APPENDIX V2-4.3: NATIONAL VEGETATION CLASSIFICATION & HABITATS SURVEY REPORT

Annex

1. NATIONAL VEGETATION CLASSIFICATION & HABITATS SURVEY REPORT

1.1 Introduction

1.1.1 MacArthur Green was commissioned by Scottish and Southern Electricity Networks Transmission (SSEN Transmission) to carry out National Vegetation Classification (NVC) and habitats surveys for the Skye Reinforcement Project (hereafter the 'Proposed Development').

1.1.2 These surveys were aimed at supplementing data and filling data gaps around earlier collected NVC data for Sections 1 to 5 of the Proposed Development (collected in June to August 2018 by an ASH sub-consultant), and to undertake full baseline surveys for Sections 0 and 6 of the Proposed Development.

1.1.3 The aim of the NVC survey is to identify and map the vegetation communities present within the survey area/study area to identify those areas of greatest ecological interest (e.g., Annex I habitats[1]; potential Groundwater Dependent Terrestrial Ecosystems (GWDTE); and Scottish Biodiversity List (SBL) priority habitats). This information is used to aid and inform the iterative alignment and design process and the ecological assessment for the Proposed Development's Environmental Impact Assessment (EIA) Report.

1.1.4 This Technical Appendix details the findings of the NVC surveys undertaken for the Proposed Development.

1.2 The Site and Survey Area / Study Area

1.2.1 The Site extends for approximately 160 km from Ardmore Substation in the northwest of Skye, to Fort Augustus Substation on the mainland. Given the length of the Proposed Development, the project has been split into seven defined 'Sections' to describe the Proposed Development and local baseline conditions. These sections are broadly defined as follows:

- Section 0 – Ardmore to Edinbane;
- Section 1 – Edinbane to North of Sligachan;
- Section 2 – North of Sligachan to Broadford;
- Section 3 – Broadford to Kyle Rhea;
- Section 4 – Kyle Rhea to Loch Cuaich;
- Section 5 – Loch Cuaich to Invergarry; and
- Section 6 – Invergarry to Fort Augustus.

1.2.2 A full description of the Proposed Development and related works can be found in **Volume 1, Chapter 3: Project Description**, and related Appendices, and further Site and Section-specific information is presented in **Volume 2, Chapter 2: Section by Section Overview**.

1.2.3 The NVC and habitats field 'survey area' generally covered a 280 m to 300 m survey corridor around the proposed alignment of the overhead line (OHL) or underground cable alignment and associated new tracks. For existing tracks in need of significant upgrading a 200 m survey corridor was applied. No surveys were considered necessary around existing roads and tracks that do not require upgrading as part of the Proposed Development.

1.2.4 The survey area evolved during the baseline survey period to reflect the iterative routeing, alignment and design process, and in some cases the consideration of alternative routes/options. Therefore, in some

[1] As defined by the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora – the 'Habitats Directive'.

instances notably larger (and sometimes alternative) areas were surveyed as part of the baseline surveys than as detailed above. The survey area covered during the baseline NVC and habitats survey for the Proposed Development covered 8,598 hectares (ha) and is shown in **Figures V2-4.3: National Vegetation Classification Survey Area and Results** and **Figures V6-4.3: National Vegetation Classification Survey Area and Results**.

1.2.5 The respective area which is then considered as part of the habitats assessment process within the EIA Report is further defined as the 'study area'. The habitats study area comprises an amalgamated 280 m corridor around the alignment of the new OHL/underground cable routes[2], a 150 m corridor around proposed new tracks[3] (permanent and temporary), and a 100 m corridor around existing tracks requiring significant upgrading (existing tracks only requiring very minor upgrading such as re-surfacing or verge widening are not included in the study area; however, several have been included in the survey area). The habitats study area covers 4,849 ha, and its juxtaposition with the survey area and Proposed Development layout is also shown in **Figures V2-4.3: National Vegetation Classification Survey Area and Results** (N.B. the habitats study area including the Alternative Alignment in Section 3 covers 4,882 ha and its juxtaposition with the survey area and Proposed Development layout is shown in **Figures V6-4.3: National Vegetation Classification Survey Area and Results**).

1.3 Methodology

National Vegetation Classification (NVC)

1.3.1 The vegetation was surveyed by suitably qualified and experienced botanical surveyors (Brian Henry, Jason MacKay (Sections 0-5) and Ben Averis (Sections 0 and 6)) using the NVC scheme (Rodwell *et al*., 1991-2000; 5 volumes[4]) and in accordance with NVC survey guidelines (Rodwell, 2006[5]). Earlier surveys for the Proposed Development were conducted from June to August 2018 by Adam Fraser of Blairbeg Consulting on behalf of ASH and the Applicant.

1.3.2 The NVC scheme provides a standardised system for classifying and mapping semi-natural habitats and ensures that surveys are carried out to a consistent level of detail and accuracy. Homogeneous stands and mosaics of vegetation were identified and mapped by eye and drawn as polygons on high resolution aerial imagery field maps. These polygons were surveyed qualitatively to determine dominant and constant species, sub-dominant species and other notable species present. The surveyors worked progressively across the survey area to ensure that no areas were missed, and that mapping was accurate. NVC communities were attributed to the mapped polygons using surveyor experience and matching field data against published floristic tables (Rodwell *et al*., 1991-2000[4]). Stands were classified to sub-community level where possible, although in many cases the vegetation was mapped to community level only because the vegetation was too species-poor or patches were too small or indistinct to allow meaningful sub-community determination; or because some areas exhibited features or fine-scale patterns of two or more sub-communities.

1.3.3 Quadrat sampling was not used in this survey because experienced NVC surveyors do not need to record quadrats to reliably identify NVC communities and sub-communities (Rodwell, 2006[5]). Notes were made about the structure and flora of larger areas of vegetation in many places (such as the abundance and frequency of species, and in some cases condition and evident anthropogenic impacts). It can be better to record several larger scale qualitative samples than one or two smaller quantitative samples; furthermore, qualitative information from several sample locations can be vital for understanding the dynamics and trends in local (survey area/study area) vegetation patterns (Rodwell, 2006[5]).

[2] i.e., a 100 m buffer surrounding the respective general 80 m Limit of Deviation (LoD).
[3] i.e., a 50 m buffer surrounding the respective general 50m LoD.
[4] Rodwell, J.S. (Ed), *et al.* (1991 – 2000). British Plant Communities (5 volumes). Cambridge University Press, Cambridge.
[5] Rodwell, J.S. (2006). NVC Users' Handbook. ISBN 978 1 86107 574 1

1.3.4 Due to small scale vegetation and habitat variability and numerous zones of transitional habitat areas between similar NVC communities, many polygons can represent complex mosaics of two or more NVC communities or include intermediate/transitional communities. Where polygons have been mapped as mosaics an approximate percentage cover of each NVC community within the polygon is given so that the dominant community and character of the vegetation could still be ascertained.

Phase 1 Habitat Characterisation

1.3.5 The NVC and mapping data was also correlated to the most appropriate equivalent habitats according to the Phase 1 habitat classification (JNCC, 2010[6]), considering the species composition and habitat quality. The Phase 1 characterisation has been utilised to allow a broader visual representation of the habitats within the survey area and study area. Polygons or areas where there are mosaic NVC communities have generally been assigned a single Phase 1 classification based on the dominant NVC type (despite some polygons containing multiple Phase 1 types, often in low percentages). Therefore, the Phase 1 characterisation is generally a broader overview to aid with general habitat characterisation, however the NVC data should be referred to for further detail in any specific area.

1.3.6 Botanical nomenclature in this report follows that of Stace (2019[7]) for vascular plants, Atherton *et al.* (2010[8]) for bryophytes and Smith *et al.* (2009[9]) for lichens.

1.4 Survey Details

1.4.1 Initial NVC surveys of Sections 1 to 5 were undertaken in June to August 2018 by Blairbeg Consulting.

1.4.2 MacArthur Green NVC surveys for the Proposed Development were undertaken on the following dates:

- Section 0: 19 October 2020 to 23 October 2020, with further minor gaps surveyed 21 February 2022 to 24 February 2022;
- Section 1: 20 May 2021 to 22 May 2021, with further gaps surveyed 21 February 2022 to 24 February 2022
- Section 2: 18 May 2021 to 20 May 2021, with further gaps surveyed 12 October 2021 to 14 October 2021 and 21 February 2022 to 24 February 2022;
- Section 3 and 3A: 04 October 2021 to 06 October 2021;
- Section 3 (Alternative Alignment): 14 March 2022 to 16 March 2022, with pinch points on the minor road through Glen Arroch surveyed 28 April 2022 and 29 April 2022;
- Section 4: 21 March 2022 to 24 March 2022 and 04 April 2022 to 08 April 2022;
- Section 5: 02 November 2021 to 05 November 2021 (Invergarry west to Tomdoun) and 07 March 2022 to 10 March 2022 (Tomdoun west to Loch Cuaich dam); and
- Section 6: 28 March 2022 to 31 March 2022.

1.5 Survey Limitations

1.5.1 The survey area was accessible except within the curtilage of private properties or in some small areas of deep ravines or steep gullies on Section 3 and Section 4 that were unsafe to survey. Such areas were examined as close as practically possible, using surrounding accessible and similar stands of vegetation as a proxy, if necessary.

[6] Joint Nature Conservancy Council (JNCC). (2010). Handbook for phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough.
[7] Stace, C.A. (2019). New Flora of the British Isles. 4th Edition. Cambridge University Press.
[8] Atherton, I., Bosanquet, S. & Lawley, M. (2010). Mosses and Liverworts of Britain and Ireland: a field guide. British Bryological Society.
[9] Smith, C.W., Aptroot, A., Coppins, B.J., Fletcher, A., Gilbert, O.L., James, P.W. & Wolseley, P.A. (Eds.) (2009). The Lichens of Great Britain and Ireland. The British Lichen Society.

1.5.2 Weather conditions for the most part was amenable to survey with light to moderate winds and good visibility prevailing, and only occasional days with heavy or persistent rain, which in some cases resulted in ceasing the survey earlier than planned, resuming in better weather. Snow showers were experienced on the morning of 24 February 2022 with snow lying on higher ground, however the snow melted by mid-morning and as surveys on that day were in and around commercial conifer plantation the weather did not pose a significant constraint on the surveys. Overall, weather conditions did not notably limit surveys.

1.5.3 As detailed in the paragraphs above, many of the surveys were undertaken in the months of October and March, with a lesser amount of survey effort taking place in the months of November and February. These months are generally considered to be outside the optimal survey period for vegetation and habitats. However, despite the time of year, the overall character and type of vegetation was still readily recognisable and could still be accurately attributed a NVC community due to the surveyor knowledge of the Site and survey area from other ecological surveys throughout the year and the persistent and still easily identifiable vegetation present in many areas such as various sub-shrubs, rushes, remnant dying/dead vegetation, bryophytes etc. It should also be noted most areas were also surveyed earlier in June to August 2018, with Sections 1 and 2 also being surveyed in May 2021 and half of Section 4 in surveyed April 2022. The timing of the surveys is not considered here to be a notable limitation.

1.5.4 The survey area was not designed to cover the existing OHL, which is to be dismantled following construction of the Proposed Development. However, due to the proximity of the existing OHL with the Proposed Development, and the survey buffers used in the habitat surveys, 127.76 km (i.e., 73.6%) of the existing 173.56 km OHL is covered by the NVC surveys described within this report (see also **Figures V2-4.3: National Vegetation Classification Survey Area and Results**). In areas where the existing OHL is not covered by these NVC surveys it can be inferred from the proximity of nearby habitats baseline data and aerial imagery that the habitats are generally similar to those reported here and are likely of similar composition. As described within **Appendix V1-3.8: Dismantling Plan for the Existing OHL** no new infrastructure is required for the dismantling and removal of the existing OHL, and so potential impacts on habitats are much reduced. Consequently, whilst there may be some data gaps around the existing OHL reasonable inferences can be made from the available data in these situations, and considering the lesser potential impact of dismantling, this data gap is considered a minor limitation.

1.5.5 The NVC system does not cover all possible semi-natural vegetation or habitat types that may be found. Since the NVC was adopted for use in Britain in the 1980's further survey work and an increased knowledge of vegetation communities has led to additional communities being described that do not fall within the NVC system (e.g., see Rodwell *et al*., 2000[10], Averis *et al*., 2004[11], Mountford, 2011[12], and Averis and Averis, 2020[13]). Where such communities are found and recorded, they are given a non-NVC community code and are described.

1.5.6 It should be noted that the results from this survey, and the matches made in describing communities, represent a current community evaluation at the time of survey (as opposed to one seeking to describe what the community was before any human interference, or what it might become in the future). In light of this, a clear constraint of the vegetation survey and evaluation process as used in this, and other, surveys are that it offers only a snapshot of the vegetation communities present and should not be interpreted as a static long-term reference.

