for securing positive effects for biodiversity in line with Policy 3 of the Fourth National Planning Framework are recommended:

- Enhancement / rewilding of the offsite area;
- Use of native plant species within soft landscaping;
- Integrated bird and bat boxes within the buildings;
- Bird and bat boxes erected onto retained or planted trees;
- Inclusion of log piles to provide refuge for hedgehogs, reptiles, amphibians and invertebrates;
- Inclusion of a pond; and
- Bat sensitive lighting plan.

2 Introduction

2.1 Purpose

This preliminary ecological appraisal (PEA) report has been prepared by Sweco for Virmati Energy Ltd and relates to the proposed development at Corriemoillie Sub-Station, Garve, IV23 2PY, hereafter referred to as 'the site'.

The purpose of the PEA is to identify and classify the habitats present, assess ecological constraints to the project and provide recommendations for any further surveys required to inform baseline conditions, and any mitigation or licencing requirements. This includes an assessment of whether the proposed development and associated activities will have the potential to adversely affect any designated nature conservation sites, protected or notable habitats or species. Additionally, recommendations for enhancement opportunities for securing positive effects for biodiversity in line with Policy 3 of the Fourth National Planning Framework (NPF4) [2] will also be included.

2.2 Site Description

The site occupies an area of approximately 5.1 ha and is located around national grid reference NH 34972 64155, to the northwest of Garve. An off-site area of approximately 16.7 ha is located to the north of the main site, around national grid reference NH 34717 65467 and is held in reserve for the purposes of biodiversity enhancement.

Habitats on site include the priority habitat wet heathland, bracken (*Pteridium aquilinum*), other upland acid grassland, pond, ditches, other rivers and streams, artificial unvegetated, unsealed surface, upland birchwoods, other Scot's pine (*Pinus sylvestris*) woodland, other coniferous woodland.

The off-site habitats include inland rock outcrops and scree habitats, wet heathland and other coniferous woodland.

The site is surrounded by further coniferous woodland plantations and wet heathland on all sides, with artificial surfaces found to the southwest at the Corriemoillie sub-station.

2.3 Proposed Development

The proposed development comprises of clearance of habitats on-site and the construction of electrical infrastructure in their place.

3 Legislative and Policy Context

3.1 Current UK Legislation

The main pieces of legislation relating to ecology within Scotland are:

- The Conservation (Natural Habitats, &c) Regulations 1994 (as amended)
- Wildlife and Countryside Act 1981 as (amended)
- Wildlife and Natural Environment (Scotland) Act (2011)
- Protection of Badgers Act 1992
- Nature Conservation (Scotland) Act 2004

All recommendations made in this PEA report are in line with the above the legislation. The reader is referred to the original legislation for definitive interpretation.

3.2 Planning Policy

The recommendations of this report are in line with the key principles of NPF4 [2].

4 Methods

4.1 Technical Approach

A Preliminary Ecological Appraisal (PEA), comprising a UK Habitat classification (UKHab) and protected species scoping survey, has been undertaken following CIEEM's guidelines [3] and British Standard 42020:2013 [4]. This approach has been employed to provide an indication of the ecological importance of the site and the potential for the site to be used by protected species.

Common names and binomial scientific names of plant species identified are as they appear in Stace [5].

The conclusions and recommendations for further works are in accordance with current legislation and guidance.

4.2 Personnel

This report was produced by Leonora Hunt MSc, who has three years' experience in ecological consultancy. This report was reviewed by Lorna McDonald MSc MCIEEM CEnv who has over 12 years' experience and by Richard Webber-Salmon BSc(Hons) MCIEEM, who has over 10 years' experience in ecological consultancy and production of preliminary ecological appraisals and impact assessments.

4.3 Scope of the Assessment and Zone of Influence

The Zone of Influence (ZOI) is the area over which ecological features may be subject to change as a result of the proposed development and associated activities [6]. The ZOI varies depending on the ecological feature concerned and can extend beyond the site boundary. Where possible, ZOIs will be determined using the results of professionally accredited or published scientific studies. Where such studies are not available, the ZOI will be determined using the professional judgement of a suitably experienced and qualified ecologist. This is in line with professional guidelines [6].

