GB Wind Farm Ltd.

Giant's Burn Wind Farm EIA

Technical Appendix 6.2: Habitats and Vegetation Survey Report

Final report
Prepared by LUC
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GB Wind Farm Ltd.

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Contents

Chapter 1
Introduction

1.1 This appendix details the full methods and results of the habitat and vegetation surveys undertaken to inform the Ecological Impact Assessment (EcIA) of the proposed Giant's Burn Wind Farm (the 'Proposed Development').

1.2 This appendix has been written to support Chapter 6 of the Environmental Impact Assessment Report (EIA Report), and should be read in conjunction with this chapter and Chapter 8 of the EIA Report.

Supporting Documents

1.3 This appendix supports the EcIA in addition to the following appendices:

- Appendix 6.1: Desk Study and Legal/Policy Context;
- Appendix 6.3: Protected Species Survey Report;
- Appendix 6.4: Bat Survey Report;
- Appendix 6.5: Biodiversity Enhancement Strategy (BES); and
- Appendix 8.1: Outline Peat Management Plan.

1.4 This appendix is supported by the following figures which can be found in Volume 3a of the EIA Report:

- Figure 3.1: Proposed Development;
- Figure 6.1: Ecology Survey Area;
- Figures 6.3a and 6.3b: Phase 1 Habitat Survey Results;
- Figures 6.4a-f: National Vegetation Classification (NVC) Survey Results;
- Figure 6.5: Areas of Guidance-Stated Potential Groundwater Dependency; and
- Figure 8.1.1: Peat Depth Map.

1.5 Representative Site photography is provided in Annex A, while Target Notes are provided in Annex B of this appendix. Annex C provides a summary of peatland function and condition, at key locations in relation to the Proposed Development.

Terminology and Survey Areas

1.6 The following terminology will be used throughout this Appendix:

- Site
  - All land within the Site Boundary, as shown in Figure 3.1.
- Proposed Development
  - The physical process involved in the development of land at Giant's Burn Wind Farm, including the construction, operation and decommissioning of a seven turbine wind farm, Battery Energy Storage System (BESS) and ancillary infrastructure (described in detail in Chapter 3).
- Ecology Survey Area (ESA)
  - The area within the Site Boundary in which all ecology surveys were undertaken, in line with good practice guidelines for all ecological features surveyed (as shown in Figure 6.1).

Chapter 2
Methods

Desk Study

2.1 A desk study was undertaken to inform the habitat and vegetation surveys. An account of the method adopted, and findings, is provided in Appendix 6.1, which also sets out the legislative provisions afforded to protected habitats.

Field Study

Overview

2.2 Habitat and vegetation surveys of the ESA were undertaken between June and October 2024, with additional surveys undertaken in April 2025 along proposed access tracks.

2.3 There were two components to the field surveys; the Phase 1 Habitat Survey and the more detailed National Vegetation Classification (NVC) which also included identification of potential Ground Water Dependant Terrestrial Ecosystems (GWDTEs)[1,2]. The methods are outlined in detail below and follow best practice guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM)[3,4] and the British Standards Institute[5].

2.4 All survey data was collected on GIS-enabled field tablets to increase accuracy and facilitate robust interpretation. Where field evidence was recorded, photographs (referred to as 'Images' within this appendix) were taken for post-survey analysis. Images are presented in Annex A of this appendix and Target Notes are provided in Annex B.

Baseline Data Collection

Phase 1 Habitat Survey

2.5 A Phase 1 Habitat Survey was undertaken, following standard methods[6], in 2024 and 2025 by experienced ecologists. The Phase 1 Habitat Survey method provides a means of rapidly classifying broad habitat types in any given terrestrial survey area. The output of the survey comprises habitat accounts, field maps and associated photography and target notes (where required). The extent of the ESA is presented on Figure 6.1.

2.6 During the survey, field surveyors walked all accessible parts of the ESA to map broad habitat types and their boundaries. Sufficient species identification was undertaken to accurately classify habitat types, using the DAFOR[7] scale where necessary. Field notes were taken to identify key areas of interest.

National Vegetation Classification (NVC)

2.7 Detailed vegetation surveys were undertaken in 2024 and 2025. All habitats identified in the field as being of conservation interest[8] during the Phase 1 Habitat Survey were subject to NVC survey. NVC survey was completed following best practice guidance[9] to map habitats based on the characteristics of the vegetation. Structure, condition and species composition were recorded including detailed notes on the species present and abundance within stands of vegetation.

2.8 The Domin scale of cover/abundance (Table 2.1) was used following best practice guidelines[9]. Data collected in the field was assessed and NVC communities (and, where possible, sub-communities) were assigned to each habitat.

Table 2.1 Domin Scale of Cover and Abundance

Cover	Domin
91-100%	10
76-90%	9
51-75%	8
34-50%	7
26-33%	6
11-25%	5
4-10%	4
<4% (many individuals)	3
<4% (several individuals)	2
<4% (few individuals)	1

Priority Peatland Habitats

2.9 In 2023, NatureScot produced new guidance on priority peatland habitats[10]. The approach set out in this guidance aligns with National Planning Framework 4 (NPF4) policies[11] which are relevant to development proposals on peatland, carbon-rich soils and priority peatland. The guidance aims to ensure that developments are designed and constructed following the mitigation hierarchy, and that biodiversity enhancement is delivered through peatland restoration.

2.10 NVC communities which are considered to be priority peatland are detailed in Table 2.2. Where these communities were identified, they were subject to detailed botanical survey.

Table 2.2 Priority Peatland Communities

NVC Community	Comment
M1 *Sphagnum denticulatum* bog pool community	Bog pools which occupy waterlogged depressions, shallow pools and erosion channels on bogs.
M2 *Sphagnum fallax/S. cuspidatum* bog pool community	
M3 *Eriophorum angustifolium* bog pool community	

[1] SEPA (2017). *Land Use Planning System SEPA Guidance Note 31. Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems*.
[2] SEPA (2024). *Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems*. Available at: https://www.sepa.org.uk/media/i2cnr03k/guidance-on-assessing-the-impacts-of-developments-on-groundwater-dependent-terrestrial-ecosystems.docx [Accessed May 2025].
[3] CIEEM (2018). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal and Marine*. Winchester: Chartered Institute for Ecology and Environmental Management.
[4] CIEEM (2017). *Guidelines for Preliminary Ecological Appraisal. 2nd Edition*. Winchester: Chartered Institute for Ecology and Environmental Management.
[5] BSI (2013). *BS 42020:2013: Biodiversity – Code of Practice for Planning and Development*. Bristol: British Standards Institution
[6] JNCC (2010). *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. JNCC, Peterborough.
[7] DAFOR Scale: D=Dominant, A=Abundant, F=Frequent, O=Occasional, R=Rare.
[8] Defined as Annex 1 habitats, Scottish Biodiversity List habitats, habitats included in the Argyll and Bute Local Biodiversity Action Plan, and habitats considered to indicate potential Groundwater Dependent Terrestrial Ecosystems (GWDTEs).
[9] Rodwell, J.S. (2006). *NVC Users' Handbook*. JNCC, Peterborough
[10] NatureScot (2023). *Advising on Peatland, Carbon-Rich Soils and Priority Peatland Habitats in Development Management*. Available at: https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management [Accessed May 2025].
[11] Scottish Government (2023). *National Planning Framework 4*. Available at: https://www.gov.scot/publications/national-planning-framework-4/ [Accessed May 2025].