[10] Rodwell, J., Dring, J.C., Averis, A.B.G., Proctor, M.C.F., Malloch, AJ.C., Schaminee, J.H.J. and Dargie, T.C.D. (2000). Review of coverage of the National Vegetation Classification. JNCC Report, No. 302. JNCC, Peterborough.

[11] Averis, A., Averis, B. Birks, J., Horsfield, D., Thompson, D. and Yeo, M. (2004). An Illustrated Guide to British Upland Vegetation. Pelagic, Exeter.

[12] Mountford, E. (2011). A compilation of proposed additions and revisions to vegetation types in the National Vegetation Classification, JNCC Report No. 448. JNCC, Peterborough, ISBN 0963-8091

[13] Averis, B and Averis, A. (2020). Plant Communities found in surveys by Ben and Alison Averis but not described in the UK National Vegetation Classification. http://www.benandalisonaveris.co.uk/wp/wp-content/uploads/2020/11/non-nvc_vegetation_types_found_by_ben_and_alison_averis_2020-06__version_with_image_resolution_reduced_.pdf

1.5.7 Ecological surveys are limited by factors which affect the presence of plants such as the time of year and weather. The ecological surveys undertaken to inform the assessment of the Proposed Development have not therefore produced a complete list of plants and the absence of evidence of any particular species should not be taken as conclusive proof that the species is not present or that it will not be present in the future. However, the results of these surveys are considered to be sufficient to undertake the assessment.

1.6 Results

Overview

1.6.1 In total, 46 NVC communities, 14 intermediates, and 28 non-NVC communities were recorded within the survey area for the Proposed Development, of these 46 NVC communities, 12 intermediates, and 26 non-NVC communities are present within the respective study area.

1.6.2 The NVC and habitats survey results for Sections 0 – 6 are summarised in the paragraphs below. A summary description of the baseline habitat character in each Section is followed by a table detailing the broad Phase 1 habitat types recorded, the site-specific NVC and non-NVC communities and habitat types underpinning these Phase 1 types, and the extent of each habitat type/community within the respective Section study area. The baseline habitat extents for the entire Proposed Development study area are provided in **Annex A**.

1.6.3 Detailed descriptions of typical NVC community composition and character can be found in Rodwell *et al*. (1991-2000[4]) and Averis *et al*. (2004[11]). In the following paragraphs only the shortened NVC identifier code is used, the full name of NVC communities and sub-communities recorded during surveys for the Proposed Development can be cross-referred to **Annex B**.

1.6.4 For any non-NVC communities or features recorded, or communities that vary notably from the typical community descriptions, these are listed with a brief description of the vegetation/feature type within **Annex C**.

1.6.5 Survey results are shown on **Figures V2-4.3: National Vegetation Classification Survey Area and Results** and **Figures V6-4.3: National Vegetation Classification Survey Area and Results**. These results figures have utilised the standard Phase 1 survey symbology to broadly characterise stands of vegetation based on the dominant NVC community within a particular area, to allow an easier visual representation of baseline habitat character. However, many of these areas are mosaics of communities of various NVC and Phase 1 types, and therefore the detailed NVC labels on the results figures should be used for greater detail in a particular area. Furthermore, whilst the entire survey area was classified to NVC level, the NVC labels are provided for the study area only, however the areas mapped outwith the study area (i.e., the wider survey area) are still represented on the figures with Phase 1 symbology.

1.6.6 Several target notes (TNs) were also made during surveys, often to describe a particular area or feature too small to be mapped as a polygon, or to pinpoint areas or species of special interest. These target notes are detailed within **Annex D** and locations also shown in **Figures V2-4.3: National Vegetation Classification Survey Area and Results** and **Figures V6-4.3: National Vegetation Classification Survey Area and Results**.

Section 0 – Ardmore to Edinbane

1.6.7 The Section 0 study area covered 764.8 ha, see **Figures V2-4.3 (0:00) to V2-4.3 (0:19): National Vegetation Classification Survey Area and Results**.

1.6.8 The Proposed Development from Ardmore, around Trumpan, initially passes through primarily semi-improved acid (U4b) and improved grasslands (MG6) before routeing through a mix of M15 wet and H10 dry heaths with patches of U4 acid grassland around Upper Halistra. As the OHL routes southeast over the Allt na Luinge watercourse it traverses through an area of primarily M17 blanket bog with smaller patches of M15 wet heath by

Beinn na Mòintich. From here southwards to Fairy Bridge the Proposed Development primarily traverses extensive areas and mosaics of M15 wet heath and M17 blanket bog, with smaller patches of H10 dry heath, U4 acid grassland, and U20 bracken scattered throughout the study area. Patches of M23 marshy grassland are infrequently present in hollows conveying water or in strips around watercourses.

1.6.9 South of Fairy Bridge to Lian Airigh nan Geadh the Proposed Development again passes over an area of predominately M17 and M19 blanket bog, although there are small patches of other habitats such as wet heath (M15), dry heath (H10, H21), flushes (M6c), scrub (W1x) and conifer plantation (CP).

1.6.10 From Lian Airigh nan Geadh to Dunvegan Substation the Proposed Development passes through primarily wet heath, with many smaller patches of blanket bog, wet modified bog, and dry heath. This same general pattern of habitats is present from Dunvegan Substation to Upper Feorlig, after which, and around Glen Heysdal, there are some more patches of improved and acid grasslands.

1.6.11 North of Caroy to Balmeanach is again characterised by blanket bog, wet heath and acid grassland areas. East of Balmeanach, the Proposed Development passes through some damp neutral marshy grassland (MG10) before entering conifer plantation, emerging again and passing through some marshy grassland by Edinbane.

1.6.12 M15 wet heath is extensive and widespread in Section 0, with all four sub-communities recorded. M15a comprises flushed wet heath vegetation consisting of mixtures of *Calluna vulgaris, Erica tetralix, Molinia caerulea, Trichophorum germanicum, Narthecium ossifragum, Potentilla erecta* and *Eriophorum angustifolium* (all common in M15 generally in this area) with the addition of *Carex panicea, C. echinata, C. hostiana, Succisa pratensis, Juncus acutiflorus, J. articulatus, Agrostis canina, Pedicularis sylvatica, Filipendula ulmaria, Achillea ptarmica, Festuca vivipara, Prunella vulgaris, Primula vulgaris, Empetrum nigrum, Schoenus nigricans* and the moss *Breutelia chrysocoma*; M15a is widespread as small heathy flushes on wet, gently sloping ground, but also locally extensive on level to very gently sloping low peaty ground in the northwest of the study area. The M15b sub-community consists mainly of mixtures of *Calluna vulgaris, Trichophorum germanicum, Molinia caerulea, Erica tetralix, Eriophorum angustifolium* and *Narthecium ossifragum*, with other species including *Salix repens, Potentilla erecta*, the mosses *Sphagnum capillifolium, Hylocomium splendens* and *Pleurozium schreberi*, and in some places the liverwort *Pleurozia purpurea*; M15b is widespread and common on damp to quite wet, peaty, fairly level to moderately sloping ground in the study area. M15c is similar to M15b but with some *Erica cinerea* and *Racomitrium lanuginosum* and it occupies slightly drier ground than M15b; it is widespread and locally extensive in the study area. M15d here has a shorter, more grassy and more grazed sward than the M15a, M15b and M15c already described. The M15d has abundant *Trichophorum germanicum* and varied amounts of *Molinia caerulea, Erica tetralix, Juncus squarrosus, Carex echinata, Agrostis canina, Festuca vivipara, Potentilla erecta* and mosses such as *Hylocomium splendens*; it is widespread but not very extensive on damp to quite wet peaty soils in moderately to heavily grazed places within the study area.

1.6.13 Much of the blanket bog within Section 0 is M17, however there are some areas of M19. The M17 is mostly found on level to very gently sloping surfaces of deeper, wet peat, with mixtures of *Calluna vulgaris, Erica tetralix, Eriophorum angustifolium, Molinia caerulea, Trichophorum germanicum*, as in M15b, but also with *Eriophorum vaginatum* and/or *Sphagnum papillosum*. Other species include *Sphagnum capillifolium, Hylocomium splendens, Pleurozium schreberi, Deschampsia flexuosa, Narthecium ossifragum* and the lichen *Cladonia portentosa*. The M19 vegetation consists mainly of a dense mix of *Calluna vulgaris* and *Eriophorum vaginatum*, and extensive carpets of mosses including *Hylocomium splendens, Pleurozium schreberi, Rhytidiadelphus loreus* and *Sphagnum capillifolium*. Other species include *Empetrum nigrum, Blechnum spicant, Deschampsia flexuosa, Molinia caerulea, Trichophorum germanicum, Erica tetralix* (and rarely *Erica cinerea*), *Juncus squarrosus, Succisa pratensis, Narthecium ossifragum* and the moss *Aulacomnium palustre*.

1.6.14 Patches of wet modified bog within the study area tend to be M25a, with some patches of M20. The M25a is strongly dominated by tussocks of *Molinia caerulea*. Among the tussocks are smaller amounts of other species

including *Potentilla erecta, Erica tetralix, Juncus articulatus, J. effusus, Carex echinata* and the mosses *Hylocomium splendens, Pleurozium schreberi* and *Sphagnum capillifolium*. Areas of M20 are dominated by *Eriophorum vaginatum*.

1.6.15 Dry heath within the Section 0 study area tends to be H10a, H10c and H10d, with some smaller areas of H21a. H10a consists mainly of a dense canopy of tall (30-50 cm) *Calluna vulgaris*. Among the heather are smaller amounts of *Erica cinerea, Potentilla erecta, Festuca vivipara, Blechnum spicant* and *Salix repens,* and abundant mosses including *Hylocomium splendens, Pleurozium schreberi, Dicranum scoparium* and *Hypnum jutlandicum*. H10a is widespread and common here on well-drained slopes. H10c is similar to H10a but with the dwarf shrubs less extensive and grasses such as *Agrostis capillaris* and *Anthoxanthum odoratum* correspondingly more extensive; it is common on the moderately grazed well-drained slopes, especially among mosaics of dry heath and acid grassland. H10d is *Calluna vulgaris* heath resembling H10a but with some base-rich influence. The heather is accompanied by smaller amounts of *Erica cinerea, Potentilla erecta, Thymus polytrichus, Primula vulgaris, Viola riviniana, Hyperichum pulchrum, Festuca vivipara, Plantago lanceolata, Lotus corniculatus, Blechnum spicant, Antennaria dioica, Salix repens* and mosses such as *Hylocomium splendens, Dicranum scoparium* and *Hypnum jutlandicum*. H10d occurs locally as small areas on steep rocky south and/or southwest facing slopes. H21a is similar to the H10a described above, but with the moss layer including *Sphagnum capillifolium*; this is present on some steep north-northeast facing slopes in the study area.

1.6.16 Acid grassland within the Section 0 study area tends to be U4. The more semi-improved U4b is a short grassland with swards of *Agrostis capillaris, Anthoxanthum odoratum, Festuca rubra* and *Holcus lanatus*. These grasses are dotted with *Potentilla erecta, Galium saxatile, Trifolium repens* and *Achillea millefolium*. There can be some very sparse *Calluna vulgaris* and *Erica cinerea*. Mosses, especially *Rhytidiadelphus squarrosus*, are very common. U4b is the most widespread type of short grassland here, occurring on well-drained ground among heaths and rush vegetation, and also occupying larger areas of enclosed farmland. The unimproved acid grasslands comprise U4a, U5 and U6. U4a is similar to U4b but lacks *Holcus lanatus* or *Trifolium repens*.

1.6.17 A number of flush communities were recorded within the Section 0 study area, including typical M6 mires, as well as small patches of M9, M10 and Mx. M9 flushes comprised, often sparse, swards of *Carex rostrata* with variable amounts of other species, including, *Viola palustris, Carex demissa, Cardamine pratensis, Cirsium palustre, Galium palustre, Epilobium palustre, Pinguicula vulgaris, Triglochin palustre, Pedicularis palustris, Juncus articulatus, Potamogeton polygonifolius, Succisa pratensis,* the mosses *Calliergonella cuspidata*, *Campylium stellatum, Scorpidium revolvens, S. cossonii, Bryum pseudotriquetrum, Sphagnum denticulatum* and *S. palustre* and the liverworts *Pellia epiphylla* and *Lophocolea bidentata*. Areas of M10 were generally small flushes on wet soils on gentle stony slopes, with mixtures of *Carex panicea*, *C. demissa*, *C. flacca*, *C. hostiana*, *C. pulicaris*, *Molinia caerulea*, *Festuca vivipara*, *Holcus lanatus*, *Ranunculus acris*, *R. flammula, Cardamine pratensis, Sagina procumbens, Prunella vulgaris*, *Succisa pratensis*, *Scorzoneroides autumnalis*, *Pedicularis palustris*, *Potentilla erecta*, *Trifolium repens*, *Agrostis canina*, *Equisetum palustre* and the mosses *Scorpidium cossonii*, *S. revolvens*, *Bryum pseudotriquetrum, Cratoneuron filicinum, Campylium stellatum*, *Ctenidium molluscum*, *Calliergonella cuspidata*, *Philonotis fontana, P. calcaerea, Fissidens adianthoides, Aulacomnium palustre, Sphagnum contortum* and *S. teres*.