The following ZOIs have informed this study:

- Statutory designated sites: The ZOI was considered as being 10km for internationally designated sites, 3km for nationally and locally designated sites, and 2km for Ancient Woodland Inventory (AWI) sites. These distances were chosen based on best professional judgement.
- Non-statutory designated sites: a 2km ZOI was considered sufficient for non-statutory designated sites and Native Woodland Survey of Scotland (NWSS). This distance was chosen based on best professional judgement.
- Bats: A 30m ZOI was considered sufficient for bats. This distance was chosen based on Bat Conservation Trust (BCT) guidelines [7].
- Great crested newt (*Triturus cristatus*) (GCN): a 500m ZOI from the site boundary was considered sufficient, based on professional guidelines [8].
- Water vole (*Arvicola amphibius*): a 10m ZOI around any watercourse/wetland habitat from the site, plus 100m upstream and downstream of any watercourses within the ZOI, was considered sufficient, based on professional guidelines [9].
- Otter (*Lutra lutra*): a 200m ZOI from the site was considered a sufficient ZOI, based on professional guidelines [10].

- Badgers (*Meles meles*): a 100m ZOI was considered sufficient, based on professional guidelines [11].
- Pine marten (*Martes martes*) and red squirrel (*Sciurus vulgaris)*: a 50m ZOI in suitable habitat was considered sufficient.

4.4 Desk Study

The Multi-Agency Geographic Information for the Countryside (MAGIC) [12] online database was consulted to obtain geographic information on nationally and / or internationally designated sites of relevance to the site.

Records of protected/notable species within site's hectad were obtained from the National Biodiversity Network (NBN) Atlas [13]. Records of non-statutory designated sites are not readily available online. Only records of protected species from within the last 10 years are considered within this report.

Information on Ancient Woodland Inventory (AWI) and Native Woodland Survey of Scotland (NWSS) sites within 2km of the site was obtained from Native Woodland Survey of Scotland Data Explorer [14].

4.5 UKHab Survey

A UKHab survey of the site was undertaken on 22 February 2024 by Leonora Hunt. Weather conditions at the time of the survey were snowy, becoming sunny, with an ambient temperature of 1°C becoming 5°C.

A list of plant species was compiled in accordance with methodology required to establish UK habitat classification types [15] up to level 4. Level 5 was recorded wherever possible, with care to accurately record all habitats of priority importance (if present). Secondary codes were added to polygons where deemed appropriate, taking special care to map mandatory codes for habitat mosaic, complex and origin. Survey was undertaken at the fine scale minimum mapping unit (MMU) of 25m^2 (polygons) and 1m width/5m long (lines). Key ecological features below the MMU in either area or length were mapped as points. The habitat classification highlights the habitat distinctiveness and whether they have the potential to classify as a priority habitat.

Habitats were classified and assessed in terms of both their conservation importance and potential to support notable and/or protected species (based on habitat suitability and/or field signs).

4.6 Protected Species Scoping Survey

The following was searched for and recorded if present during the survey:

- All field signs of protected species or those of conservation interest, including burrows, droppings, footprints and hairs;
- Refuges and particular habitat types to be used by certain classes of fauna;
- Any mammal paths if found were noted and followed where possible;
- Entry points for fauna along fence and/or hedgerow boundaries if present; and
- Incidental sightings of invasive species.

The scoping criteria for bat commuting and foraging habitat suitability was taken from the best practice guidance, summarised in Table 4.1.

Table 4.1. Suitability of Commuting and Foraging Habitats for Bats

Suitability	Roosting Habitats
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats, but isolated. Suitable but isolated habitat that could be used by small numbers of foraging bats.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting. Habitat that is connected to the wider landscape that could be used by bats for foraging.
High	Continuous, high-quality habitat that is well-connected to the wider landscape that is likely to be used regularly by commuting bats. High-quality habitat that is well-connected to the wider landscape that is likely to be used regularly by foraging bats. Site is close and connected to well-known roosts.

Established trees on site were assessed for their suitability to support roosting bats by looking for and assessing any Potential Roost Features (PRFs). The trees were placed into one of three categories as described in the BCT survey guidelines [7] which are:

- NONE – Either no PRFs in the tree or highly unlikely to be any.
- FAR – Further assessment required to establish if PRFs are present in the tree.
- PRF – A tree with at least one PRF present.

Ponds/ditches within 500m of the site boundary were subject to a Habitat Suitability Index (HSI) assessment to assess their suitability for GCN where access was possible, in line with relevant guidelines [16].

The suitability of habitat to support viable water vole populations was assessed using the Water Vole Habitat Suitability Assessment (HSA) method [17].

Incidental sightings of invasive species listed on Annex B of NatureScot's Developing with Nature guidance [18] were also recorded.

The survey area included all accessible areas and habitats within the site boundary.

4.7 Limitations

Due to the rapid turnover of the report, NBN Atlas was used to conduct the data search for the desk study. Species records were obtained for the site's hectad (10km by 10km square). However, nearly all the available records were not available for commercial use. Additionally, information on non-statutory designated sites could not be obtained.