NVC Community	Comment
M17 *Trichophorum germanicum-Eriophorum vaginatum* blanket mire	These are communities of wetter peat and have species such as purple moor-grass *Molinia caerulea*, deergrass *Trichophorum germanicum*, bog myrtle *Myrica gale* and cross-leaved heath *Erica tetralix*. The most characteristic Sphagna are *S. papillosum* and *S. capillifolium*, and, in M18, *S. magellanicum*. Species such as round-leaved sundew *Drosera rotundifolia*, heath spotted-orchid *Dactylorhiza maculata*, bog asphodel *Narthecium ossifragum* and tormentil *Potentilla erecta* are common in the wetter M17 and M18 bogs.
M18 *Erica tetralix-Sphagnum papillosum* raised and blanket mire	
M19 *Calluna vulgaris-Eriophorum vaginatum* blanket mire	Occurs on drier substrates and has more bilberry *Vaccinium myrtillus*, cowberry *V. vitis-idaea*, crowberry *Empetrum nigrum* and *Sphagnum capillifolium*. M19 has a darker, tussocky sward and is the more common type of bog at moderate to high altitudes. Species commonly occurring in this community include cloudberry *Rubus chamaemorus* and common cow-wheat *Melampyrum pratense*.
M20 *Eriophorum vaginatum* blanket and raised mire	A degraded form of M19 where the heather and most of the Sphagna have been eliminated by heavy grazing, repeated burning and/or atmospheric pollution.
M15 *Trichophorum germanicum-Erica tetralix* wet heath	Are classed as blanket bog when they are on deep peat, as they are almost always a replacement for the original bog vegetation following unfavourable management such as burning on too short a rotation followed by heavy grazing. Impacts on these communities are unlikely to raise issues of national interest but should still follow the mitigation hierarchy. They could also be important candidates, as well other peatland communities, for measures to offset impacts from development and areas where enhancement measures could be located.
M16 *Erica tetralix-Sphagnum compactum* wet heath	
M25 *Molinia caerulea-Potentilla erecta* mire	
M2 *Sphagnum cuspidatum/fallax* bog pool community	These are blanket bogs which occur at altitudes above 600 m, they are particularly sensitive to damage and are incredibly difficult to restore.
M7 *Carex curta-Sphagnum russowii* mire	

Ground Water Dependent Terrestrial Ecosystems

2.11 GWDTEs are defined by SEPA[1,2] and are considered important indicators of sensitive groundwater movement. NVC communities listed in the SEPA guidance are those which, if present, are considered to indicate that a wetland is likely to be either highly or moderately groundwater dependent depending on the hydrogeological setting.

2.12 Where these communities were identified, and they were not obviously surface or rainwater fed (e.g. marshy grassland and wet heath on watershed and ombrogenous bog systems), they were subject to detailed botanical survey. Table 2.3 sets out a decision-making tool that was used to establish the level of groundwater dependency of each community.

2.13 Potential GWDTEs are shown in Figure 6.5. Assessment of potential effects on GWDTEs are discussed in Chapter 8 of the EIA Report.

Table 2.3 GWDTE Decision Tool[12]

Criteria	Yes	No
A. Is the GWDTE vegetation evidently influenced by groundwater? (i.e. base-enriched (M10, M11, M37 and/or M38) and/or discharging from an evident point source such as a spring head (M31, M32, M33).		
If the answer to A is 'Yes' then field assessment ends at this stage and the GWDTE is treated as 'high', as per the guidance. If 'No', continue to B.		
B. Is the GWDTE polygon associated with an evident surface water feature? i.e., is the vegetation located within one of the following topographic locations:		
Watershed/ridge		
Watercourse		
Floodplain		
Ponding location, pond, loch etc (localised depression)		
Surface water conveyance (drain, gully, rill, etc.)		
If the answer to B is 'Yes' then the GWDTE polygon is no more than 'moderate' and very likely to be 'low'. Additional floristic and environmental data should be collected, including photographs to allow for further, desk-based determination of the groundwater dependency. If 'No', continue to C.		
C. Is the GWDTE polygon associated with an ombrogenous system? i.e. with blanket bog or wet heath habitat. This is especially relevant to M6 and M25:		
Presence/persistence of distinctive bog habitat, species and/or associations.		
Deep peat not confined to depressions/valleys (>0.5 m visible in drains or hagged areas).		
If the answer to C is 'Yes' then the GWDTE polygon is no more than 'moderate' and very likely to be 'low'. Additional floristic and environmental data should be collected, including photographs to allow for further, desk-based determination of the groundwater dependency.		

Peatland Condition Assessment

2.14 The NatureScot Peatland Condition Assessment[13] was employed in the field to determine the condition of the peatland habitat. This classifies the peatland into four classes:

- Near Natural;
- Modified;
- Drained; and
- Actively Eroding.

2.15 Field-based assessment of a series of key indicators facilitates assignment of one of these classes to an area of peatland. These indicators include features such as the *Sphagnum* cover and vegetation condition; evidence of fire (frequency and intensity); bare peat; and scrub/tree invasion. These indicators were noted in the field, to determine the condition class.

[12] Botanaeco (2018). *GWDTE Decision Tool*. Available at: https://botanaeco.co.uk/gwdte [Accessed May 2025].

[13] NatureScot (2023). *Peatland Condition Assessment*. Available at: https://www.nature.scot/sites/default/files/2023-02/Guidance-Peatland-Action-Peatland-Condition-Assessment-Guide-A1916874.pdf [Accessed May 2025].

Nomenclature

2.16 Standardised vernacular names, followed by the scientific name upon first use (*italicised* within the text), are used for vascular plants (graminoids, herbs and shrubs). Scientific names only are used for moss, liverwort and lichen species because although vernacular names are now in existence, they are not in general usage.

Competency

2.17 All habitat and vegetation surveys were undertaken within appropriate seasonal windows in 2024 and 2025, by academically and professionally qualified ecologists who are members of CIEEM. The data has been assessed by LUC ecologists with extensive experience in interpreting habitat datasets.