1.6.18 The stands of Mx comprise small to medium-sized sedge mires whose flora indicates more or less neutral soils. Sedges include *Carex echinata, C. flacca, C. panicea* and *C. pulicaris*. Other graminoids include *Nardus stricta, Festuca vivipara, Holcus lanatus, Cynosurus cristatus* and *Juncus articulatus*. Herbs are common and include *Ranunculus acris, R. flammula, Potentilla erecta, Cardamine pratensis, Prunella vulgaris, Filipendula ulmaria, Scorzoneroides autumnalis, Caltha palustris, Montia fontana, Potamogeton polygonifolius, Viola palustris* and, on one occasion, *Galium boreale*. Bryophytes are abundant and include the mosses *Breutelia chrysocoma, Calliergonella cuspidata, Plagiomnium undulatum, Rhytidiadelphus squarrosus, Bryum pseudotriquetrum, Aulacomnium palustre, Sphagnum teres, S. contortum, Rhizomnium punctatum, Warnstorfia exannulata, Cratoneuron filicinum* and *Philonotis fontana*, and the liverwort *Riccardia chamedryfolia*. Mx mires are widely

but thinly scattered on damp to wet, flushed ground on gentle slopes, in association with grasslands and rush mires.

1.6.19 **Table 1.1: Summary of Phase 1 & NVC communities recorded within the Section 0 study area** below further details the habitat composition recorded within the Section 0 study area.

1.6.20 TNs recorded in Section 0 includes several species records and the locations of flushes (see **Annex D** and **Figures V2-4.3: National Vegetation Classification Survey Area and Results**). The TN flush features, such as M9, M10 and Mx, being too small to be mapped as an individual polygon, although such communities are included within polygons as part of larger mosaics.

1.6.21 Of the vascular species TN records all are classified as species of 'Least Concern' in the Vascular Plant Red Data List for Great Britain (Cheffings & Farrell, 2005[14]), i.e., the lowest classification category therein. With regards bryophyte species TN records, the moss *Campylopus shawii* was recorded in two locations (TNs 0:11 and 0:19), this species is classed as Nationally Scarce (Pescott, 2016[15]), but was recorded outwith the LoD (see **Figure V2-4.3 (0:03) and V2-4.3 (0:13): National Vegetation Classification Survey Area and Results**).

Table 1.1: Summary of Phase 1 & NVC communities recorded within the Section 0 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	0.767	0.10	W7, W7c	0.288	0.038
			W11	0.285	0.037
			W17	0.194	0.025
Broadleaved Plantation Woodland (A1.1.2)	0.073	0.01	AG, BP, YBP	0.073	0.01
Coniferous Plantation Woodland (A1.2.2)	36.05	4.71	CP, YCP	36.05	4.71
Dense/Continuous Scrub (A2.1)	2.97	0.39	W1x	0.80	0.11
			W23	2.17	0.28
Recently Felled Coniferous Woodland (A4.2)	5.31	0.69	CF	5.31	0.69
Unimproved Acid Grassland (B1.1)	32.87	4.30	U4, U4a, U4d	16.74	2.19
			U5, U5a, U5b	8.09	1.06
			U6, U6a, U6c	8.04	1.05
Semi-Improved Acid Grassland (B1.2)	61.32	8.02	U4b	61.32	8.02

[14] Cheffings, C.M. & Farrell, L. (Eds), Dines, T.D., Jones, R.A., Leach, S.J., McKean, D.R., Pearman, D.A., Preston, C.D., Rumsey, F.J., Taylor, I. (2005). The Vascular Plant Red Data List for Great Britain. Species Status 7: 1-116. Joint Nature Conservation Committee, Peterborough. ISSN 1473-0154.

[15] Pescott, O. (2016). Revised lists of nationally rare and scarce bryophytes in Britain. Field Bryology 115, 22-30.

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Unimproved Neutral Grassland (B2.1)	1.08	0.14	MG1a	1.08	0.14
Unimproved Calcareous Grassland (B3.1)	0.06	0.008	CG10, CG10a	0.06	0.008
Improved Grassland (B4)	11.25	1.47	MG6, MG6a	11.19	1.46
			MG7	0.07	0.009
Marsh/Marshy Grassland (B5)	56.68	7.41	M23b	13.03	1.70
			M25, M25c	1.53	0.20
			MG10a, MG10c	30.67	4.01
			Je	11.38	1.49
			Mx	0.07	0.009
Continuous Bracken (C1.1)	5.05	0.66	U20, U20a, U20c	5.05	0.66
Acid Dry Dwarf Shrub Heath (D1.1)	46.09	6.03	H9, H9d	2.01	0.26
			H10, H10a, H10c, H10d	36.71	4.80
			H12, H12a	7.05	0.92
			H21a	0.31	0.04
Wet Dwarf Shrub Heath (D2)	291.91	38.17	M15a	17.44	2.28
			M15b	246.86	32.28
			M15c	23.99	3.14
			M15d	3.62	0.47
Wet Heath/Acid Grassland Mosaic (D6)	0.07	0.009	M15-U6 intermediate	0.07	0.009
Blanket Bog (E1.6.1)	146.10	19.10	M1	0.84	0.11
			M2	0.51	0.07
			M3	0.53	0.07
			M17, M17a, M17b, M17c	83.96	10.98
			M19, M19a	60.25	7.88
	36.54	4.78	M20, M20a	22.17	2.90

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Wet Modified Bog (E1.7)			M25a	13.60	1.78
			M20-M25	0.77	0.10
Acid/Neutral Flush (E2.1)	17.08	2.23	M4	0.008	0.001
			M6, M6a, M6c, M6d	16.75	2.19
			M29x	0.32	0.04
Basic Flush (E2.2)	0.12	0.02	M9	0.01	0.001
			M10	0.03	0.004
			M14	0.09	0.01
Fen (E3)	0.009	0.001	M25PH	0.009	0.001
Standing Water (G1)	1.07	0.14	SW	1.07	0.14
Running Water (G2)	0.81	0.12	RW	0.81	0.12
Amenity Grassland (J1.2)	0.93	0.12	PG	0.93	0.12
Building (J3.6)	0.35	0.05	BD	0.35	0.05
Bare Ground (J4)	10.29	1.35	BG	10.29	1.35
TOTAL				**746.82**	**100**

Section 1 – Edinbane to North of Sligachan

1.6.22 The Section 1 study area covered 645.7 ha, see **Figures V2-4.3 (1:00) to V2-4.3 (1:16): National Vegetation Classification Survey Area and Results**.

1.6.23 The Section 1 study area for the Proposed Development originates at Edinbane Substation where it heads east for a short section through grazed MG10 marshy grassland before the habitat changes to M17 and M19 blanket bog. The OHL line then changes direction where it crosses the upper Ose River and continues southeast and uphill between the Raegerry Burn to the west and Beinn a' Chait to the east through dry and rank M19 blanket bog to the conifer plantation at Glen Vic Askill, which in the open areas and failed forestry coupes contains a mix of M17 and M19 blanket bog, M1 and M2 bog pools, and M25a wet modified bog.

1.6.24 Upon leaving the plantation at Glen Vic Askill the Proposed Development heads in a generally easterly direction, crossing the B885 road, to the plantation at Lòn Dubh. The habitats in this stretch are primarily good quality M17 and M19 blanket bogs with associated M1, M2 and M3 bog pools. The expanse of blanket bog is broken up with smaller patches of mainly M15b/M15c wet heath and M25a wet modified bog.

1.6.25 From Lòn Dubh the Proposed Development generally heads southwards, to the east of Am Maol, through Achaleathan, and to the plantation west of Mugeary. The majority of the stretch is also dominated by generally

good quality blanket bog (mostly M17) and with some patches of M15 wet heath and M25a wet modified bog. The large basin of blanket bog at Achaleathan appears wet and on flat ground, likely with deep peat, which is evident from some of the peat banks around the Abhainn an Acha-leathain watercourse.

1.6.26 After leaving the plantation at Mugeary the Proposed Development heads south and southeast via An Leitir to Glen Varragill Forest, and then beyond to the end of Section 1, located just west of Meall Odhar Mòr. This stretch is a more complex upland habitat mosaic with variable topography, and stands and complex mosaics of primarily blanket bog, wet modified bog, wet heath, dry heath, and with occasional flushes.

1.6.27 The blanket bog within the Section 1 study area is extensive, particularly between Edinbane and An Leitir. Much of this is M17a and M17b and generally includes *Calluna vulgaris, Erica tetralix, Eriophorum vaginatum, Eriophorum angustifolium, Molinia caerulea, Trichophorum germanicum* and *Narthecium ossifragum*, with some stands also including some *Empetrum nigrum*, *Vaccinium myrtillus* and *Drosera rotundifolia* (in M17a). Mosses include *Sphagnum capillifolium, S. compactum, S. papillosum* (particularly in M17a), *Hylocomium splendens* and *Pleurozium schreberi*. M17b also stands out as having many hummocks of the moss *Racomitrium lanuginosum* and patches of *Cladonia* spp. (lichens). The areas of M19 are typically similar to those as described in the Section 0 study area above. The one exception to this is the area of drier and rank M19 around Raegerry Burn and Beinn a' Chait where the vegetation comprises a tall dense sward of very dominant *Calluna vulgaris* but with frequent *Molinia caerulea* and a fairly constant, but relatively low cover, of *Eriophorum vaginatum* underneath and through the heather. Sphagna are very scarce in this particular area, and where present tends to be *Sphagnum capillifolium*, otherwise the ground layer is dominated by pleurocarpous mosses.

1.6.28 Error! Reference source not found. below details the habitat composition recorded within the Section 1 study area.

1.6.29 A single TN was recorded within Section 1, relating to the presence of *Juniperus communis*, this is a species of Least Concern[14] and was recorded 112 m from the nearest proposed works for the Proposed Development (see **Annex D** and **Figure V2-4.3 (1.14): National Vegetation Classification Survey Area and Results**).

Table 1.2: Summary of Phase 1 & NVC communities recorded within the Section 1 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	0.05	0.008	W17	0.05	0.008
Coniferous Plantation Woodland (A1.2.2)	142.75	22.11	CP, YCP	142.75	22.11
Dense/Continuous Scrub (A2.1)	0.24	0.04	W1x	0.23	0.04
			W23	0.01	0.002
Scattered Broadleaved Tree (A3.1)	0.002	0.0003	SBT	0.002	0.0003
Scattered Coniferous Tree (A3.2)	0.06	0.01	SCT	0.06	0.01
Scattered Mixed Woodland (A3.3)	0.0004	0.0001	SMT	0.0004	0.0001

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Unimproved Acid Grassland (B1.1)	10.45	1.62	U4, U4a, U4d	5.73	0.89
			U5, U5a	4.05	0.63
			U6, U6c	0.68	0.11
Semi-Improved Acid Grassland (B1.2)	2.32	0.36	U4b	2.32	0.36
Marsh/Marshy Grassland (B5)	15.06	2.33	M23a, M23b	1.27	0.20
			M25, M25b	3.30	0.51
			MG10a, MG10c	7.59	1.18
			Je	2.91	0.45
Continuous Bracken (C1.1)	0.49	0.08	U20, U20a	0.49	0.08
Non-Ruderal (C3.2)	0.006	0.001	U16	0.006	0.001
Acid Dry Dwarf Shrub Heath (D1.1)	12.25	1.90	H10, H10a	5.91	0.92
			H12, H12a	4.23	0.66
			H21, H21a	0.004	0.001
			H9-H12	0.02	0.003
			H10-M25	0.26	0.04
			H12-M25	1.83	0.28
Wet Dwarf Shrub Heath (D2)	89.70	13.89	M15a	2.61	0.41
			M15b	73.77	11.43
			M15c	13.10	2.03
			M15-M17	0.23	0.04
Blanket Bog (E1.6.1)	251.34	38.93	M1	3.26	0.50
			M2	1.67	0.26
			M3	0.97	0.15
			M17, M17a, M17b, M17c	156.10	24.18
			M19, M19a, M19b	89.35	13.84
Wet Modified Bog (E1.7)	102.79	15.92	M20, M20a, M20b	8.41	1.30
			M25a	94.38	14.62

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Acid/Neutral Flush (E2.1)	11.87	1.84	M6a, M6c, M6d	11.81	1.83
			M6-M25	0.04	0.006
			M29x	0.03	0.004
Basic Flush (E2.2)	0.05	0.008	M10a	0.05	0.008
Standing Water (G1)	0.21	0.03	SW	0.21	0.03
Running Water (G2)	1.56	0.24	RW	1.56	0.24
Quarry (I2.1)	0.13	0.02	QY	0.13	0.02
Building (J3.6)	0.006	0.001	BD	0.006	0.001
Bare Ground (J4)	4.34	0.67	BG	4.34	0.67
TOTAL				**645.7**	**100**

Section 2 – North of Sligachan to Broadford

1.6.30 The Section 2 study area covered 661.1 ha, see **Figures V2-4.3 (2:00) to V2-4.3 (2:17): National Vegetation Classification Survey Area and Results**.