Due to the time of year, some vascular plant species were not identifiable during the survey. This means that the habitat could not be definitively assessed as many species die back over winter. Fresh snowfall further hampered plant identification and identification of field signs at the off-site location. It is not thought that this will affect the habitat classification but the recommended botanical survey would appropriately review and/or confirm the habitat classification within this report.

5 Results

5.1 Designated Sites

All relevant desk study data relating to designated sites is attached in Appendix A.

Consultation of the MAGIC online interactive mapping tool confirms the presence of four internationally designated sites within 10km of the site boundary:

- Glen Affric to Strathconon SPA (2.1km to the south)
- Achanalt Marshes SPA (7.6km to the south)
- Fannich Hills SAC (8.3km to the northwest)
- Ben Wyvis SAC and SPA (8.6km to the east)

There are no nationally or locally designated sites within 3km of the site.

None of these are considered to have good habitat connectivity to the site, or have qualifying features that have the potential to make use of habitats present at the site.

5.2 Ancient Woodland Inventory (AWI) and Native Woodland of Scotland (NWSS)

There are 19 parcels of AWI, 18 Ancient (of semi-natural origin) and one Long-Established (of plantation origin) found within 2km of the site boundary. Two parcels are found within 200m of the site boundary.

There are 41 parcels of NWSS woodland within 2km of the site on the NWSS Data Explorer [14]. There are no parcels that fall within the site boundary, however a parcel of native pinewood is across the burn that forms the southern boundary of the site.

5.3 Habitats

The results of the UKHab survey are presented below and on Figures 65212359-SWE-XX-XX-D-J-0001 (on site) and 65212359-SWE-XX-XX-D-J-0002 (off site).

The following habitat types are present on site:

- Other upland acid grassland (rushes dominant) – g1b6 280
- Bracken - g1c
- Wet heathland with cross-leaved heath; upland (H4010) - h1b6
- Other standing water (ditches) - r1g 50
- Other rivers and streams – r2b
- Artificial unvegetated, unsealed surface – u1c
- Upland birchwoods - w1e
- Other Scots pine woodland - w2b
- Other coniferous woodland (plantation) - w2c 289

The following habitat types are present within the off-site location:

- Inland rock outcrops and scree habitats - s1a
- Wet heathland with cross-leaves heath; upland (H4010) - h1b6
- Other coniferous woodland - w2c

5.3.1 Other upland acid grassland – g1b6

Present to the southwest of the site, this habitat was marshy, and dominated by rushes (*Juncus* sp.) (Photo 1). Other species include mat grass (*Narda stricta*) and foxglove (*Digitalis purpurea*). Further identification, particularly of less robust grasses, was not possible due to the time of year.

Photo 1. Grassland dominated by rushes. Wet heath can be seen in the distance.

5.3.2 Bracken - g1c

Small patches of bracken (Photo 2) were present between the coniferous plantation and wet heath habitats to the east of the site. The ground cover beneath was largely bare, but some bryophytes were present beneath the bracken including *Pleurozium schreberi* and *Pseudoscleropodium purum*.

Photo 2. Bracken dominated patch.

5.3.3 Wet heathland with cross-leaved heath; upland (H4010) - h1b6

This habitat covered most of the area around the coniferous plantation (Photo 3). Species included heather (*Calluna vulgaris*), cross-leaved heath (*Erica tetralix*) and included a significant bryophyte assemblage including *Hylocomium splendens*,

Polytrichum commune, *Pleurozium schreberi*, *Pseudoscleropodium purum* and *Sphagnum* spp.

Photo 3. Wet heath between plantation blocks.

5.3.4 Ditches (r1e)

A network of ditches cross the site, draining towards the southeast (Photos 4 and 5). The ditches appear largely artificial; however some may be enhanced natural burns. In places, the waterflow spreads across adjacent habitats forming waterlogged conditions. No aquatic vegetation was observed.

The ditches are typically clear of the tree line and run through wet heathland, with a vegetative composition similar to that habitat on their banks.

Photo 4. Ditch running inside northern fence line.

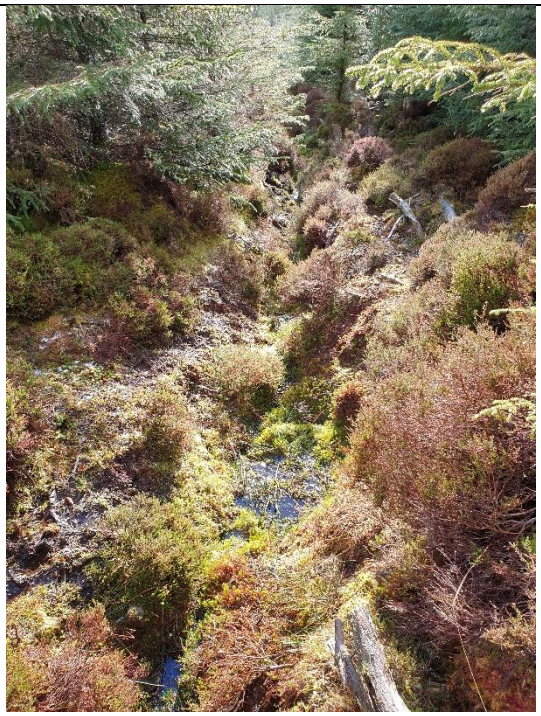

Photo 5. Overgrown ditch flowing south, in the east of the site.