Constraints and Limitations

2.18 All ecological surveys represent a snapshot in time. Habitats and species assemblages are dynamic and change over time in response to a range of variables. Data presented in this appendix should not be considered a long-term interpretation of ecological data and should not be relied upon as such.

2.19 Surveys were completed during the optimal survey season for habitat and vegetation studies (April to September), and as such, the data gathered is considered robust for the purposes of informing the EIA Report.

2.20 Some areas of the ESA were not fully accessible (e.g. due to boggy terrain or steep terrain). Where this was the case, areas were viewed from vantage points and binoculars were used to identify habitat types. This was sufficient for identification of the habitat and therefore, is not seen as a constraint to the robustness of the surveys. Areas which were not accessible are listed under 'Risk Areas' within Table B.1, Annex B.

2.21 Some habitat areas were small in extent and not easily mapped (< 0.1 ha). Where these were considered to be potential habitats of conservation interest[8], for example springs and flushes, point features (see Target Notes, Annex B) were recorded to capture the notable habitat or feature.

2.22 Given the small-scale variations in vegetation communities, detailed mapping of all sub-communities would be particularly challenging and time-consuming. As such, NVC data was often mapped to community level only unless there was a specific reason to record the sub-community. This is not considered to be a significant constraint to the assessment because habitats of conservation interest[8] are commonly identified on the basis of their NVC communities and are largely unchanged by additional information on sub-communities.

2.23 While care has been taken to collect and review habitat data, it is not possible to account for any changes that may occur in the intervening period between data collection and submission of the EIA Report.

Chapter 3
Baseline Results

Desk Study

3.1 A desk study was undertaken to inform the habitat and vegetation surveys. An account of the methods adopted, and findings, is provided in Appendix 6.1 which also sets out the legislative provisions afforded to habitats, notably habitats of conservation interest[8].

3.2 Eight Ancient Woodland Inventory (AWI)[14] sites were identified within the Site during the desk study. Six were classified as 'Ancient (of Semi-Natural Origin)' and two were classified as 'Other (on Roy Maps)'.

3.3 No other statutory or non-statutory designated sites were identified within the Site.

Field Study

Site Overview

3.4 The Site is located approximately 1.3 km west of Dunoon within the Argyll and Bute administrative area, and has a total area of approximately 700.6 ha. The area is topographically complex and is characterised by several raised peaks including Tom Odhar (256 m AOD) to the east, and Kilbride Hill (3,960 m AOD) to the south. The area reaches a topographic height at Cruanch nan Capuall to the north-west, at an elevation of 611 m AOD.

3.5 The Site largely comprises open moorland with a range of upland habitats, including blanket bog. The undulating topography and variable climatic conditions give rise to a complex habitat assemblage, containing a variety of vegetation communities and habitats. The west of the Site is largely dominated by acid grassland, while the centre of the Site, which is the location of the proposed wind farm infrastructure, is largely comprised of mosaics of blanket bog, wet modified bog and dry heath, with occasional acid flushes and marshy grassland. The lower slopes of the Site, to the north-west, north and east, are dominated by conifer plantation. Small areas of broadleaved woodland, acid grassland and bracken were also recorded on freer-draining sloping ground, particularly along the north-west boundary of the ESA. Despite the presence of habitats of conservation interest[8], the Site has been impacted by the history of land management.

3.6 The Site is drained by a number of small tributaries such as Giant's Burn and Spout Burn, which eventually flow into the Glenkin Burn to the north-west of the Site. On the east side of the Site, tributaries such as the Badd Burn drain into Balgaidh Burn, which flows south-east towards Dunoon.

3.7 The location of the Site is shown in Figure 6.1.

Survey Area

3.8 A total of 13 Phase 1 habitats were recorded within the ESA and within these a total of 19 NVC communities are described in detail below. Phase 1 habitats and NVC communities are described separately due to the complexity of the Site. A summary of the Phase 1 habitats and their associated NVC communities is provided in Table 3.1.

3.9 The Phase 1 habitat and NVC community descriptions are supported by, and should be read in conjunction with, Figures 6.3a-b and Figures 6.4a-f.

Phase 1 Habitats

A1.1.1 Broadleaved Woodland (Semi-Natural)

3.10 Along the north-western boundaries of the ESA there are small pockets of semi-natural broadleaved woodland. These pockets ranged in size and species composition. However, rowan *Sorbus aucuparia* and birch *Betula* spp. were the most dominant tree species with an understory dominated by a mix of purple moor-grass, sweet vernal-grass *Anthoxanthum odoratum*, common bent *Agrostis capillaris*, heath bedstraw *Galium saxatile*, wood sorrel *Oxalis acetosella*, Yorkshire fog *Holcus lanatus*, and willow *Salix* spp. with pockets of bracken, dog violet *Viola riviniana*, *Hylocomium splendens, Pleurozium schreberi, Rhytidiadelphus loreus, Polytrichum commune, Sphagnum fallax* and *Sphagnum palustre*.

A1.2.2 Coniferous Woodland (Plantation)

3.11 The lower slopes of the ESA and areas surrounding the access tracks were dominated by conifer plantation. The dominant species was Sitka spruce *Picea sitchensis*, and trees were generally semi-mature to mature in age. Beneath the dense canopy, in some areas, there was rare wavy hair-grass *Deschampsia flexuosa*, *Polytrichum commune*, tormentil, heath rush *Juncus squarrosus* and heather *Calluna vulgaris*.

A2.1 Scrub (Dense/Continuous)

3.12 This habitat was recorded once, along the existing access tracks at the north-east corner of the ESA. Vegetation comprised of wild raspberry *Rubus idaeus*, soft rush *Juncus effusus*, willow spp. and gorse *Ulex europaeus*.

A4.2 Coniferous Woodland (Recently-Felled)

3.13 Some areas of coniferous woodland had been recently felled. These areas consisted primarily of bare ground and brash.

B1.2 Acid Grassland (Semi-Improved)

3.14 A few areas of acid grassland were recorded within the ESA, mainly in the west. Acid grasslands regularly occupied the tops of rocky ridges and hillocks, and were often in a mosaic with dry heath (see below). These grasslands were grazed by sheep. Species which dominated these habitats included mat grass *Nardus stricta*, heath rush, heath bedstraw, sheep's fescue *Festuca ovina* and wavy hair-grass.

B5 Marshy Grassland

3.15 Marshy grassland was generally limited to areas alongside watercourses. These habitats were dominated by sharp-flowered rush *Juncus acutiflorus* or soft rush with abundant purple moor-grass, star sedge *Carex echinata* and tormentil. Yorkshire fog, heath bedstraw, wavy hair-grass, marsh thistle *Cirsium palustre*, *Sphagnum fallax, Sphagnum capillifolium* and *Sphagnum papillosum* occurred occasionally.