1.6.31 The Section 2 study area for the Proposed Development begins just west of Meall Odhar Mòr and heads southeast mainly through M15 wet heath to the tidal section of the River Sligachan where there is some SM16 saltmarsh and exposed shingle substrates. After crossing the River Sligachan the Proposed Development follows the route of the A87 road to around Torr Dubh, where it then leaves the main carriageway and heads east and to the south of Sconser. The Proposed Development then routes south, around the head of Loch Ainort, then east to Strollamus, before heading generally southeast again to its termination at Broadford Substation.

1.6.32 The majority of the entire Section 2 study area is dominated by M15 wet heath which is continuous and expansive locally, making up the bulk of the local landscape here. The M15 tends to be mixes of M15a, M15b and M15c dependent on topography, depth of peat, wetness, and grazing levels. M15d was rarely recorded in Section 2. The M15 here contains the usual mix of characteristic species with *Calluna vulgaris, Trichophorum germanicum, Erica tetralix, Molinia caerulea, Narthecium ossifragum* and *Eriophorum angustifolium*. Some stands also included species such as *Empetrum nigrum*, *Juncus squarrosus, Potentilla erecta, Galium saxatile, Polygala serpyllifolia* and in dry patches some *Erica cinerea*. The patches of M15a were more flushed and in many instances included *Schoenus nigricans* as well as various *Carex* spp. and generally slightly more *Molinia caerulea*. Mosses within M15 here contained the usual mix of typical pleurocarpous and acrocarpous species with patches of *Sphagnum capillifolium*, with frequent to abundant *Racomitrium lanuginosum* and *Cladonia* spp. (lichens) generally separating out the stands of M15c.

1.6.33 Throughout the expanse of wet heath there are smaller and scattered pockets of other typical upland habitats, including M17 and M19 blanket bog, M25a and occasionally M20 wet modified bog, and smaller patches of dry heath, mostly H10a but also some H10c, H12a and H21a.

1.6.34 Several small flush features too small to map are present on the mainly prevailing sloping ground and form part of the intricate mosaics with the wet heath communities, these flushes tend to be M10a with some M6. The small flushes, runnels, and patches of M10a typically include species such as various small *Carex* spp., *Narthecium ossifragum, Erica tetralix, Eriophorum angustifolium, Trichophorum germanicum, Pinguicula vulgaris, Schoenus nigricans, Selaginella selaginoides, Pedicularis sylvatica* and mosses include *Sphagnum denticulatum* as well as the 'brown mosses' species group.

1.6.35 Error! Reference source not found. below details the habitat composition recorded within the Section 2 study area.

Table 1.3: Summary of Phase 1 & NVC communities recorded within the Section 2 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	0.95	0.14	W4	0.05	0.007
			W11	0.16	0.03
			W17, W17b	0.74	0.11
Coniferous Plantation Woodland (A1.2.2)	11.63	1.76	CP, YCP	11.63	1.76
Dense/Continuous Scrub (A2.1)	1.15	0.18	W1x	0.67	0.17
			W23, W23a	0.48	0.07
Scattered Broadleaved Tree (A3.1)	0.01	0.002	SBT	0.01	0.002
Recently Felled Coniferous Woodland (A4.2)	2.30	0.35	CF	2.30	0.35
Unimproved Acid Grassland (B1.1)	20.99	3.17	U4, U4a	16.80	2.54
			U5, U5a, U5c	4.06	0.61
			U6	0.12	0.02
Semi-Improved Acid Grassland (B1.2)	7.51	1.14	U4b	7.51	1.14
Marsh/Marshy Grassland (B5)	6.08	0.92	M23, M23a, M23b	2.50	0.38
			M25, M25b	1.85	0.28
			MG10a, MG10c	0.81	0.12
			Je	0.93	0.14
Continuous Bracken (C1.1)	3.53	0.53	U20, U20a, U20c	3.53	0.53
Tall Ruderal (C3.1)	0.05	0.007	OV25, OV27	0.05	0.007

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Acid Dry Dwarf Shrub Heath (D1.1)	24.65	3.73	H10, H10a, H10c	17.48	2.64
			H12a	0.86	0.13
			H21a	0.07	0.01
			H9-H12	0.68	0.10
			H10-M15	4.25	0.64
			H10-M25	1.15	0.18
			H12-M25	0.16	0.03
Wet Dwarf Shrub Heath (D2)	468.60	70.8	M15a	69.70	10.54
			M15b	245.59	37.15
			M15c	152.14	23.01
			M15d	0.39	0.06
			M15-M17	0.78	0.12
Wet Heath/Acid Grassland Mosaic (D6)	1.25	0.19	M15-U4	1.25	0.19
Blanket Bog (E1.6.1)	26.49	4.01	M1	5.12	0.78
			M2a	0.18	0.03
			M3	1.09	0.17
			M17, M17a, M17b	15.21	2.30
			M19a	4.89	0.74
Wet Modified Bog (E1.7)	20.97	3.17	M20	1.38	0.21
			M25a	19.58	2.96
Acid/Neutral Flush (E2.1)	3.34	0.51	M6, M6a, M6c	3.27	0.49
			M6-M25	0.07	0.01
Basic Flush (E2.2)	10.58	1.60	M10, M10a	10.58	1.60
Standing Water (G1)	10.83	1.64	SW	10.83	1.64
Running Water (G2)	5.67	0.86	RW	5.67	0.86
Dense/Continuous Saltmarsh (H2.6)	6.17	0.93	SM16	6.17	0.93
Quarry (I2.1)	1.41	0.21	QY	1.41	0.21

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Amenity Grassland (J1.2)	0.30	0.05	PG	0.30	0.05
Building (J3.6)	0.36	0.06	BD	0.36	0.06
Intertidal Shingle/Cobble (H1.2), Scree – Acid/Neutral (I1.2.1), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	26.30	3.98	BG	26.30	3.98
TOTAL				**661.1**	**100**

Section 3 – Broadford to Kyle Rhea

1.6.36 The Section 3 study area covered 635.4 ha, see **Figures V2-4.3 (3:00) to V2-4.3 (3:15): National Vegetation Classification Survey Area and Results**.

1.6.37 Section 3 of the Proposed Development starts at Broadford Substation where it heads southeast through conifer plantation to meet the B8083 road. At this point the Section 3 study area then traverses primarily open ground to the south of Broadford and Harrapool and passes through a range of habitats in mosaics, including blanket bog, wet modified bog, wet heath, dry heath, flush, bracken, acid grassland and marshy grassland.

1.6.38 From south of Skulamus the Proposed Development generally heads east to Abhainn Lusa, where there is a riparian gully of W11 and W17 semi-natural broadleaved woodland. Between Skulamus and Abhainn Lusa the habitat is generally a large expanse of blanket bog (mostly M17) and wet heath (M15) and complex mosaics of these, along with various bog pools (M1-M3) and small pools of standing dystrophic water, and patches of M25 along the lines of the many minor watercourses.

1.6.39 From Abhainn Lusa northeast and east the Proposed Development passes through both standing and felled conifer plantation in the Kyle Farm area until it reaches the boundary of the Kinloch and Kyleakin Hills Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) just south of Loch na Bèiste and at the W11 and W17 broadleaved woodland gully around Allt a' Ghleannain.

1.6.40 Within the Kinloch and Kyleakin Hills SAC/SSSI the Proposed Development heads east and generally skirts the southern and upslope edges of the Mudalach woodlands before reaching the headland at Rubha Buidhe where it then routes south over upland habitat to the Allt an t-Seachrain, after which the Proposed Development continues south through formerly felled plantation that is now regenerating back to upland habitats to the existing OHL crossing location at Kylerhea, where Section 3 ends.

1.6.41 Broadleaved woodland in Section 3, which is mostly within the Kinloch and Kyleakin Hills SAC/SSSI area, is generally riparian and located along the banks of watercourses or is more expansive along the lower slopes of Mudalach. These stands are largely dominated by W17 and less so W11, but there are also smaller areas of W4 and, more rarely, W7. These woods are dominated by *Betula* spp. with many mature stands, but also areas of younger and expanding regeneration. Throughout the *Betula* spp. there is often a variable scattering of *Quercus petraea, Sorbus aucuparia* (which can be locally dominant), *Ilex aquifolium* and *Salix* spp. The understorey in many places is overly dominated by *Pteridium aquilinum*, but where less so other species

recorded include *Dryopteris* spp., *Luzula sylvatica, Calluna vulgaris, Erica cinerea, Vaccinium myrtillus, Potentilla erecta, Molinia caerulea*, and a number of typical grass species as well as a carpet of typical pleurocarpous mosses. Further smaller and more fragmented patches of woodland or scrub are generally comprised of regenerating *Betula* spp., *Sorbus aucuparia* and *Salix* spp., or as scattered trees along cliff edges, ravines or through a number of open habitat types.

1.6.42 The wet heath in Section 3 is predominantly mixtures of M15b and M15c, with the vegetation similar in composition to those as described above for Sections 0 to 2. The wet heath within the Kinloch and Kyleakin Hills SAC/SSSI part of the study area appears more rank and leggier and less grazed than the wet heath that is present west of Abhainn Lusa.

1.6.43 With respect to blanket bog the main communities are again M17 followed by M19, although there are some instances of more intermediate communities (see table below). The main expanses of blanket bog are between Skulamus and Abhainn Lusa, in a mosaic with areas of wet heath. The M17 composition here is similar to that as described earlier and is of good quality, with a high cover of Sphagna and the addition of patches of locally abundant *Myrica gale* and frequent small bog pool communities (M1-M3). Areas of blanket bog within the Kinloch and Kyleakin Hills SAC/SSSI are less expansive but are scattered throughout the study area, the largest areas being in the west where M17 and M19 again are the most common forms.

1.6.44 Dry heaths are usually small and patchy within the study area, most of them occurring on steeper ground, banks of gullied watercourses, and knolls. The most common community present is H10, typically on shallow soils and dominated by *Calluna vulgaris* with frequent *Erica cinerea*. On more humid slopes, shady watercourse banks and knolls H21 is quite common. H12 is present but generally uncommon within the study area.

1.6.45 Error! Reference source not found. below details the habitat composition recorded within the Section 3 study area (including within the SAC/SSSI area).

1.6.46 TNs recorded in Section 3 includes several species records and the locations of springs and flushes (see **Annex D** and **Figures V2-4.3 (3:03) to V2-4.3 (3:14): National Vegetation Classification Survey Area and Results**). The TN spring and flush features being too small to be mapped as an individual polygon, although such communities are included within polygons as part of larger mosaics. Of the vascular species TN records all are classified as species of 'Least Concern' in the Vascular Plant Red Data List for Great Britain[14].

1.6.47 Bryophyte and lichen species TN records include instances of Nationally Rare and/or Nationally Scarce species, these are discussed in **Appendix V2-4.6: Kinloch & Kyleakin Hills SAC/SSSI Bryophyte and Lichen Survey Report**.