5.3.5 Other rivers and streams – r2b

A burn runs west (Photo 6) to east (Photo 7) along the southern border of the site. At the western end, the burn is wider, with steep banks on either side.

Photo 6. The burn as it flows into the site.

Photo 7. The burn as it leaves the site.

5.3.6 Artificial unvegetated, unsealed surface – u1c

Constructed artificial, unvegetated, unsealed surfaces (previous forestry tracks) run through the eastern most plantation parcel.

5.3.7 Upland birchwoods (w1e)

A small patch of birch (*Betula* sp.) is present along the burn to the southeast of the site (Photo 8).

Photo 8. Birch has colonised the banks of the burn to the east of the site.

5.3.8 Other Scots pine woodland (w2b)

A patch of Scots pine (*Pinus sylvestris*) is present at the southeast of the site (Photo 9). The ground, thick with needles, is free of vascular plants however, is bryophyte rich with a community comprising *Thuidium tamariscinum*, *Pleurozium schreberi*, *Hypnum jutlandicum*. *Plagiothecium undulatum* and *Dicranium majus.*

Photo 9. Scots pine woodland.

5.3.9 Other coniferous woodland (w2c)

The majority of site comprises non-native Sitka spruce (*Picea stitchensis*) plantation (Photo 10). The trees are less than 20 years old but, in places, the thick canopy restricts the light reaching ground level. In such places, the ground flora is comprised solely of bryophytes, including *Thuidium tamariscinum*, *Plagiothecium undulatum*, *Polytrichum commune*, *Rhytidiadelphus loreus*, and *Pleurozium schreberi* (Photo 11). In areas with a thinner canopy, the ground flora species composition is similar to the wet heathland surrounding the plantations.

Photo 10. Coniferous woodland overview.

Photo 11. Coniferous woodland ground flora.

5.3.10 Inland rock outcrops and scree habitats - s1a

The Coireag Beinn A' Bhric lie at the centre of the offsite location facing east. No vegetation was identified on the crags at the time of survey (Photo 12).

Photo 12. Eastern facing crags.

5.3.11 Wet heathland with cross-leaved heath; upland (H4010) - h1b6

The sloping, steep in places, heathland of the offsite area is dominated by heather and cross-leaved heath (Photo 13). A significant community of bryophytes form an underlayer and include *Hylocomium splendens, Aulocomnium palustre* and *Sphagnum* spp. A series of small flushes drain to the east however, they were below the MMU and therefore not mapped separately.

Fresh snowfall hindered further plant identification within the offsite area.

Photo 13. Wet heathland of the offsite area.

5.3.12 Other coniferous woodland - w2c

A small section of non-native coniferous plantation falls within the offsite boundary. This area is vegetatively similar to surrounding heathland, but with new conifer saplings planted across the area. This area was assessed from behind the fence line.

5.4 Species and Species Groups

Species searched for in the data search include species listed on Schedule 8 of the Wildlife and Countryside Act (WCA8), Scottish Biodiversity List (SBL), UK Biodiversity Action Plan (UKBAP) and the Highland Nature Biodiversity Action Plan (HNBAP) [19].

The ecological desk study, species scoping survey and UKHab survey have identified that signs of or habitat suitable to support the following species are present.

5.4.1 Botany

There were no records of notable or protected species from within the hectad.

The grassland, heath and woodland habitats on site have the potential to support a common assemblage of plant species.

5.4.2 Invertebrates

Available records of invertebrates were restricted to Lepidoptera. Species recorded within the hectad include the priority species brindled beauty (*Lycia hirtaria*), goat moth (*Cossus cossus*), oblique carpet (*Orthonama vittate*), streak (*Chesias legatella*) and white ermine (*Spilosoma lubricipeda*).

The grassland / woodland habitats on site have the potential to support a common assemblage of invertebrate species.

5.4.3 Reptiles

There are records of adder (*Vipera berus*) within the hectad.

There is potential foraging and basking habitats on site for common reptiles within the grassland and heathland areas.