C1.1 Bracken (Continuous)

3.16 Pockets of bracken were noted in the north and west of the ESA. These areas were dominated by bracken with occasional purple moor-grass, heather and wavy hair-grass.

D1 Dry Dwarf Shrub Heath

3.17 Dry dwarf shrub heath occurred within the north of the ESA, often occurring within a mosaic with marshy grassland, blanket bog or wet modified bog. These habitats were dominated by heather, sweet vernal-grass, purple moor-grass and bilberry, with tormentil, Yorkshire fog and fescues *Festuca* spp. occurring frequently. *Sphagnum capillifolium, Sphagnum papillosum, Polytrichum commune*, marsh thistle and wavy hair grass occurred occasionally.

D5 Dry Heath/Acid Grassland Mosaic

3.18 Pockets of dry heath/acid grassland mosaic were recorded within the west of the ESA, particularly on steeper sections. This habitat was dominated by heather, bilberry, mat grass, tormentil and heath bedstraw, with occasional bell heather *Erica cinerea*, wavy hair-grass, heath rush, purple moor-grass and rare bracken.

[14] NatureScot (2000). *Ancient Woodland Inventory*. Available at: https://opendata.nature.scot/datasets/ancient-woodland-inventory/explore. Accessed on: 12 May 2025.

E1.6.1 Blanket Bog

3.19 The ESA was dominated by blanket bog, occurring on level and/or gently sloping ground such as plateaus, wide depressions and gentle slopes where deep peat had formed. It was often recorded as a mosaic with dry heath and/or acid grassland; this is due to the complex topography with many knolls and hillocks forming 'islands' in the blanket bog. This habitat had frequent *Sphagnum* including *Sphagnum capillifolium* and *Sphagnum papillosum*. A variety of ericoids were also recorded; heather was the most common and was often locally dominant, but cross-leaved heath *Erica tetralix*, bilberry and crowberry were all recorded as frequent within this habitat. Additionally, much of the blanket bog had an abundance of hare's-tail cottongrass *Eriophorum vaginatum*, with frequent deergrass and common cottongrass *Eriophorum angustifolium*.

E1.7 Wet Modified Bog

3.20 Wet modified bog occurred in some areas within the ESA. Areas of exposed peat and hagging were often recorded within this habitat. This habitat was often recorded close to watercourses within the ESA. This habitat was dominated by purple moor-grass with abundant heather and crossed-leaved heath with frequent deergrass and soft rush.

E2.1 Acid Flush

3.21 Acid flush was recorded within the ESA and was often located close to watercourses, or on steep ground sloping towards the watercourses. These areas were dominated by sharp-flowered rush, soft rush, purple moor-grass, tormentil, star sedge, bogbean *Menyanthes trifoliata*, S*phagnum fallax*, *Polytrichum commune*, *Hylocomium splendens*, *Pleurozium schreberi*, red fescue *Festuca rubra*, wavy hair grass and sweet-vernal grass.

E2.2 Basic Flush

3.22 Basic flushes were only recorded twice within the ESA and the habitats were small in their extent (see Target Notes, Annex B). They typically comprised narrow, stony flushes on steeper slopes. Species included a range of sedge species, including common yellow sedge *Carex demissa*, green sedge *Carex viridula* ssp., *oedocarpa*, dioecious sedge *Carex dioica* and carnation sedge *Carex panicea*. Butterwort *Pinguicula vulgaris* and yellow saxifrage *Saxifraga aizodes* were also recorded in this habitat, albeit rarely.

G2 Running Water

3.23 There were several watercourses within the ESA and these ranged in size and width (see Appendix 6.3 for more details). There were approximately 19.68 km of watercourses within the ESA.

NVC Communities

H10 *Calluna vulgaris-Erica cinerea* heath

3.24 The H10 heath community was recorded on steep, well-drained slopes with thin acidic soils. This was often on light to moderately grazed slopes. These are dry heaths with a mixture of ling heather and bell heather with tormentil and heath bedstraw. There was a thick carpet of *Pleurozium schreberi* and *Rhytidiadelphus loreus* recorded.

H12 *Calluna vulgaris-Vaccinium myrtillus* heath

3.25 H12 was recorded on the hummocks across the ESA. These areas were dominated by ling heather and bilberry with occasional wavy hair-grass. Bell heather was occasionally present, with crowberry occurring more frequently. Bracken was rare.

M1 *Sphagnum denticulatum* bog pool

3.26 The M1 bog pool community occurred as shallow pools found in wet depressions among M17 blanket mire on deep, waterlogged peat. They were filled with half-submerged, half-floating S*phagnum denticulatum* with occasional bog asphodel, sundew and bog bean.

M2 *Sphagnum cuspidatum*/*fallax* bog pool

3.27 The M2 bog pool community was identified in wet depressions among bog on deep waterlogged peat. It was identified by the presence of *Sphagnum cuspidatum* and/or *Sphagnum fallax* as the dominant species, which grew in shallow water with occasional cross-leaved heath. This type of bog pool was noted within the M17 bog community (described below) and was not widely recorded across the ESA; however, these bog pools were often small in size (see Target Notes, Annex B).

M3 *Eriophorum angustifolium* bog pool

3.28 M3 bog pools were recorded within the ESA in wet depressions. These bog pools were recorded in a mosaic of M17 and M19, occurring as expanses of exposed peat with relatively limited vegetation. Species recorded in M3 bog pools were common cottongrass, S*phagnum fallax* and S*phagnum cuspidatum*.

M6 *Carex echinata-Sphagnum fallax*/*denticulatum* mire

3.29 The M6 community was recorded in a small number of locations across the ESA, often in hillside flushes or along edges of watercourses. These areas were dominated by sharp-flowered or soft rush with a dense layer of mosses below such as S*phagnum fallax*, S*phagnum papillosum*, *Sphagnum capillifolium* and *Polytrichum commune*.

3.30 Two sub-community was recorded:

- M6c *Juncus effusus* sub-community, characterised as being dominated by soft rush, with the associated *Sphagnum* species described above.
- M6d *Juncus acutiflorus* sub-community, characterised as being dominated by sharp-flowered rush, with the associated *Sphagnum* species described above.

M10 *Carex dioica-Pinguicula vulgaris* mire

3.31 This basic flush community was identified on narrow and stony, basic flushes on slopes to the west of Site. The species present were common butterwort *Pinguicula vulgaris* with a range of sedge species such as little green sedge *Carex viridula ssp. oedocarpa*, carnation sedge *C. panicea* and dioecious sedge *C. dioica*.

M17 *Trichophorum germanicum-Eriophorum vaginatum* blanket mire

3.32 The M17 blanket mire community was typically found on level but waterlogged ground and was identified by abundant hare's-tail cottongrass and deergrass. Cross-leaved heath, ling heather and purple moor-grass were recorded as frequent. *Sphagnum capillifolium* and *Sphagnum papillosum* were recorded as occasional, while round-leaved sundew was rare.