Table 1.4: Summary of Phase 1 & NVC communities recorded within the Section 3 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	38.55	6.07	W4, W4b	8.20	1.291
			W7, W7c	0.78	0.12
			W11, W11b	7.10	1.12
			W17, W17, W17b	22.47	3.54
Broadleaved Plantation Woodland (A1.1.2)	0.004	0.001	W17x	0.004	0.001

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Coniferous Plantation Woodland (A1.2.2)	63.41	9.98	CP, YCP	63.41	9.98
Dense/Continuous Scrub (A2.1)	1.91	0.30	W1x	1.79	0.28
			W23, W23a	0.12	0.02
Scattered Broadleaved Tree (A3.1)	1.01	0.16	SBT	1.01	0.16
Recently Felled Coniferous Woodland (A4.2)	63.45	9.99	CF	63.45	9.99
Unimproved Acid Grassland (B1.1)	7.52	1.18	U4, U4a	7.23	1.14
			U5, U5a, U5c, U5d	0.29	0.04
			U6	0.003	0.001
Semi-Improved Acid Grassland (B1.2)	0.85	0.13	U4b	0.85	0.13
Improved Grassland (B4)	0.08	0.01	MG6	0.08	0.01
Marsh/Marshy Grassland (B5)	41.34	6.51	M23, M23a, M23b	3.12	0.49
			M25, M25b, M25c	6.98	1.10
			MG10a, MG10c	26.08	4.11
			Je	5.13	0.81
			Mx	0.02	0.004
Continuous Bracken (C1.1)	31.89	5.02	U20, U20a, U20b, U20c	31.89	5.02
Tall Ruderal (C3.1)	0.02	0.002	OV27	0.02	0.002
Non-Ruderal (C3.2)	0.03	0.004	U19	0.03	0.004
Acid Dry Dwarf Shrub Heath (D1.1)	25.16	3.96	H10, H10a	9.32	1.47
			H12, H12a, H12c	7.78	1.22
			H21, H21a	6.61	1.04
			H10-M15	0.77	0.12
			H10-M25	0.41	0.06
			H12-M25	0.27	0.04

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Wet Dwarf Shrub Heath (D2)	162.70	25.61	M15a	6.99	1.10
			M15b	102.68	16.16
			M15c	47.07	7.41
			M15-M17	5.96	0.94
Blanket Bog (E1.6.1)	99.51	15.66	M1	2.83	0.45
			M2, M2a	4.35	0.68
			M3	0.65	0.10
			M17, M17a, M17b	80.37	12.65
			M19, M19a, M19c	10.67	1.68
			M17-M25	0.54	0.08
			M19-M25	0.10	0.02
Wet Modified Bog (E1.7)	69.35	10.91	M20, M20b	0.73	0.12
			M25a	68.62	10.80
Acid/Neutral Flush (E2.1)	8.02	1.26	M6, M6a, M6c, M6d	6.80	1.07
			M6-M25	1.22	0.19
Basic Flush (E2.2)	0.40	0.06	M10a, M10b	0.40	0.06
Swamp (F1)	0.41	0.06	S4	0.35	0.06
			S9a	0.06	0.01
Standing Water (G1)	13.55	2.13	SW	13.55	2.13
Running Water (G2)	1.30	0.20	RW	1.30	0.20
Building (J3.6)	0.62	0.10	BD	0.62	0.10
Intertidal Boulders/Rocks (H1.3), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	4.36	0.69	BG	4.36	0.69
TOTAL				**635.4**	**100**

1.6.48 The study area for the Alternative Alignment within Section 3 covered 668.9 ha, see **Figures V6-4.3 (3:00) to V6-4.3 (3:19): National Vegetation Classification Survey Area and Results**.

1.6.49 From Broadford Substation to Abhainn Lusa the study area and associated habitats for the Alternative Alignment and Proposed Alignment are exactly the same within this portion of Section 3. However, at Abhainn Lusa the Alternative Alignment turns southeast and generally flanks the C1239 minor road down through Glen Arroch and Kylerhea Glen to just west of the settlement of Kylerhea, where the Alternative Alignment then heads north along the coast to the existing OHL crossing location at Kyle Rhea.

1.6.50 Where the Alternative Alignment splits at Abhainn Lusa the Alternative Alignment initially passes through some conifer plantation to the southwest of Loch an na Sàile which is mainly checked forestry or has failed/is failing due to the underlying peatlands substrates. Upon leaving the forestry here and for the majority of the Alternative Alignment to Kylerhea it passes through the Kinloch and Kyleakin Hills SAC/SSSI. The majority of the habitat in this stretch is M15b and M15c wet heath although this is punctuated by frequent smaller patches of blanket bog (mainly M17, M19, and some M19-M25 intermediate), wet modified bog (M25), flushes (M6 and M6-M25 intermediate), dry heath (H10 and H21), and bracken (U20). These habitats often form complex mosaics over short distances due to variable topography, aspect, soil/peat depths and wetness. Woodland is very scarce in this portion of the Alternative Alignment study area, only present as a few small riparian strips of predominately W11 and W17 *Betula* spp. dominated woodland, although there are often isolated individual or small patches of younger scattered broadleaved trees (SBT) in the study area and locally here. Infrequent small patches of *Salix aurita* scrub (W1x) are also present.

1.6.51 North of Kylerhea and the C1239 road the shallower soils and sloping ground are more of a dry heath and bracken mix, although there are still frequent small patches of wet heath scattered throughout. North of the RSPB hide/car park area the Alternative Alignment primarily passes through conifer plantation, with occasional patches of bracken and also broadleaved woodland in watercourse gullies until it reaches the existing OHL crossing location at Kyle Rhea, where Section 3 ends.

1.6.52 **Table 1.5: Summary of Phase 1 & NVC communities recorded within the Alternative Alignment study area** below details the habitat composition recorded within the Alternative Alignment study area (including within the SAC/SSSI area).

1.6.53 TNs recorded in Section 3 of relevance to the Alternative Alignment includes several species records and the locations of flushes (see **Annex D** and **Figures V6-4.3 (3:03) to V6-4.3 (3:19): National Vegetation Classification Survey Area and Results**). The TN flush features being too small to be mapped as an individual polygon, although such communities are included within polygons as part of larger mosaics. Of the vascular species TN records all are classified as species of 'Least Concern' in the Vascular Plant Red Data List for Great Britain[14].

1.6.54 Bryophyte and lichen species TN records include instances of Nationally Rare and/or Nationally Scarce species, these are discussed in **Appendix V2-4.6: Kinloch & Kyleakin Hills SAC/SSSI Bryophyte and Lichen Survey Report**.

Table 1.5: Summary of Phase 1 & NVC communities recorded within the Alternative Alignment study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	10.11	1.51	W4, W4b	1.00	0.15
			W7c	0.08	0.01
			W11, W11a, W11b	2.02	0.30

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			W17, W17a, W17b, W17c	7.00	1.05
Broadleaved Plantation Woodland (A1.1.2)	0.04	0.006	W17x, BP	0.04	0.006
Coniferous Semi-Natural Woodland (A1.2.1)	0.04	0.007	W18	0.04	0.007
Coniferous Plantation Woodland (A1.2.2)	98.27	14.69	CP, YCP	98.27	14.69
Dense/Continuous Scrub (A2.1)	2.72	0.41	W1x	2.54	0.38
			W23, W23a	0.18	0.03
Scattered Broadleaved Tree (A3.1)	0.96	0.14	SBT	0.96	0.14
Scattered Coniferous Tree (A3.2)	0.10	0.02	SCT	0.10	0.02
Recently Felled Coniferous Woodland (A4.2)	4.19	0.63	CF	4.19	0.63
Unimproved Acid Grassland (B1.1)	8.07	1.21	U4, U4a	7.81	1.17
			U5, U5a. U5c, U5d	0.26	0.04
			U6	0.003	0.0005
Semi-Improved Acid Grassland (B1.2)	0.96	0.14	U4b	0.96	0.14
Improved Grassland (B4)	0.08	0.01	MG6	0.08	0.01
Marsh/Marshy Grassland (B5)	34.37	5.14	M23, M23a, M23b	1.47	0.22
			M25, M25b, M25c	4.54	0.68
			M28	0.03	0.01
			MG10a, MG10c	26.09	3.90
			Mx	0.04	0.01
			Je	2.19	0.33
Continuous Bracken (C1.1)	28.79	4.30	U20, U20a, U20b, U20c	28.59	4.27

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			W25a	0.2	0.03
Tall Ruderal (C3.1)	0.0003	0.00004	W24	0.0003	0.00004
Non-Ruderal (C3.2)	0.12	0.02	U16, U16c	0.08	0.01
			U19	0.03	0.004
			Daff	0.004	0.001
Acid Dry Dwarf Shrub Heath (D1.1)	24.27	3.63	H9	0.05	0.01
			H10, H10a, H10c, H10d	18.53	2.76
			H12, H12, H12c	0.71	0.11
			H21a	3.39	0.51
			H10-M15	0.77	0.12
			H10-M25	0.56	0.08
			H12-M25	0.26	0.04
Wet Dwarf Shrub Heath (D2)	229.52	34.31	M15a	8.21	1.23
			M15b	120.96	18.08
			M15c	94.38	14.11
			M15-M17	5.97	0.89
Blanket Bog (E1.6.1)	107.58	16.08	M1	2.73	0.41
			M2, M2a	3.69	0.55
			M3	0.30	0.05
			M17, M17a, M17b	74.94	11.20
			M19, M19a, M19b	22.57	3.37
			M17-M25	0.17	0.02
			M19-M25	3.18	0.47
Wet Modified Bog (E1.7)	82.04	12.27	M20, M20b	0.72	0.11
			M25	81.25	12.15
			M20-M25	0.07	0.01
Acid/Neutral Flush (E2.1)	6.50	0.97	M4	<0.0001	<0.0001
			M6, M6a, M6c. M6d	6.12	0.91

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			M6-M25	0.38	0.06
Basic Flush (E2.2)	0.35	0.05	M10, M10a	0.34	0.05
			M14	0.005	0.001
Bare Peat (E4)	0.01	0.001	ExP	0.01	0.001
Swamp (F1)	0.41	0.06	S4	0.35	0.06
			S9a	0.06	0.01
Standing Water (G1)	12.58	1.88	SW	12.58	1.88
Running Water (G2)	4.96	0.74	RW	4.96	0.74
Quarry (I2.1)	0.15	0.02	QY	0.15	0.02
Building (J3.6)	0.66	0.10	BD	0.66	0.10
Intertidal Boulders/Rocks (H1.3), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	10.40	1.56	BG	10.40	1.56
Non-Surveyed Area (NSA)	0.64	0.10	NSA	0.64	0.10
TOTAL				**668.9**	**100**

Section 4 – Kyle Rhea to Loch Cuaich

1.6.55 The Section 4 study area covered 1204.8 ha, see **Figures V2-4.3 (4:00) to V2-4.3 (4:29): National Vegetation Classification Survey Area and Results**.

1.6.56 Section 4 of the Proposed Development is a long Section and which for the most part is very remote. This Section begins on the mainland side of the existing Kyle Rhea crossing where it initially traverses a strip of coastal W17 broadleaved woodland and enters conifer plantation until it re-emerges into open upland habitat northwest of Creag Dhubh, although there is a notable patch of M17 and M19 blanket bog in a large plantation opening around the summit plateau of Druim na Leitire.

1.6.57 Around the Creag Dhubh and Cnoc Mòr area the Proposed Development passes through a typical upland habitat mosaic for the area with patches of wet heath, dry heath, blanket bog, flush, acid grasslands, bracken and occasional small strips and patches of broadleaved woodland.

1.6.58 After crossing the Glenmore River south of Creag Mhòr the OHL for the Proposed Development passes through a large area of mainly W17 mature broadleaved woodland on the steep slopes of Lag Leamhain until it reaches an upper more level and gently sloping plateau to the east of Tòrr na h-Iolaire. The slopes here are too steep for access tracks which instead would be routed further east around the woodland and up the relatively less steep

slopes west of Coire a' Bheoil-àirigh, this area is dominated by M19 blanket bog which is rather unusually present on quite steep sloping ground for this habitat type, although correspondingly peat depths would be expected to be quite shallow as a result, and the levels of Sphagna observed were less than would be expected in deeper, wetter and level peatland. The blanket bog here is punctuated by numerous small knolls of bracken and some patches of M15 wet heath.

1.6.59 From Tòrr na h-lolaire the Proposed Development heads south and southeast for approximately 3.6 km to the area around Coire nan Caorach and Drium losal. The majority of this stretch is characterised by M15b and M15c wet heath although it is frequently interspersed with small plateaus, basins and terraces of blanket bog (mainly M17 but also M19), especially around Suilean Dubha and due north of here. There are also numerous patches of bracken here, and less so dry heath. Broadleaved woodland is restricted to riparian strips around watercourses, and acid grasslands are of low extent.

1.6.60 The areas around Coire nan Caorach, Drium losal and Torr a Phreasachain are mainly characterised by stands of bracken and dry heath.

1.6.61 As the Proposed Development crosses the Abhainn a' Ghlinne Bhig by Strath a' Chomair it again primarily traverses wet heath habitats, and this continues for over 6 km to Druim Eileasaig, with M15c being the dominant community. The large expanse of wet heath is punctuated by smaller patches of other typical habitats here, primarily patches of M17 blanket bog.

1.6.62 Southeast of Druim Eileasaig the Proposed Development passes through an area of more open canopied W17 broadleaved woodland around the Allt an Tomain Odhair and Allt Lochannan Crìonack watercourses. After this it passes through a short section of blanket bog and wet heath around Gleandubhlochain.