5.4.4 Amphibians

There were records of common toad (*Bufo bufo*), common frog (*Rana temporaria*) and palmate newt (*Lissotriton helveticus*) from within the hectad. There are no nearby records of great crested newt (*Triturus cristatus*).

There is one pond on site and six waterbodies within 500m of the site boundary, shown on Figure 65212359-SWE-XX-XX-D-J-0003 and described in Table 5.1.

Table 5.1. Waterbody descriptions and scoping

Waterbody ID	Location and description	Scoped in for HSI?
P1	NH 34905 63884. Lined, artificial pond (Photo 14) set into young broadleaf plantation, adjacent to the existing sub-station.  **Photo 14. Pond located to the southwest of site.**	Yes
P2	NH 35521 64302. On far side of fast flowing Allt Coire Mhuilidh.	No – no connectivity to site
P3	NH 35572 64247. On far side of fast flowing Allt Coire Mhuilidh.	No – no connectivity to site
P4	NH 35541 63650. On far side of fast flowing Allt Coire Mhuilidh.	No – no connectivity to site
P5	NH 35085 63522. On far side of A832.	Inaccessible – on private land
P6	NH 34984 65674 – reservoir behind hydroelectric dam.	No – reservoir limited suitability; too

		high -altitude 290m.
P7	NH 34903 64133. Approximately 5m^2 and up to 30cm deep (Photo 15). Formed in a depression in material on site and lacking aquatic vegetation, although filamentous algae suggests a permanent presence of water. Given the location's high precipitation, it is considered possible that it is suitable for use by breeding amphibians.  **Photo 15. Small area of open water on site.**	Yes

The HSI carried out on the scoped-in ponds within 500m of the site concluded the ponds were of poor suitability for great crested newt, although the grassland, heath and woodland offer suitable terrestrial habitat for amphibians. Results are shown below in Table 5.2.

Table 5.2. Great crested newt HSI assessment results

Feature	P1	P7
OS Grid Reference	NH 34905 63884	NH 34903 64133
Geographic Location	0.01	0.01
Pond Area	0.6	0.05

Feature	P1	P7
Permanence	0.9	0.1
Water quality	0.67	0.33
Shade	1	1
Waterfowl	0.67	1
Fish	1	1
Pond count	0.1	1
Terrestrial habitat	0.67	1
Macrophytes	0.3	0.3
Score	0.37 - Poor	0.29 - Poor

5.4.5 Birds

Listed below in Table 5.3 are notable bird species recorded within the hectad. These include bird species listed on Schedule 1 of the Wildlife and Countryside Act (WCA1), the European Birds Directive, Annex 1 (BD Annex 1), Priority Species (HLBAP & SBL) and those with a conservation status currently listed as red[1] or amber[2] by the 5th review of Birds of Conservation Concern (BoCC) [20].

The grassland, heath and woodland provide potential wintering and breeding habitat for numerous notable species of bird on site.

Table 5.3. Results of the database search for bird species records

Common name	Scientific name	BOCC / WCA / BD Annex 1
Black Grouse	*Lyrurus tetrix*	Red BOCC, SBL, HNBAP
Bullfinch	*Pyrrhula pyrrhula*	Amber BOCC,
Common Gull	*Larus canus*	Amber BOCC
Common Sandpiper	*Actitis hypoleucos*	Amber BOCC
Cuckoo	*Cuculus canorus*	Red BOCC, SBL,
Greenfinch	*Chloris chloris*	Red BOCC
Greenshank	*Tringa nebularia*	Amber BOCC, WCA1, HNBAP
House Martin	*Delichon urbicum*	Red BOCC
House Sparrow	*Passer domesticus*	Red BOCC, SBL
Kestrel	*Falco tinnunculus*	Amber BOCC, SBL
Lesser Redpoll	*Acanthis cabaret*	Red BOCC, SBL
Mallard	*Anas platyrhynchos*	Amber BOCC,

[1] Red is the highest conservation priority with species requiring urgent action and includes globally threatened species and species that have experienced a sever historical decline. A summary of relevant factors can be accessed via the RSPB website: https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/uk-conservation-status-explained/

[2] Amber is the next most critical group after red and includes species which have suffered a moderate decline. A summary of relevant factors can be accessed via the RSPB website: https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/uk-conservation-status-explained/