M19 *Calluna vulgaris-Eriophorum vaginatum* blanket mire

3.33 The M19 blanket mire community was the most common habitat type within the ESA. It is a relatively dry bog community and was characterised by the co-dominance of ling heather and hare's-tail cottongrass with S*phagnum papillosum*, S*phagnum capillifolium* and tormentil.

3.34 One sub-community was recorded:

- M19b *Empetrum nigrum* subsp. *nigrum* sub-community is defined as having more crowberry. Hare's-tail cottongrass was generally abundant with ling heather being the primary species.

M20 *Eriophorum vaginatum* blanket and raised mire

3.35 The M20 bog community was dominated by hare's-tail cottongrass. There was variation in the frequency of deergrass and heather, which were locally abundant in some areas and occasional in other areas. The community was widespread across the ESA. It was recorded in wide depressions, between hillocks and on gentle slopes. In places, there was little or no *Sphagnum* species where the mire was actively eroding or had been drained.

M23 *Juncus effusus*/*acutiflorus-Galium palustre* rush-pasture

3.36 The M23 rush-pasture community was often recorded in a mosaic with M25, alongside the upland source of many of the watercourses centred around the west and middle part of the ESA. It was characterised by the dominance of rushes and had an absence or rarity of *Sphagnum* mosses.

3.37 One sub-community was recorded:

- M23b *Juncus effusus* sub-community was dominated by soft rush, Yorkshire fog and creeping buttercup *Ranunculus repens*.

M25 *Molinia caerulea-Potentilla erecta* mire

3.38 The M25 mire community was comprised of tall, dense tussocks of purple moor-grass with occasional tormentil, which was often well-hidden beneath the tussocks. The community often occurred in a mosaic with dry health and blanket bog communities.

3.39 Two sub-communities were recorded within the ESA:

- M25a *Erica tetralix* sub-community contained frequent cross-leaved heath, ling heather, bog myrtle *Myrica gale* and occasional deergrass, thereby giving it a heathy characteristic whilst still being dominated by purple moor-grass.
- M25b *Anthoxanthum odoratum* sub-community was a grassier form, with species such as sweet vernal-grass, common bent and sheep's fescue occurring frequently throughout the sward of purple moor-grass.

W4 *Betula pubescens-Molinia caerulea* woodland

3.40 The W4 woodland community was recorded in two small pockets in the north-west of the ESA at the foot of the steep slopes. This community consisted of silver birch *Betula pendula*, purple moor-grass, tormentil, heath bedstraw, *Hylocomium splendens*, *Pleurozium schreberi*, *Rhytidiadelphus loreus*, *Polytrichum commune*, hard fern *Blechnum spicant*, S*phagnum papillosum*, S*phagnum capillifolium* and creeping soft grass *Holcus mollis*, with rare rowan, bilberry, bracken, *Sphagnum fallax*, wood sorrel and soft rush.

W11 *Quercus petraea-Betula pubescens-Oxalis acetosella* woodland

3.41 The W11 woodland community was recorded in three small pockets in the north-west of the ESA. This community extended up the hillside and consisted of birch and rowan, with an understory of sweet vernal grass, common bent, wood sorrel, Yorkshire fog and rare S*phagnum fallax*, willow and dog violet.

W17 *Quercus petraea-Betula pubescens-Dicranum majus* woodland

3.42 A small stand of W17 woodland was recorded in the north-west of the ESA, at the foot of the steep slopes close to an area of W4 woodland. The W17 habitat consisted of downy birch *Betula pubescens*, alder *Alnus glutinosa* and willow, with an understory of purple moor-grass, wood sorrel, S*phagnum palustre*, S*phagnum fallax* and *Polytrichum commune*.

U4 *Festuca ovina-Agrostis capillaris-Galium saxatile* grassland

3.43 The U4 grassland community was recorded in mosaic with U5 grassland (see below). It is a dry grassland community that occurred on the steep slopes of the ESA, particularly around the north and north-west. This community comprised of fescue, common bent, sweet vernal grass, wavy hair-grass, purple moor-grass, S*phagnum papillosum* and *Sphagnum capillifolium*.

U5 *Nardus stricta-Galium saxatile* grassland

3.44 The U5 grassland community is another dry grassland community, which was recorded in a few locations, on steep sections of the Site, mainly towards the west of the ESA. Species such as wavy hair-grass, matt grass, common bent, fescue, S*phagnum papillosum* and S*phagnum capillifolium*.

U6 *Juncus squarrosus-Festuca ovina* grassland

3.45 The U6 grassland community was often found in mosaic with dry heath habitats on grazed rocky ridges and knolls, although the level of grazing was variable. In general, the grassland was more heavily grazed in the west of the ESA. This community also appeared to have replaced areas of heavily grazed blanket bog habitat on level ground. Tussocky heath rush was abundant and stood out against the surrounding habitats. Swards of wavy hair-grass and star sedge were dotted within the heath rush, with occasional tormentil.

U20 *Pteridium aquilinum-Galium saxatile* community

3.46 The U20 community occurred in a few locations across the west and north-west of the ESA, on the steep slopes. U20 is a community dominated by bracken, with occasional heather, purple moor-grass and wavy hair grass. This habitat occurred on well-drained soils.

Summary

Table 3.1 summaries the Phase 1 habitats and associated NVC communities recorded within the ESA.

Table 3.1 Summary of Habitat and Vegetation Types and their Conservation Interest

Phase 1 Habitat	Associated NVC communities	Area within ESA (ha)	Proportion of ESA (%)	Mechanism for Habitat Conservation Interest
A1.1.1 Broadleaved Woodland (Semi-Natural)	W4, W11 and W17	15.57	2.22	■ High Potential GWDTE (W4) ■ Scottish Biodiversity List (W4, Wet Woodland) ■ Scottish Biodiversity List (W11 and W17, Upland Birchwoods) ■ Argyll and Bute Local Biodiversity Action Plan (LBAP)[15]
A1.2.2 Coniferous Woodland (Plantation) A4.2 Coniferous Woodland (Recently Felled)	-	206.19	29.43	-
A2.1 Scrub (Dense/Continuous)	-	2.01	0.29	-
B1.2 Acid Grassland (Semi-Improved)	U4, U5 and U6	81.44	11.62	■ Moderate Potential GWDTE (U6)
B5 Marshy Grassland	M23 and M25 (on peat <0.5m)	89.25	12.74	■ High Potential GWDTE (M6) ■ Moderate Potential GWDTE (M23) ■ Scottish Biodiversity List (M6 and M23, Upland Flushes, Fens and Swamps) ■ LBAP
C1.1 Bracken (Continuous)	U20	25.56	3.65	-
D1 Dry Dwarf Shrub Heath	H10 and H12	30.14	4.30	■ Annex 1 Habitat (H4030 European Dry Heaths) ■ Scottish Biodiversity List (Upland Heathland) ■ LBAP
E1.6.1 Blanket Bog	M1, M2, M3, M17 and M19	235.81	33.66	■ Annex 1 Habitat (H7130 Blanket Bogs) ■ Scottish Biodiversity List (Blanket Bog) ■ Priority Peatland ■ LBAP