1.6.63 From Gleandubhlochain to Kinloch Hourn, M15c is again the prevailing and dominant habitat type which is very extensive in the study area and beyond in the wider landscape, with some pockets of blanket bog also a common feature. A notable aspect of the habitat here is the damage to the wet heath and its degradation through an apparent long history of overgrazing by deer. As a result, the sward is relatively short compared to other areas of better-quality wet heath around the Proposed Development and there are numerous sigs of grazing, poaching and peat erosion caused by deer. The substantial area of ancient *Betula* spp. woodland located to the southeast of Gleandubhlochain has also been evidently negatively impacted by deer in the area. The understorey vegetation in these woods is cropped short by grazing with no seedlings or young trees present, as well as deer damage to older trees, the result is an ageing, declining and increasingly sparse woodland with no natural regeneration evident, or possible, in the current situation.

1.6.64 In the relatively short stretch from Kinloch Hourn to Innis na Craige / Loch Coire Shùbh the Proposed Development passes through a mosaic of broadleaved woodland, wet heath, blanket bog, dry heath, bracken, and rocky outcrops.

1.6.65 From Innis na Craige / Loch Coire Shùbh the Proposed Development again predominantly passes through extensive expanses of M15 (mostly M15c) wet heath until the end of Section 4 by Loch Cuiach Dam, the wet heath here has also been notably grazed by deer. The wet heath is intermittently broken up by patches of the other typical upland habitat types already described above, in particular blanket bog and bracken, and also may exposed rocky knolls or patches of bare rock. Broadleaved woodland is generally restricted to narrow riparian stands around some of the watercourses. There are also isolated stands of broadleaved plantation around Allt Choire nan Eiricheallach, and some small patches of conifer plantation scattered in this stretch. The area to the south and southwest of Meall a' Mhèil also contains a high abundance of invasive non-native *Rhododendron ponticum* with many dense mature patches around watercourses and providing a woodland understorey, there are also dense stands along the U1207 minor road and much spread and invasion of young *Rhododendron ponticum* heading up the slopes here and colonising areas of semi-natural upland habitats, such as the areas of wet heath.

1.6.66 Error! Reference source not found. below details the habitat composition recorded within the Section 4 study area.

1.6.67 TNs recorded in Section 4 includes species records and the locations of M10 flushes (see **Annex D** and **Figures V2-4.3 (4:01) to V2-4.3 (4:29): National Vegetation Classification Survey Area and Results**). The TN flush features being too small to be mapped as an individual polygon, although such communities are included within polygons as part of larger mosaics. Of the vascular species TN record of *Juniperus communis* this is classified as a species of 'Least Concern' in the Vascular Plant Red Data List for Great Britain[14].

Table 1.6: Summary of Phase 1 & NVC communities recorded within the Section 4 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	69.51	5.77	W4, W4b, W4c	1.19	0.10
			W7, W7c	0.94	0.08
			W10	0.16	0.01
			W11	2.48	0.21
			W17	64.74	5.37
Broadleaved Plantation Woodland (A1.1.2)	5.87	0.49	W17x	5.87	0.49
Coniferous Semi-Natural Woodland (A1.2.1)	1.48	0.12	W18	1.48	0.12
Coniferous Plantation Woodland (A1.2.2)	53.89	4.85	CP, YCP	53.89	4.85
Mixed Plantation Woodland (A1.3.2)	8.72	0.72	MP	8.72	0.72
Dense/Continuous Scrub (A2.1)	0.63	0.05	W1x	0.00	0.0003
			W23	0.63	0.05
Scattered Broadleaved Tree (A3.1)	0.24	0.02	SBT	0.24	0.02
Scattered Coniferous Tree (A3.2)	0.04	0.004	SCT	0.04	0.004
Recently Felled Coniferous Woodland (A4.2)	19.77	1.64	CF	19.77	1.64
Unimproved Acid Grassland (B1.1)	25.55	2.12	U4, U4a	18.88	1.57
			U5, U5a	4.95	0.41
			U6	1.72	0.14

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Semi-Improved Acid Grassland (B1.2)	1.68	0.14	U4b	1.68	0.14
Unimproved Neutral Grassland (B2.1)	0.19	0.01	MG1	0.15	0.01
			MG9, MG9a	0.05	0.004
Improved Grassland (B4)	6.12	0.51	MG6	6.12	0.51
Marsh/Marshy Grassland (B5)	31.32	2.60	M23b	0.47	0.04
			M25, M25b	20.09	1.67
			MG10a	3.74	0.31
			Je	7.02	0.58
Continuous Bracken (C1.1)	81.42	6.76	U20, U20a, U20b, U20c	81.42	6.76
Tall Ruderal (C3.1)	0.27	0.02	OV25	0.10	0.01
			OV27	0.12	0.01
			W24	0.05	0.004
Acid Dry Dwarf Shrub Heath (D1.1)	34.47	2.86	H10, H10a, H10b, H10c	11.93	0.99
			H12, H12a	6.39	0.53
			H21, H21a	0.85	0.07
			H10-M15	2.68	0.22
			H10-M25	5.78	0.48
			H12-M25	6.84	0.57
Wet Dwarf Shrub Heath (D2)	637.52	52.91	M15	5.16	0.43
			M15a	14.49	1.20
			M15b	217.54	18.06
			M15c	387.37	32.15
			M15d	0.51	0.04
			M15-M17	12.45	1.03
Blanket Bog (E1.6.1)	118.72	9.85	M1	1.30	0.11
			M2	0.96	0.08
			M3	0.71	0.06

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			M17, M17a, M17b, M17c	69.71	5.79
			M19, M19a, M19b, M19c	44.34	3.68
			M17-M25	0.50	0.04
			M19-M25	1.20	0.10
Wet Modified Bog (E1.7)	20.03	1.66	M20b	0.34	0.03
			M25a	19.69	1.63
Acid/Neutral Flush (E2.1)	4.86	0.40	M6, M6a, M6c	4.76	0.40
			M6-M25	0.10	0.01
			M29x	0.003	0.0002
Basic Flush (E2.2)	0.02	0.002	M11	0.02	0.002
Bare Peat (E4)	0.27	0.02	ExP	0.27	0.02
Swamp (F1)	0.01	0.001	S9	0.01	0.001
Standing Water (G1)	20.24	1.68	SW	20.24	1.68
Running Water (G2)	12.39	1.03	RW	12.39	1.03
Quarry (I2.1)	0.42	0.03	QY	0.42	0.03
Introduced Shrub (J1.4)	6.98	0.58	RP	6.98	0.58
Building (J3.6)	0.36	0.03	BD	0.36	0.03
Scree – Acid/ Neutral (I1.2.1), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	37.31	3.10	BG	37.31	3.10
TOTAL				**1204.8**	**100**

Section 5 – Loch Cuaich to Invergarry

1.6.68 The Section 5 study area covered 684.5 ha, see **Figures V2-4.3 (5:00) to V2-4.3 (5:17): National Vegetation Classification Survey Area and Results**.

1.6.69 Section 5 of the Proposed Development begins around Loch Cuaich dam where there are bracken dominated slopes, however the habitat character quickly changes to a M15b/M15c wet heath dominated landscape again, in keeping with previous sections, between the dam and the conifer plantation by Tomdoun. The wet heath is

interspersed with smaller patches of bracken, blanket bog, wet modified bog, and more rarely, dry heath. Many small watercourses are present on the steep slopes here.

1.6.70 North of Tomdoun, the Proposed Development passes through conifer plantation with the existing wayleave, forest rides and patches of open ground within this area mainly comprising wet modified bog (M25) and wet heath habitats (M15). The Proposed Development then passes through an area of *Betula* spp. dominated broadleaved woodland (W11 and W17) with openings of bracken (U20) by Inchlaggan.

1.6.71 From Inchlaggan the route continues east through a large area of mainly clear-felled conifer plantation, with the alignment mostly designed to pass through the bracken dominated existing wayleave until it reaches Teanga Fraoich, just east of the A87 and Allt Daingean.

1.6.72 From Teanga Fraoich east to Faichem there are numerous patches of W11 and W17 *Betula* spp. and *Quercus petraea* dominated mature broadleaved woodlands, particularly south and southwest of Achadh-luachrach and around Leacan Dubha. The areas around Coille Achaidh Luachraich and Munergie Wood are commercial conifer plantations. Through this mostly wooded stretch the smaller patches of open ground and the wayleave for the existing OHL contains a wide mix of habitats with patches of blanket bog, wet modified bog, wet heath, dry heath, flush, marshy grassland, and bracken.

1.6.73 East of Faichem to the end of Section 5 by the south of Loch Lundie the Proposed Development passes through a good quality peatland area which primarily contains M17 blanket bog in the flat and gently sloping areas and wet heath on the numerous protruding knolls, with mosaics of blanket bog and wet heath in-between (occasionally some smaller patches of dry heath and wet modified bog are present also).

1.6.74 Error! Reference source not found. below details the habitat composition recorded within the Section 5 study area.

1.6.75 TNs recorded in Section 5 include examples of bog pools, large mature trees and peat erosion, furthermore invasive species in the form of *Rhododendron ponticum* was noted (see **Annex D** and **Figures V2-4.3 (5:01) to V2-4.3 (5:17): National Vegetation Classification Survey Area and Results**).

Table 1.7: Summary of Phase 1 & NVC communities recorded within the Section 5 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	85.39	12.47	W4, W4a, W4b, W4c	4.71	0.69
			W7, W7c	0.35	0.05
			W11, W11a, W11b	33.22	4.85
			W17, W17a, W17b	47.12	6.88
Broadleaved Plantation Woodland (A1.1.2)	0.74	0.11	AG, YBP	0.74	0.11
Coniferous Semi-Natural Woodland (A1.2.1)	1.07	0.16	W18	1.07	0.16

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Coniferous Plantation Woodland (A1.2.2)	102.04	14.91	CP, YCP	102.04	14.91
Dense/Continuous Scrub (A2.1)	0.25	0.04	W1x	0.15	0.02
			W23, W23a	0.10	0.01
Scattered Broadleaved Tree (A3.1)	1.38	0.20	SBT	1.38	0.20
Scattered Coniferous Tree (A3.2)	0.08	0.01	SCT	0.08	0.01
Scattered Mixed Woodland (A3.3)	0.08	0.01	SMT	0.08	0.01
Recently Felled Coniferous Woodland (A4.2)	90.25	13.18	CF	90.25	13.18
Unimproved Acid Grassland (B1.1)	3.59	0.52	U4, U4a	2.50	0.37
			U5, U5a, U5c	1.09	0.16
Semi-Improved Acid Grassland (B1.2)	1.60	0.23	U4b	1.60	0.23
Unimproved Neutral Grassland (B2.1)	0.40	0.06	MG1	0.40	0.06
Improved Grassland (B4)	4.42	0.65	MG6, MG6a	4.42	0.65
Marsh/Marshy Grassland (B5)	19.62	2.87	M23, M23a, M23b	0.68	0.10
			M25, M25b	11.08	1.62
			M28	0.01	0.001
			MG10a, MG10c	7.56	1.10
			Je	0.29	0.04
Continuous Bracken (C1.1)	74.38	10.87	U20, U20a, U20b, U20c	74.38	10.87
Acid Dry Dwarf Shrub Heath (D1.1)	6.10	0.89	H10, H10a	0.43	0.06
			H12, H12a, H12b, H12c	2.33	0.34
			H21a	0.25	0.04
			H10-M15	1.25	0.18

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			H10-M25	0.07	0.01
			H12-M25	1.77	0.26
Wet Dwarf Shrub Heath (D2)	178.51	26.08	M15a	5.06	0.74
			M15b	106.55	15.57
			M15c	66.52	9.72
			M15-M17	0.39	0.06
Blanket Bog (E1.6.1)	39.87	5.82	M1	0.54	0.08
			M2, M2a	0.30	0.04
			M3	0.27	0.04
			M17, M17a, M17b, M17c	37.27	5.44
			M19a	1.11	0.16
			M17-M25	0.37	0.05
Wet Modified Bog (E1.7)	42.31	6.18	M25a	42.31	6.18
Acid/Neutral Flush (E2.1)	5.34	0.78	M6, M6a, M6c, M6d	5.34	0.78
Bare Peat (E4)	0.19	0.03	ExP	0.19	0.03
Swamp (F1)	0.02	0.004	S9a	0.02	0.004
Standing Water (G1)	6.09	0.89	SW	6.09	0.89
Running Water (G2)	4.23	0.62	RW	4.23	0.62
Quarry (I2.1)	0.05	0.01	QY	0.05	0.01
Amenity Grassland (J1.2)	0.12	0.02	PG	0.12	0.02
Introduced Shrub (J1.4)	0.01	0.001	RP	0.01	0.001
Building (J3.6)	1.05	0.15	BD	1.05	0.15
Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	15.36	2.24	BG	15.36	2.24
TOTAL				**684.5**	**100**

Section 6 – Invergarry to Fort Augustus

1.6.76 The Section 6 study area covered 252.4 ha, see **Figures V2-4.3 (6:00) to V2-4.3 (6:07): National Vegetation Classification Survey Area and Results**.