Common name	Scientific name	BOCC / WCA / BD Annex 1
Meadow Pipit	*Anthus pratensis*	Amber BOCC
Mistle Thrush	*Turdus viscivorus*	Red BOCC
Osprey	*Pandion haliaetus*	Amber BOCC, WCA1, SBL, BD Annex 1
Red Kite	*Milvus milvus*	WCA1, SBL, HNBAP, BD Annex 1
Red-throated Diver	*Gavia stellata*	WCA1, SBL, HNBAP, BD Annex 1
Skylark	*Alauda arvensis*	Red BOCC
Snipe	*Gallinago gallinago*	Amber BOCC, HNBAP
Song Thrush	*Turdus philomelos*	Amber BOCC, SBL,
Sparrowhawk	*Accipiter nisus*	Amber BOCC
Starling	*Sturnus vulgaris*	Red BOCC, SBL,
Tawny Owl	*Strix aluco*	Amber BOCC
Tree Pipit	*Anthus trivialis*	Red BOCC, SBL,
Wheatear	*Oenanthe oenanthe*	Amber BOCC
Willow Warbler	*Phylloscopus trochilus*	Amber BOCC
Wood Warbler	*Phylloscopus sibilatrix*	Red BOCC, SBL
Woodpigeon	*Columba palumbus*	Amber BOCC
Wren	*Troglodytes troglodytes*	Amber BOCC
Yellowhammer	*Emberiza citrinella*	Red BOCC, SBL

5.4.6 Bats

There are records of at least two species of bat within the hectad. The species include brown long-eared bat (*Plecotus auritus*) and pipistrelle (*Pipistrellus* sp.).

The habitats on site, in particular the woodland edges, provide high quality commuting and foraging habitat for bats.

The plantation on site is young (less than 20 years) and no roost features were identified during the survey. It is considered unlikely that roost features are on site due to the species and age of the trees, however a comprehensive roost assessment of all trees on site was not possible due to the density of the vegetation.

5.4.7 Water vole

There are no records of water vole from the hectad, however the burn along the southern boundary was subject to a Habitat Suitability Assessment.

The suitability of the unnamed burn along the southern boundary of the site for water vole was assessed as optimal. Habitat suitability features which scored well included the presence of open water, refuge areas above the water level, lack of disturbance and nest building opportunities. Table 5.4 below summarises the results of the Water Vole Habitat Suitability Assessment and the full habitat suitability results are provided in Appendix B.

No field signs of water vole were identified on site, however recent snowfall led to an increase in waterflow which may have washed evidence away.

Table 5.4. Water vole habitat suitability assessments

Section	Approximate Section Length (m)	Habitat Suitability Score	Habitat Suitability Category
1	100	6	Optimal
2	100	6	Optimal
3	100	6	Optimal
4	100	6	Optimal

5.4.8 Otter

There are no records of otter from within the hectad.

No field signs of otter were identified on site, however recent snowfall led to an increase in waterflow which may have washed evidence away.

5.4.9 Badger

There are records of badger within the hectad.

The grassland, heath and woodland provide suitable habitat for badger setts and foraging. No badger field signs were observed on site, however, the dense vegetation prevented access in places and may conceal a sett.

5.4.10 Pine marten and red squirrel

There are no records of pine marten but there are records of red squirrel within the hectad. Saving Scotland's Red Squirrels sightings map [21] shows red squirrels have been recorded within 500m of the site.

Some of the more mature areas of woodland near to site, and in particular the Scots pine to the south of the site, could be suitable for these species. No signs of either species were recorded during the survey.

5.4.11 Mountain hare

There are no records of mountain hare (*Lepus timidus*) within the hectad, however, habitats, particularly within the offsite area, have the potential to support this species.

5.4.12 Other notable species

Field signs – tracks in soft mud and faeces - of fox (*Vulpes vulpes*) and red deer (*Cervus elaphus*) were present on site.

5.4.13 Invasive non-native species (INNS)

There are records of rhododendron (*Rhododendron ponticum*) from within the hectad.

While no invasive species were identified within the site boundary, several stands of rhododendron (Photo 16) are present across the burn that forms the southern boundary of the site.

Photo 16. Rhododendron shrub and sapling.

6 Implications, Requirements and Recommendations

The evaluation in this section is based on the site survey on 22 February 2024. For purposes of the assessment, it is assumed there has been no change in the condition of the site since the site survey (unless otherwise stated).

Listed below are recommendations which must be followed to comply with legal requirements; or which should be followed to minimise adverse ecological impacts to protected or notable species. The recommendations for additional surveys are also outlined.

At the time of writing, proposals for the off-site area are unknown. If habitats within the off-site area will be impacted, the scope and scale of the survey recommendations may change.

6.1 Designated sites

Four designated sites are within 10 km of the site boundary. The sites are protected under the Conservation (Natural Habitats, &c) Regulations 1994 (as amended).

None of these are considered to have good habitat connectivity to the site or have qualifying features that have the potential to make use of habitats present at the site. Therefore, it is not considered likely that there will be an impact on any designated sites as a result of the proposed development.