[15] The Argyll and Bute Local Biodiversity Action Plan 2010-2015

Phase 1 Habitat	Associated NVC communities	Area within ESA (ha)	Proportion of ESA (%)	Mechanism for Habitat Conservation Interest
E1.7 Wet Modified Bog	M25 (on peat >0.5m)	2.80	0.40	■ Annex 1 Habitat (H7130 Blanket Bogs) ■ Priority Peatland ■ Scottish Biodiversity List (Blanket Bog) ■ LBAP
E2.1 Acid Flush	M6	11.87	1.69	■ High Potential GWDTE (M6) ■ Scottish Biodiversity List (Upland Flushes, Fens and Swamps) ■ LBAP
E2.2 Basic Flush	M10	N/A[16]	N/A	■ Annex 1 Habitat (H7230 Alkaline Fens) ■ High Potential GWDTE (M10) ■ Scottish Biodiversity List (Upland Flushes, Fens And Swamps) ■ LBAP
G2 Running Water	-	N/A[17]	N/A	■ Scottish Biodiversity List (Rivers) ■ LBAP

Groundwater Dependent Terrestrial Ecosystems (GWDTEs)

3.47 Five NVC communities with potential to be GWDTEs were recorded within the ESA. According to SEPA guidance[1], these NVC communities indicate potential groundwater dependency. These are shown in Figure 6.5.

3.48 Table 3.2 presents the NVC communities recorded which potentially indicate groundwater dependency and the standard SEPA guidance regarding the potential groundwater dependency of these communities based on the vegetation alone[18].

Table 3.2 Potential GWDTEs

Potential GWDTE NVC Code	Groundwater Dependency as per SEPA (2017)[1]
M6	High
M10	High
M23	Moderate
U6	Moderate
W4	High

Peatland Condition

3.49 Details of the assessment of function and condition of peatland at key infrastructure locations is provided in Annex C. This assessment draws on the results of both the NVC survey and the peat survey.

3.50 The majority of the ESA is depicted on the Carbon and Peatland 2016 Map[19] as being Class 2, with a small pocket of Class 1 in the north of the ESA. Class 2 is described as 'nationally important carbon-rich soils, deep peat and priority peatland habitat; areas of potentially high conservation value and restoration potential' as shown on Figure 8.1. Class 1 is described as 'nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas likely to be of high conservation value'.

3.51 Peat has been confirmed to be present across the majority of the Site at depths mainly measuring between 0.5m –9.0m (see Figure 8.1.1). The geological structure of the Site has resulted in areas of deeper peat between crags and ridges, and thinner peat or organic soils on the steeper slopes around rocky outcrops. Some areas of natural erosion (e.g. gullying) are visible around watercourses. Peat is assessed in detail in Chapter 8.

3.52 Peatland condition was assessed following NatureScot guidance[13]. Peatland condition varied across the ESA, and is discussed within Chapter 8. There was evidence of grazing noted but no evidence of burning across the ESA. The condition of peatlands at the proposed turbine locations is presented in Annex C.

Invasive species

3.53 No invasive non-native species were recorded within the ESA.

[16] Due to their small size, M10 communities were recorded as Target Notes. Target Notes are located within Table B.1, Annex B.
[17] As watercourses were recorded as linear features rather than polygons, they were excluded from these calculations. However, see Paragraph 3.23 for the total length of watercourses contained within the ESA.
[18] The identified potential GWDTEs have been assessed for their actual groundwater dependency status and are further discussed in Chapter 8.
[19] Scottish Natural Heritage (2016). *Carbon and Peatland 2016 Map*. Available at: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/soils/carbon-and-peatland-2016-map [Accessed May 2025].

Chapter 4
Discussion and Interpretation

Habitats of Conservation Interest

4.1 A desk study was undertaken to inform habitat and vegetation surveys. An account of the method adopted, and findings, is provided in Appendix 6.1 which also sets out the legislative provisions afforded to habitats, notably habitats of conservation interest.

4.2 Habitats of conservation interest recorded within the ESA are detailed in Table 3.1 above and included the following:

- Three Annex 1 habitats: H4030 European Dry Heaths, H7130 Blanket Bog and H7230 Alkaline Fens;
- Six Priority Peatland habitats: M1, M2, M3, M17, M19 and M25;
- Six Scottish Biodiversity List habitats: Wet Woodland, Upland Birchwoods, Upland Heathland, Blanket Bog, Upland Flushes, Fens and Swamps, and Rivers; and
- Five potential GWDTE communities: M6, M10, M23, U6 and W4.

Annex 1 Habitats

4.3 The most common Annex 1 habitat type was Blanket bog (H7130), comprising approximately 34.06% of the ESA when communities M1, M2, M3, M17, M19 and M25 (on peat >0.5 m) are combined. These habitat types were primarily associated with deeper peat substrates (1.5-9.0 m). H4030 European Dry Heaths, were the second most dominant Annex 1 habitat within the ESA, comprising approximately 4.30%. This habitat was commonly associated with deposits of peat ranging from 0.0-1.5 m depth.

4.4 H7230 Alkaline Fens were only recorded twice within the ESA and, due to their limited extent, their locations were recorded as Target Notes (see Table B.1, Annex B). They typically comprised narrow, stony flushes on steeper slopes.

Scottish Biodiversity List (SBL)

4.5 The majority of the SBL habitats located within the ESA were comprised of Upland Heathland and Blanket Bog. These SBL habitats form part of the Annex 1 habitats mentioned above.

4.6 Other SBL habitats located within the ESA included:

- SBL Wet Woodland (W4): this habitat was located in two small pockets to the north-west of the ESA and makes up less than 4.2% of the ESA.
- SBL Upland Birchwoods (W11 and W17): these habitats were recorded in small pockets to the north-west of the ESA and make up less than 1.63% of the ESA.
- SBL Upland Flushes, Fens and Swamps: these habitats were represented by two communities (M6 and M23) and make up approximately 4.82% of the ESA.
- SBL Rivers: There was approximately 19.68 km of watercourses within the ESA.

GWDTEs

4.7 A detailed assessment of GWDTE is provided in Chapter 8. Communities within the ESA with potential to be GWDTEs, within 250 m of the proposed infrastructure, were considered for assessment. Potential GWDTEs outwith this distance or outwith the ESA were not subject to hydrogeological assessment.