1.6.77 The baseline character of the Section 6 study area can be broadly split into two main areas, the northern half which is located north of the Invervigar Burn and northeast of Achadh-nan-darach, and the southern half to the south and southwest of these same locations.

1.6.78 The northern half of Section 6 is predominately characterised by commercial forestry plantation, of which parts have been clear-felled at various stages in the recent past. Some of these areas are still considered recent clear-fell with little vegetation re-establishment and are mapped accordingly. However, many areas of former clear-fell that have not been restocked have re-established sufficiently to have been mapped as returning semi-natural habitats including U4 acid grassland, H9 and H10 dry heath, M15 wet heath, and M20 and M25 modified bog communities.

1.6.79 The open and unplanted areas within the northern forestry area comprise a mix of similar habitat types with abundant patches of bracken (U20 and W25), acid grassland, dry heath, wet heath, and modified bog communities. There are also smaller scattered stands of other habitats such as W4, W11 and W17 broadleaved woodland and W23 scrub.

1.6.80 The southern half of Section 6 is unplanted but does contain some relatively small stands of semi-natural W11 and W17 broadleaved woodland (e.g., around Doire Daraich). Around Achadh-nan-darach there are stands of bracken and acid grassland interspersed with smaller patches of semi-natural broadleaved woodland, blanket bog and wet modified bog.

1.6.81 Southwest of Achadh-nan-darach to around Doire Mòr is dominated by M17 blanket bog, M25 wet modified bog, M15 wet heath, H9 dry heath, and mosaics of these same main communities. Further southwest from Doire Mòr to the end of Section 6 at the south of Loch Lundie is predominantly characterised by M15 wet heath with some smaller patches of M17 blanket bog.

1.6.82 Wet heath within the Section 6 study area is all of the M15 community, with M15a, M15b and M15c all recorded: M15b being the most extensive within the study area. Most of the M15b consists mainly of a lush, tussocky mix of *Calluna vulgaris* and *Molinia caerulea*. Other species include sparse *Erica tetralix, Myrica gale* and the mosses *Sphagnum capillifolium, Hypnum jutlandicum* and *Hylocomium splendens*. The vegetation is therefore rather like M25a but with more *Calluna* (i.e., *Calluna* and *Molina* co-dominant). Some of the M15b in the southern part of the study area is less tall and less tussocky and while *Calluna* and *Molinia* are still the most abundant species there is frequent *Trichophorum germanicum, Erica tetralix* and *Myrica gale* along with the above-mentioned mosses. The stands of M15a are similar to the M15b described above but shorter, more open, not so tussocky and with the species including a sparse growth of *Carex panicea* and *Sphagnum denticulatum.* The M15a vegetation is clearly grazed and was found on level to gently sloping peaty ground in the centre of the study area. The areas of M15c are similar to the shorter form of M15b described above, but with scattered *Erica cinerea* and frequent patches or scattered plants of *Racomitrium lanuginosum* and the lichens *Cladonia portentosa* and *Cladonia uncialis*. M15c is locally common in the southern part of the study area, mainly on the upper parts of peaty or rocky hillocks. The peat surfaces within M15c appear on the whole to be drier than those with M15b.

1.6.83 Most of the blanket bog in the Section 6 study area belongs to the M17 community, which occupies deeper, wet peat on level ground in many places in the southern half of the study area. The vegetation consists mainly of a mixture of *Calluna vulgaris, Eriophorum vaginatum, E. angustifolium, Erica tetralix, Molinia caerulea, Trichophorum germanicum, Myrica gale* and the mosses *Sphagnum capillifolium, S. papillosum, S. cuspidatum, S. tenellum, S. compactum* and *Hypnum jutlandicum*. There are smaller amounts of other species including

Narthecium ossifragum and the liverworts *Odontoschisma sphagni* and *Pleurozia purpurea.* M17 as just described belongs to the *Drosera rotundifolia-Sphagnum* sub-community M17a, which is common here and in some places in the south also includes *Rhynchospora alba* and the moss *Sphagnum medium*, but this grades imperceptibly into vegetation that is similar but lacking *R. alba* and *S. medium* and including good quantities of the moss *Racomitrium lanuginosum* and the lichens *Cladonia portentosa* and *C. uncialis* (i.e., M17b).

1.6.84 M19 blanket bog is scarce but there are small patches of it among the mosaics of M15 wet heath and M17 bog in the south of the study area. The vegetation is taller, thicker and more tussocky than M17 and is composed mainly of *Calluna vulgaris* and *Eriophorum vaginatum*, with abundant mosses including *Hylocomium splendens, Hypnum jutlandicum, Pleurozium schreberi* and *Sphagnum capillifolium*. There are small quantities of *Erica tetralix, Molinia caerulea* and *Trichophorum germanicum*: the cover of these species is lower here than in the nearby M17.

1.6.85 The M25 mire (wet modified bog) vegetation is species-poor but includes at least a scatter of other species such as *Calluna vulgaris, Erica tetralix, Myrica gale, Juncus effusus, Potentilla erecta, Carex echinata* and the mosses *Hylocomium splendens, Hypnum jutlandicum, Pleurozium schreberi* and *Sphagnum capillifolium*. However, some areas of M25a contain abundant *Myrica gale* and therefore look more heathy or scrubby. M25a is very widespread and common on damp to wet peaty ground in the study area, occurring in both the open heath/bog area in the south and also in the felled plantations in the north. Much of it in the south might once have been heathier (M15 or M17) but since lost most or all its dwarf shrub growth as a result of grazing by large herbivores.

1.6.86 Error! Reference source not found. below details the habitat composition recorded within the Section 6 study area.

1.6.87 The TNs recorded within Section 6 contain several records of non-native *Rhododendron ponticum*, as well as some other notable native species records (**Annex D** and **Figures V2-4.3 (6:01) to V2-4.3 (6:07): National Vegetation Classification Survey Area and Results**).

1.6.88 Of the vascular species TN records all, with the exception of TN 6:15, are classified as species of 'Least Concern' in the Vascular Plant Red Data List for Great Britain[14]. TN 6:15 includes a record of *Gnaphalium sylvaticum* at the southeast edge of an existing forest road. *Gnaphalium sylvaticum* is a short-lived perennial herb of open communities on dry, acidic, often sandy or gravelly soils[16]. This species is usually found in heaths and heathy pastures, sandpits, dunes, tracks and, especially, open woodland and forestry rides in areas of former heathland[16]. *Gnaphalium sylvaticum* is regarded as 'Endangered' within the Vascular Plant Red Data List for Great Britain due to apparent decline, although it is noted to be an under-recorded species[14]. However, the Botanical Society of Britain and Ireland (BSBI) Atlas of the British and Irish Flora consider the plant as 'not scarce'[16]. The record of *Gnaphalium sylvaticum* (TN 6:15) is located 85 m from the LoD (see **Figure V2-4.3 (6:05): National Vegetation Classification Survey Area and Results**).

1.6.89 A single M10 base-rich flush was recorded within Section 6 and is included within the TNs at TN 6:14 (**Figure V2-4.3 (6:03): National Vegetation Classification Survey Area and Results**). The M10 comprised a narrow flush among M15 wet heath on an east facing valley-side slope in the centre of the study area with a low grown assemblage made up largely of *Carex demissa, Juncus articulatus, Selaginella selaginoides, Myrica gale, Ranunculus flammula,* the mosses *Scorpidium scorpioides, S. revolvens, Campylium stellatum, Breutelia chrysocoma* and *Blindia acuta,* and the liverwort *Aneura pinguis*.

[16] https://plantatlas.brc.ac.uk/plant/gnaphalium-sylvaticum [Accessed 09 August 2022].

Table 1.8: Summary of Phase 1 & NVC communities recorded within the Section 6 study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	8.83	3.50	W4, W4b	1.26	0.50
			W11	4.23	1.68
			W17, W17b, W17c, W17d	3.34	1.32
Coniferous Plantation Woodland (A1.2.2)	45.06	17.85	CP, YCP	45.06	17.85
Mixed Plantation Woodland (A1.3.2)	0.34	0.14	MP	0.34	0.14
Dense/Continuous Scrub (A2.1)	2.82	1.12	W23	2.82	1.12
Scattered Coniferous Tree (A3.2)	0.02	0.01	SCT	0.02	0.01
Recently Felled Coniferous Woodland (A4.2)	8.47	3.36	CF	8.47	3.36
Unimproved Acid Grassland (B1.1)	3.24	1.28	U4, U4a	3.07	1.22
			U5b	0.17	0.07
Semi-Improved Acid Grassland (B1.2)	1.92	0.76	U4b	1.92	0.76
Marsh/Marshy Grassland (B5)	9.55	3.78	M25	1.17	0.46
			MG10a	0.47	0.19
			Je	7.90	3.13
Continuous Bracken (C1.1)	22.95	9.09	U20	22.30	8.83
			W25	0.65	0.26
Acid Dry Dwarf Shrub Heath (D1.1)	13.13	5.20	H9	3.54	1.40
			H10, H10a, H10b, H10c	8.84	3.50
			H12a, H12c	0.75	0.30
			H21a	0.004	0.002
			H12-M25	0.001	0.003
Wet Dwarf Shrub Heath (D2)	66.88	26.50	M15a	0.96	0.38
			M15b	56.56	22.41

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			M15c	9.36	3.71
Blanket Bog (E1.6.1)	21.70	8.60	M1	<0.0001	<0.0001
			M2	0.01	0.005
			M17, M17a, M17b	21.18	8.39
			M19a	0.23	0.09
Wet Modified Bog (E1.7)	34.82	13.79	M20	2.07	0.82
			M25a	30.40	12.04
			PC	2.34	0.93
Acid/Neutral Flush (E2.1)	0.39	0.15	M6c	0.39	0.15
Basic Flush (E2.2)	0.01	0.002	M10a	0.01	0.002
Bare Peat (E4)	0.002	0.001	ExP	0.002	0.001
Standing Water (G1)	0.15	0.06	SW	0.15	0.06
Running Water (G2)	0.01	0.002	RW	0.01	0.002
Building (J3.6)	2.58	1.02	BD	2.58	1.02
Bare Ground (J4)	8.95	3.55	BG	8.95	3.55
Other Habitat (J5)	0.61	0.24	DG	0.61	0.24
TOTAL				**252.4**	**100**

Groundwater Dependent Terrestrial Ecosystems (GWDTEs)

1.6.90 SEPA has classified several NVC communities as potentially dependent on groundwater[17]. Wetlands or habitats containing these NVC communities are to be considered GWDTEs unless further information can be provided to demonstrate this is not the case. Many of the NVC communities on the list are very common habitat types across Scotland, and some are otherwise generally of low ecological value. Furthermore, some of the NVC communities may be considered GWDTEs only in certain hydrogeological settings.

1.6.91 Designation as a potential GWDTE does not therefore infer an intrinsic biodiversity value, and GWDTE status has not been used as criteria to determine a habitats respective conservation importance. There is however a statutory requirement to consider GWDTEs and the data gathered during the NVC surveys has been used to inform this assessment (see **Volume 2**, **Chapter 6: Water Environment**).

[17] SEPA. (2017a). Land Use Planning System SEPA Guidance Note 31: Guidance on Assessing the Impacts of Windfarm Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems. Version 3. Issue date: 11/09/2017 and SEPA. (2017b). Land Use Planning System SEPA Guidance Note 4: Planning guidance on on-shore windfarm developments. Version 3. Issue date: 11/09/2017.

1.6.92 Using SEPA's guidance, **Annex E** shows which communities recorded within the study area may be considered potential GWDTE.

1.6.93 GWDTE sensitivity has been assigned solely on the SEPA listings[17]. However, depending on several factors such as geology, superficial geology, presence of peat and topography, many of the potential GWDTE communities recorded may in fact be only partially groundwater fed or not dependant on groundwater. Determining the actual groundwater dependency of particular areas requires further assessment (see **Volume 2**, **Chapter 6: Water Environment**).

Annex A. Proposed Development Study Area Habitat Extents

1.6.94 The baseline habitat extents for the entire Proposed Development study area including the preferred alignment within Section 3 (i.e., excluding the Alternative Alignment within Section 3) are provided in Error! Reference source not found. below.

1.6.95 The baseline habitat extents for the entire Proposed Development study area and utilising the Alternative Alignment within Section 3 are provided in **Table 1.10: Summary of Phase 1 & NVC communities recorded within the Proposed Development study area (using Alternative Alignment)**.

1.6.96 Survey results are shown on **Figures V2-4.3: National Vegetation Classification Survey Area and Results** and for the Alternative Alignment on **Figures V6-4.3: National Vegetation Classification Survey Area and Results**.