6.1.1 Ancient Woodland Inventory (AWI) and Native Woodland of Scotland (NWSS)

Forty-one parcels of NWSS and 19 parcels of AWI are within 2km of the site boundary.

The Scottish Government's Policy on Control of Woodland Removal [22] provides guidance on whether removal of woodland is likely to be permitted. There is a strong presumption against removal of woodland in Scotland and woodland removal should be allowed only where it would achieve significant and clearly defined additional public benefits.

The current proposals will require clearance of the woodland on site. Compensatory planting of the off-site area would not be appropriate as the offsite area largely comprises the more valuable priority habitat wet heathland with cross-leaved heath – upland, synonymous with the Annex 1: H4010 Northern Atlantic wet heaths with *Erica tetralix* [upland] of the Habitats Directive.

Focusing on the enhancement / rewilding of the off-site area could instead be considered. Removing grazing pressure by preventing deer from accessing the site and allowing native tree species to recolonise the area could satisfy the requirements for woodland removal without compensatory planting, particularly if clearly defined public benefits from the development could be demonstrated. In addition, it could be argued that the woodland to be removed is of a relatively low value as it is immature, of a non-native species, and would not lead to fragmentation of woodland habitat across the wider landscape.

Consultation with the local planning authority is **recommended** to establish whether the proposed extent of removal would be permitted.

6.1.2 Groundwater Dependent Terrestrial Ecosystems (GWDTE)

The protection of GWDTEs in Scotland is regulated within the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

Wetland habitats (such as marshy grassland and heathland flushes) that have potential to be GWDTE were identified on site. Further botanical and hydrological survey will be **required** to confirm whether the wetland habitats are GWDTE. It is **recommended** that a National Vegetation Classification survey is undertaken to identify potential GWDTEs based on the vegetation present.

6.2 Protected and Notable Species

6.2.1 Reptiles

The three common Scottish reptile species common lizard (*Zootoca vivipara*), slow-worm (*Anguis fragilis*) and adder are protected under the Wildlife and Countryside Act 1981 (as amended).

The grassland and heathland habitats have potential to support common reptiles and will be impacted under current plans. It is **recommended** that reptile surveys are undertaken to ensure this legally protected taxa is not present prior to removal.

Works should be conducted under a precautionary method statement to avoid impacts to reptiles. The precautionary method statement would include (but not be limited to) the following:

- If vegetation clearance is carried out outside of the active season for reptiles (active season: April-October), this should be to ground level only with no ground disturbance.
- Ground disturbance works or disturbance of stone walls or debris piles should be carried out under supervision during the active season only.
- During the active season, vegetation clearance should be carried out in suitable conditions (>10°C and dry).
- Vegetation clearance and ground disturbance works during the active season should be supervised by a suitably qualified ecologist, so that any reptiles present within works areas can be identified and moved away (avoiding killing and injury, which is an offence). Vegetation must be cleared using precautionary methods (i.e. phased strim) prior to ground disturbance.

Please note that using these precautionary methods increases the amount of time it takes to carry out earthworks and vegetation clearance.

Alternatively, carrying out a reptile survey at the site could serve to rule out the presence of reptiles and therefore avoid the need to employ precautionary working methods. If a reptile survey is carried out, this should consist of a visit to place artificial refuge sites and a further seven survey visits in suitable weather conditions (10-20°C and dry) during April-October. If no reptiles were identified, no further mitigation for this group would be required; however, if surveys confirmed that reptiles are present on site, works would need to be carried out following precautionary methods detailed within a precautionary method statement for works.

6.2.2 Amphibians

GCN are a European protected species and are afforded protection under the Conservation (Natural Habitats, &c) Regulations 1994 as amended in Scotland and is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

While the waterbodies have been assessed as providing poor habitat suitability, mostly due to being in an area classified as unsuitable in the HSI, there is a native population of GCN present in and around 30 miles of Inverness [23]. eDNA surveys are **recommended** as an inexpensive means of scoping out this protected species. One visit to each accessible waterbody located on/within 500m of the site between mid-April to end of June will be required.

Tree felling and vegetation clearance presents an **opportunity** to leave some trees and dead/cut wood *in situ* to act as hibernacula (winter refuges) for amphibians.

6.2.3 Birds

The nests and eggs of all wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). Birds which are listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are afforded additional protection.

It is currently understood that the scheme will utilise buried cables and, as such, the risk from potential avian collision is negligible. However, should the scheme result in any changes to existing powerlines, e.g. heights or locations, then vantage point surveys may be required to assess the risk of potential collisions with overhead cables.

The site and surrounding area are suitable for a variety of nesting birds in the woodland, heathland and grassland.

A breeding bird survey is required to establish the importance of this site for rare or notable species. This should include a minimum of six visits between March and July inclusive and should cover on and offsite, as well as a boundary buffer around the woodland.