Peatland Condition

4.8 *Sphagnum* cover varied substantially across the peatland habitats within the ESA, ranging from abundant to rare, indicating different levels of peatland condition. There were areas with a diversity and abundance of *Sphagnum*, however, extensive areas were noted to be in 'modified' condition due to grazing. Grazing densities are not known, although only relatively limited numbers of deer were observed during surveys. Sheep were also noted to be present during the surveys.

4.9 Areas of bare peat were recorded across the ESA in haggs and gullies of varying extents, indicating 'actively eroding' peatland condition. Across some areas of the ESA, particularly in the west, sheep and deer grazing was evident with these animals also trampling and rubbing on haggs which was accelerating actively eroding peatland and preventing re-vegetation.

4.10 As described, the peatland condition within the ESA comprises a mosaic of peatland conditions, with large extents showing a significant degree of modification and erosion. As such, there are significant opportunities to enhance the overall condition of the peatland within the ESA.

4.11 Further interpretation of the peat resource within the ESA is provided in Appendix 8.1.

Annex A

Images

A1.1.1 Broadleaved Woodland (Semi-Natural)	A1.2.2 Coniferous Woodland (Plantation)	B1.2 Acid Grassland (Semi-Improved)
		
B5 Marshy Grassland with D1 Dry Dwarf Shrub Heath	**C1.1 Bracken (Continuous)**	**D1 Dry Dwarf Shrub Heath**
		

E1.6.1 Blanket Bog

E1.7 Wet Modified Bog

E2.1 Acid Flush

G2 Running Water

Annex B

Target Notes

Table B.1: Target Notes

Target Note ID	Target Note Type	Phase 1 Habitat	NVC Community	Comments
1	Risk Area	N/A	N/A	Boggy ground.
2	Risk Area	N/A	N/A	Steep 'v'-shaped burn cuts through the path.
3	Risk Area	N/A	N/A	Quaking bog.
4	Habitat	E1.6.1 Blanket bog	M19	M19 is modified due to presence of grazing sheep. No signs of recent burning but peat is eroding with some small haggs. *Sphagnum* is present but not in continuous blanket.
5	Habitat	E1.6.1 Blanket bog	M3	Area of erosion and haggs. M3 bog pool present.
6	Risk Area	N/A	N/A	Extremely steep drop.
7	Habitat	E1.6.1 Blanket bog	M19	Area of erosion and haggs.
8	NVC	E1.6.1 Blanket bog	M20	
9	Risk Area	N/A	N/A	Very steep sided river valley.
10	Risk Area	N/A	N/A	Very steep ground.
11	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE
12	GWDTE	B5 Marshy grassland	M23	Narrow strip of M23 (Moderate potential GWDTE).
13	GWDTE	B5 Marshy grassland	M23	Narrow strip of M23 (Moderate potential GWDTE).
14	NVC	E1.6.1 Blanket bog	M19	
15	NVC	B1.2 Acid grassland (semi-improved)	U4	Small pockets.
16	GWDTE	B5 Marshy grassland	M23	Narrow strip of M23 (Moderate potential GWDTE) along watercourse.
17	GWDTE	B5 Marshy grassland	M23	Narrow strip of M23 (Moderate potential GWDTE) along watercourse.
18	Habitat	E1.6.1 Blanket bog	M19	Erosion. *Sphagnum* spp. are frequent and ground is pretty soggy. Sitka starting to spread.
19	GWDTE	E1.7 Wet modified bog	M25	
20	NVC	E1.6.1 Blanket bog	M3	M3 bog pool.
21	NVC	D1 Dry dwarf shrub heath	H10	
22	NVC	E1.6.1 Blanket bog	M20	
23	GWDTE	E2.1 Acid flush	M6	High potential GWDTE
24	GWDTE	E2.1 Acid flush	M6	High potential GWDTE
25	NVC	B1.2 Acid grassland (semi-improved)	U4	On slope.

Target Note ID	Target Note Type	Phase 1 Habitat	NVC Community	Comments
26	Habitat	E1.6.1 Blanket bog	M19	Peat haggs/erosion.
27	NVC	D1 Dry dwarf shrub heath	H10	Small patches.
28	GWDTE	E1.7 Wet modified bog	M25	
29	Risk Area	N/A	N/A	Refrain from approaching unless absolutely necessary.
30	Risk Area	N/A	N/A	Sudden drop.
31	NVC	E1.6.1 Blanket bog	M17	
32	NVC	E1.6.1 Blanket bog	M19/U4	
33	NVC	E1.6.1 Blanket bog	M17	
34	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE
35	Risk Area	N/A	N/A	Really steep.
36	GWDTE	A1.1.1 Broadleaved woodland (semi-natural)	W4/W11	Transitions from W4 to W11 as you move up the slope. High potential GWDTE.
37	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE
38	GWDTE	B5 Marshy grassland	M25	
39	GWDTE	B5 Marshy grassland	M25	
40	NVC	E1.6.1 Blanket bog	M3	Small bog pool with bog bean and cottongrass.
41	Risk Area	N/A	N/A	Steep drop.
42	GWDTE	B5 Marshy grassland	M23	Area around watercourse dominated by sharp-flowered rush. Moderate potential GWDTE.
43	GWDTE	B5 Marshy grassland	M23	Sharp-flowered rush, *Molinia* patch - very wet under foot. Moderate potential GWDTE.
44	NVC	E1.6.1 Blanket bog	M20/M25	
45	NVC	E1.6.1 Blanket bog	M20/U5	
46	NVC	B1.2 Acid grassland (semi-improved)	U6	Small area. Moderate potential GWDTE.
47	NVC	E1.6.1 Blanket bog	M20/M19/M17	
48	NVC	E1.6.1 Blanket bog	M19b	Crowberry, heather, hare's-tail, bilberry, other dwarf shrub.
49	GWDTE	E2.2 Basic flush	M10	High potential GWDTE.
50	Habitat	E1.6.1 Blanket bog	M19	Erosion.
51	NVC	E1.6.1 Blanket bog	M20/M19/M17	
52	NVC	E1.6.1 Blanket bog	M2/M3	
53	Habitat	E1.6.1 Blanket bog	M19	Erosion.
54	Habitat	E1.6.1 Blanket bog	M19	Erosion.