The woodland, heathland and grassland offer potential important wintering bird foraging opportunities. Wintering bird surveys are required to establish the importance of this site for rare or notable species. This should include a minimum of four visits between November and February inclusive.

It is a **mandatory requirement** that nesting birds (or their nests or eggs), including ground and bank nesting birds and waterfowl, would not be killed or injured or their active nests destroyed as a result of activities on site.

It is **recommended** that clearance of vegetation that is suitable for nesting birds is undertaken outside the core nesting bird season (March to August inclusive) and if the works programme cannot be amended to facilitate this, then a pre-works check for nesting birds be undertaken by a suitably qualified ecologist prior to works. If active nests were found, there would be no other option but to delay works in this immediate area until chicks have fledged which could be a period of up to ten weeks.

6.2.4 Bats

All bat species found in Scotland are classed as European protected species. They receive full protection under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

As the site is considered to support high suitability habitat for bats, it is **recommended** one transect and static bat detector surveys should be carried out per month between April and October.

Lighting at night should be hooded to avoid overspill and lighting should be directed away from semi-natural habitats including woodlands, hedgerows and rivers. Lighting should be designed with reference to the Bat Conservation Trust and Institute of Lighting Professionals guidance note 08/23 [24] and in consultation with a qualified ecologist.

6.2.5 Water vole

Water vole is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

The site walkover undertaken in February 2024 is considered out of season and further water vole surveys 100m upstream and downstream of the watercourse are therefore **recommended**. This will require two surveys, at least two months apart, one in the first half of the season (mid-April to June inclusive) and one in the second half of the season (July to September inclusive).

6.2.6 Otter

Otter is a European protected species, fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

The burn and wet ditches provide suitable habitat for otter. No field signs confirming the presence of otter were identified during the survey, however recent snowfall may have resulted in evidence being washed away. Therefore, it is **recommended** that otter surveys up to 200m upstream and downstream of the watercourse are undertaken. Otter surveys require one survey visit, and as they can be undertaken at any time of year can be undertaken in conjunction with the recommended water vole surveys above.

During works, commuting routes for otter must be retained. Excavations should be covered overnight, otherwise ramps must be installed to allow egress of any animals that enter the excavations. The lighting requirements detailed above for bats are further recommended for otter to reduce disturbance and changes to behaviour.

6.2.7 Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992 as amended by the Wildlife and Natural Environment (Scotland) Act 2011.

A pre-commencement site walkover of the proposed development footprint plus a buffer of 30m is **required** to be undertaken by an ecologist no more than three months prior to works. Should the ecologist find evidence of badger sett creation, further advice will be given.

6.2.8 Pine marten and red squirrel

Pine marten, red squirrel and their resting places are protected under the Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004.

Suitable habitat for both species is in the coniferous woodland across, and adjacent to, the site. Further survey to establish the presence of these two species is **recommended**. This would involve a search for pine marten field signs (scats and footprints) with a systematic, transect-based approach and the use of camera traps to identify if either species is present.

It is a **recommended** that a pre-construction check for dreys should be carried out prior to felling of any trees. This should be carried out as close as possible to the time of the works as possible, no more than three months ahead of works. If felling is carried out during the breeding season (February-September) an additional check should be carried out no more than three weeks ahead of the felling works.

6.2.9 Mountain hare

Mountain hare and their places of shelter are protected under the Wildlife and Countryside Act 1981 (as amended).

The heathland, particularly in the off-site area is suitable for mountain hare. It is **recommended** that a mountain hare night-time spot-lamping transect survey is undertaken between September and November inclusive to establish how this species may use the site.

6.2.10 Invasive non-native species

The law on INNS is covered by the Wildlife and Countryside Act 1981 (as amended by the Wildlife and Natural Environment (Scotland) Act 2011), making it an offence to allow non-native species to grow in the wild.

During the survey several stands of rhododendron were recorded just south of the site's southern boundary. No INNS were observed on site during the survey.

It is **recommended** that an INNS survey during the botanical growing season is undertaken to establish the presence or absence of INNS onsite.

6.3 Opportunities for Enhancement

In order to secure positive effects for biodiversity at the site in line with NPF4 [2] it is recommended that the following ecological enhancements appropriate for the proposed development should be considered for inclusion:

- Enhancement / rewilding of the offsite area;
- Use of native plant species within soft landscaping;
- Integrated bird and bat boxes within the buildings;
- Bird and bat boxes erected onto retained trees;
- Inclusion of log piles to provide refuge for hedgehogs, reptiles, amphibians and invertebrates;
- Inclusion of a pond; and
- Bat sensitive lighting plan.

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