Target Note ID	Target Note Type	Phase 1 Habitat	NVC Community	Comments
55	NVC	E1.6.1 Blanket bog	H12b and M19b	
56	Habitat	E1.6.1 Blanket bog	M19	Erosion.
57	Risk Area	N/A	N/A	Steep drop and gorge.
58	Risk Area	N/A	N/A	Steep drop and gorge.
59	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
60	Risk Area	N/A	N/A	Steep drop.
61	Risk Area	N/A	N/A	Very steep drop and rocky.
62	NVC	B1.2 Acid grassland (semi-improved)	U6	
63	NVC	B1.2 Acid grassland (semi-improved)	U4/U20/U5	
64	NVC	E1.6.1 Blanket bog	M20	
65	NVC	E1.6.1 Blanket bog	M1/M3	M1/M3 bog pool.
66	GWDTE	E2.2 Basic flush	M10	High potential GWDTE.
67	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
68	NVC	B1.2 Acid grassland (semi-improved)	U5/U4	
69	NVC	B1.2 Acid grassland (semi-improved)	U4/U5/M17	
70	NVC	E1.6.1 Blanket bog	M20	
71	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
72	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
73	NVC	E1.6.1 Blanket bog	M3	Peat haggs and bog pool.
74	Habitat	E1.6.1 Blanket bog	M19	Erosion.
75	NVC	E1.6.1 Blanket bog	U5/M19/M17	Short grassland/heath. Heather, deergrass, common cottongrass, blaeberry, crowberry, heath rush.
76	NVC	E1.6.1 Blanket bog	M17	Area of soggy ground with *Sphagnum* (*cap* and *pap*), common cottongrass, bog asphodel, cross-leaved heath, heather, some hares-tail cottongrass, tormentil.
77	NVC	E1.6.1 Blanket bog	M19	
78	NVC	E1.6.1 Blanket bog	M17/M19	
79	NVC	B1.2 Acid grassland (semi-improved)	U5	
80	NVC	E1.6.1 Blanket bog	M3	Small bog pools, quaking bog habitat. Deergrass, common cottongrass, *Sphagnum pap* and occasional common pondweed.
81	GWDTE	E2.1 Acid flush	M6	High potential GWDTE.
82	GWDTE	B5 Marshy grassland	M25	Peat <0.5m.
83	NVC	E1.6.1 Blanket bog	M20	

Target Note ID	Target Note Type	Phase 1 Habitat	NVC Community	Comments
84	Risk Area	N/A	N/A	Very steep sided gorge with waterfalls.
85	Habitat	N/A	N/A	Bog bean and *S. fallax* and very dark green *Sphagnum* in wet depression beside access track.
86	Risk Area	N/A	N/A	Very steep drop down to watercourse.
87	Habitat	N/A	N/A	Patch of great wood-rush and bluebell beside watercourse.
88	GWDTE	B5 Marshy grassland	M6/M25	High potential GWDTE.
89	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
90	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
91	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
92	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
93	GWDTE	B5 Marshy grassland	M23	Moderate potential GWDTE.
94	Habitat	E2.1 Acid flush	M6	Very wet area, sloping downhill. High potential GWDTE.
95	GWDTE	E2.1 Acid flush	M6/M25	High potential GWDTE.
96	GWDTE	E2.1 Acid flush	M6/M25	High potential GWDTE.

Annex C

Peatland Condition Assessment

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
T1	> 50	N/A	■ Conifer plantation	Turbine located within conifer plantation.	No photo available.
T2	> 50	N/A	■ Conifer plantation	Turbine located within conifer plantation[20].	

[20] Associated photograph shows the conifer plantation in the background of the image. Turbine infrastructure is not proposed for the open ground in the forefront of the image.

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
T3	> 50	M19 and M25	■ Woodland/scrub absent ■ Erosion and haggs recorded ■ *Sphagnum* occasional	Mosaic of M19 blanket bog and M25 wet modified bog. Evidence of erosion and haggs in vicinity. Majority of probes > 50 cm deep.	
T4	> 50	M19 and M25	■ Woodland/scrub absent ■ Erosion and haggs recorded ■ *Sphagnum* occasional	Mosaic of M19 blanket bog and M25 wet modified bog. Evidence of erosion and haggs at proposed turbine location. Majority of probes > 50 cm deep.	

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
T5	> 50	M19, M23, H12 and U4	■ Woodland/scrub absent ■ Well-vegetated ■ *Sphagnum* frequent to absent	Mosaic of M19 blanket bog and M23 marshy grassland, with tussocks of H12 dry heath and U4 acid grassland. Majority of probes > 50 cm deep.	
T6	> 50	M19, M25 and H12	■ Woodland/scrub absent ■ Well-vegetated ■ *Sphagnum* frequent to absent	Mosaic of M19 blanket bog, M25 wet modified bog and H12 dry heath. Majority of probes > 50 cm deep.	

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
T7	> 50	M19, M17, M6, M25 and H12	■ Woodland/scrub absent ■ Erosion and haggs recorded ■ *Sphagnum* occasional to frequent	Mosaic of M19 and M17 blanket bog, M25 wet modified bog and H12 dry heath, with some M6 acid flush. Evidence of erosion and haggs at proposed turbine location. Majority of probes > 50 cm deep.	
Construction Compound	> 50	M19 and M25	■ Woodland/scrub present ■ Well-vegetated ■ *Sphagnum* frequent	Mosaic of M19 blanket bog and M25 wet modified bog. Sitka spruce self-seeding within wider area. Majority of probes > 50 cm deep.	

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
BESS Compound and Hardstanding	> 50	M19 and M25	■ Woodland/scrub absent ■ Well-vegetated ■ *Sphagnum* occasional to frequent	Mosaic of M19 blanket bog and M25 wet modified bog. Majority of probes > 50 cm deep.	
Track to T6, T7, Construction Compound and BESS	> 50	M19, M25, M17 and H12	■ Woodland/scrub absent ■ Well-vegetated ■ *Sphagnum* frequent	Mosaic of M19 and M17 blanket bog, with M25 wet modified bog and H12 dry heath. Majority of probes > 50 cm deep.	

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
Track to T5	> 50	M19, M25, H12 and U4	■ Woodland/scrub absent ■ Well-vegetated ■ *Sphagnum* absent to frequent	Mosaic of M19 blanket bog and M25 wet modified bog, with H12 dry heath and U4 acid grassland. Majority of probes > 50 cm deep.	
Track to T3 and T4	> 50	M19, M25 and M23	■ Woodland/scrub absent ■ Erosion and haggs recorded ■ *Sphagnum* frequent to rare	Mosaic of M19 blanket bog, M25 wet modified bog and M23 marshy grassland. Evidence of erosion and haggs in vicinity. Majority of probes > 50 cm deep.	

Infrastructure	Peat Depth (cm)	NVC Communities	Notable Features	Comments	Photo
Track to T1 and T2	> 50	M19 and M23	■ Woodland/scrub absent ■ Erosion and haggs recorded ■ *Sphagnum* frequent to occasional	Mosaic of M19 blanket bog and M23 marshy grassland. Evidence of erosion and haggs in vicinity. Majority of probes > 50 cm deep.