Table 1.9: Summary of Phase 1 & NVC communities recorded within the Proposed Development study area

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	204.05	4.21	W4, W4a, W4b, W4c	15.41	0.32
			W7, W7c	2.35	0.05
			W10	0.16	0.003
			W11, W11a, W11b	47.48	0.98
			W17, W17a, W17b, W17c, W17d	138.66	2.86
Broadleaved Plantation Woodland (A1.1.2)	6.68	0.14	AG, BP, YBP, W17x	6.68	0.14
Coniferous Semi-Natural Woodland (A1.2.1)	2.55	0.05	W18	2.55	0.05
Coniferous Plantation Woodland (A1.2.2)	459.32	9.47	CP, YCP	459.32	9.47
Mixed Plantation Woodland (A1.3.2)	9.07	0.19	MP	9.07	0.19
Scrub – Dense/Continuous & Scattered (A2.1/A2.2)	9.98	0.21	W1x	3.65	0.08
			W23	6.33	0.13
Scattered Trees – Broadleaved (A3.1)	2.64	0.05	SBT	2.64	0.05
Scattered Trees – Coniferous (A3.2)	0.20	0.004	SCT	0.20	0.004
Scattered Trees – Mixed (A3.3)	0.08	0.002	SMT	0.08	0.002
Recently Felled Coniferous Woodland (A4.2)	189.56	3.91	CF	189.56	3.91
Acid Grassland – Unimproved (B1.1)	104.21	2.15	U4, U4a, U4d	70.95	1.46
			U5, U5a, U5b, U5c, U5c	22.70	0.47
			U6, U6a, U6c	10.56	0.22
Acid Grassland – Semi-improved (B1.2)	77.19	1.59	U4b	77.19	1.59
	1.68	0.03	MG1, MG1a	1.63	0.03

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Neutral Grassland – Unimproved (B2.1)			MG9, MG9a	0.05	0.001
Calcareous Grassland – Unimproved (B3.1)	0.06	0.001	CG10, CG10a	0.06	0.001
Improved Grassland (B4)	21.88	0.45	MG6, MG6a	21.81	0.45
			MG7	0.07	0.001
Marsh/Marshy Grassland (B5)	179.63	3.70	M23, M23a, M23b	21.07	0.44
			M25, M25b, M25c	45.99	0.95
			M28	0.01	0.0002
			MG10a, MG10c	76.92	1.59
			Je	35.55	0.73
			Mx	0.09	0.002
Bracken – Continuous & Scattered (C1.1/C1.2)	219.70	4.53	U20, U20a, U20b, U20c	219.06	4.52
			W25	0.65	0.01
Tall Herb & Fern: Tall Ruderal (C3.1)	0.33	0.01	OV25	0.11	0.002
			OV27	0.18	0.004
			W24	0.05	0.001
Tall Herb & Fern: Non-Ruderal (C3.2)	0.03	0.001	U16	0.01	0.0001
			U19	0.03	0.001
Dry Dwarf Shrub Heath – Acid (D1.1)	161.84	3.34	H9, H9d	5.55	0.11
			H10, H10a, H10b, H10c, H10d	90.61	1.87
			H12, H12a, H12b, H12c	29.38	0.61
			H21, H21a	8.10	0.17
			H9-H12	0.69	0.01
			H10-M15	8.95	0.18
			H10-M25	7.67	0.16
			H12-M25	10.87	0.22
Wet Dwarf Shrub Heath (D2)	1895.83	39.10	M15	5.16	0.11
			M15a	117.26	2.42
			M15b	1049.53	21.65
			M15c	699.55	14.43
			M15d	4.51	0.09
			M15-M17	19.81	0.41
Wet Heath/Acid Grassland Mosaic (D6)	1.32	0.03	M15-U4 Intermediate	1.25	0.03
			M15-U6 Intermediate	0.07	0.001
Blanket Bog (E1.6.1)	703.71	14.51	M1	13.89	0.29
			M2, M2a	7.98	0.16
			M3	4.22	0.09
			M17, M17a, M17b, M17c	463.80	9.57
			M19, M19a, M19b, M19c	210.84	4.35
			M17-M19	0.27	0.01
			M17-M25	1.41	0.03
			M19-M25	1.30	0.03
Wet Modified Bog (E1.7)	326.79	6.74	M20, M20a, M20b	35.10	0.72
			M25a	288.58	5.95

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			M20-M25	0.77	0.02
			PC	2.34	0.05
Flush/Spring – Acid/Neutral (E2.1)	50.89	1.05	M4	0.01	0.0002
			M6, M6a, M6c, M6d	49.11	1.01
			M6-M25	1.43	0.03
			M29x	0.35	0.01
Flush/Spring – Basic (E2.2)	11.17	0.23	M9	0.01	0.0001
			M10, M10a, M10b	11.05	0.23
			M11	0.02	0.0004
			M14	0.09	0.002
Fen (E3)	0.01	0.0002	M25PH	0.01	0.0002
Bare Peat (E4)	0.46	0.01	ExP	0.46	0.01
Swamp (F1)	0.45	0.01	S4	0.35	0.01
			S9, S9a	0.09	0.002
Standing Water (G1)	52.13	1.08	SW	52.13	1.08
Running Water (G2)	25.97	0.54	RW	25.97	0.54
Saltmarsh – Dense/Continuous (H2.6)	6.17	0.13	SM16	6.17	0.13
Quarry (I2.1)	2.00	0.04	QY	2.00	0.04
Amenity Grassland (J1.2)	1.34	0.03	PG	1.34	0.03
Introduced Shrub (J1.4)	6.99	0.14	RP	6.99	0.14
Buildings (J3.6)	5.33	0.11	BD	5.33	0.11
Intertidal Shingle/ Cobble (H1.2), Intertidal Boulders/ Rocks (H1.3), Scree – Acid/ Neutral (I1.2.1), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	106.91	2.20	BG	106.91	2.20
Other Habitat (J5)	0.61	0.01	DG	0.61	0.01
TOTAL				**4848.77**	**100**

Table 1.10: Summary of Phase 1 & NVC communities recorded within the Proposed Development study area (using Alternative Alignment)

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Broadleaved Semi-Natural Woodland (A1.1.1)	175.61	3.60	W4, W4a, W4b, W4c	8.21	0.17
			W7, W7c	1.66	0.03
			W10	0.16	0.003
			W11, W11a, W11b	42.10	0.87
			W17, W17a, W17b, W17c, W17d	123.19	2.52
Broadleaved Plantation Woodland (A1.1.2)	6.72	0.14	AG, BP, YBP, W17x	6.72	0.14

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Coniferous Semi-Natural Woodland (A1.2.1)	2.55	0.05	W18	2.55	0.05
Coniferous Plantation Woodland (A1.2.2)	459.32	9.47	CP, YCP	494.19	10.12
Mixed Plantation Woodland (A1.3.2)	9.07	0.19	MP	9.07	0.19
Scrub – Dense/Continuous & Scattered (A2.1/A2.2)	10.78	0.22	W1x	4.40	0.09
			W23	6.39	0.13
Scattered Trees – Broadleaved (A3.1)	2.59	0.05	SBT	2.59	0.05
Scattered Trees – Coniferous (A3.2)	0.31	0.01	SCT	0.31	0.01
Scattered Trees – Mixed (A3.3)	0.08	0.002	SMT	0.08	0.002
Recently Felled Coniferous Woodland (A4.2)	130.30	2.67	CF	130.30	2.67
Acid Grassland – Unimproved (B1.1)	104.77	2.15	U4, U4a, U4d	71.53	1.47
			U5, U5a, U5b, U5c, U5c	22.67	0.46
			U6, U6a, U6c	10.56	0.22
Acid Grassland – Semi-improved (B1.2)	77.30	1.58	U4b	77.30	1.58
Neutral Grassland – Unimproved (B2.1)	1.68	0.03	MG1, MG1a	1.63	0.03
			MG9, MG9a	0.05	0.001
Calcareous Grassland – Unimproved (B3.1)	0.06	0.001	CG10, CG10a	0.06	0.001
Improved Grassland (B4)	21.88	0.45	MG6, MG6a	21.81	0.45
			MG7	0.07	0.001
Marsh/Marshy Grassland (B5)	172.67	3.54	M23, M23a, M23b	19.42	0.40
			M25, M25b, M25c	43.56	0.89
			M28	0.04	0.0008
			MG10a, MG10c	76.92	1.59
			Je	32.61	0.67
			Mx	0.10	0.002
Bracken – Continuous & Scattered (C1.1/C1.2)	216.60	4.44	U20, U20a, U20b, U20c	215.76	4.42
			W25	0.85	0.02
Tall Herb & Fern: Tall Ruderal (C3.1)	0.32	0.01	OV25	0.11	0.002
			OV27	0.16	0.003
			W24	0.05	0.001
Tall Herb & Fern: Non-Ruderal (C3.2)	0.12	0.002	U16	0.09	0.002
			U19	0.03	0.001
			Daff	0.004	0.0001
Dry Dwarf Shrub Heath – Acid (D1.1)	160.95	3.30	H9, H9d	5.60	0.11
			H10, H10a, H10b, H10c, H10d	99.83	2.04

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
			H12, H12a, H12b, H12c	22.31	0.46
			H21, H21a	4.89	0.10
			H9-H12	0.69	0.01
			H10-M15	8.95	0.18
			H10-M25	7.83	0.16
			H12-M25	10.86	0.22
Wet Dwarf Shrub Heath (D2)	1962.65	40.20	M15	5.16	0.11
			M15a	118.48	2.43
			M15b	1067.82	21.87
			M15c	746.86	15.30
			M15d	4.51	0.09
			M15-M17	19.82	0.41
Wet Heath/Acid Grassland Mosaic (D6)	1.32	0.03	M15-U4 Intermediate	1.25	0.03
			M15-U6 Intermediate	0.07	0.001
Blanket Bog (E1.6.1)	711.79	14.58	M1	13.79	0.28
			M2, M2a	7.32	0.15
			M3	3.88	0.08
			M17, M17a, M17b, M17c	458.36	9.39
			M19, M19a, M19b, M19c	222.74	4.56
			M17-M19	0.27	0.01
			M17-M25	1.04	0.02
			M19-M25	4.38	0.09
Wet Modified Bog (E1.7)	339.48	6.95	M20, M20a, M20b	35.09	0.72
			M25a	301.21	6.17
			M20-M25	0.84	0.02
			PC	2.34	0.05
Flush/Spring – Acid/Neutral (E2.1)	49.37	1.01	M4	0.01	0.0002
			M6, M6a, M6c, M6d	48.42	0.99
			M6-M25	0.59	0.01
			M29x	0.35	0.01
Flush/Spring – Basic (E2.2)	11.12	0.23	M9	0.01	0.0001
			M10, M10a, M10b	11.00	0.23
			M11	0.02	0.0004
			M14	0.09	0.002
Fen (E3)	0.01	0.0002	M25PH	0.01	0.0002
Bare Peat (E4)	0.47	0.01	ExP	0.47	0.01
Swamp (F1)	0.45	0.01	S4	0.35	0.01
			S9, S9a	0.09	0.002
Standing Water (G1)	51.16	1.05	SW	51.16	1.05
Running Water (G2)	29.63	0.61	RW	29.63	0.61
Saltmarsh – Dense/Continuous (H2.6)	6.17	0.13	SM16	6.17	0.13
Quarry (I2.1)	2.15	0.04	QY	2.15	0.04
Amenity Grassland (J1.2)	1.34	0.03	PG	1.34	0.03
Introduced Shrub (J1.4)	6.99	0.14	RP	6.99	0.14

Phase 1 Habitat Description (Code)	Study Area Extent – Phase 1 (ha)	% of Study Area – Phase 1	Corresponding NVC Types & Other Habitats Recorded	Study Area Extent – NVC (ha)	% of Study Area - NVC
Buildings (J3.6)	5.36	0.11	BD	5.36	0.11
Intertidal Shingle/ Cobble (H1.2), Intertidal Boulders/ Rocks (H1.3), Scree – Acid/ Neutral (I1.2.1), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)	112.96	2.31	BG	112.96	2.31
Other Habitat (J5)	0.61	0.01	DG	0.61	0.01
Non-Surveyed Area (NSA)	0.64	0.01	NSA	0.64	0.01
TOTAL				**4882.25**	**100**

Annex B. List of NVC communities recorded during surveys for the Proposed Development

1.6.97 The following table provides a list of all the NVC communities recorded during surveys for the Proposed Development.

Table 1.11: NVC Communities and Sub-Communities Recorded

NVC Code	NVC Community Name
Woodlands and Scrub	
W4	*Betula pubescens - Molinia caerulea* woodland
W4a	*Betula pubescens - Molinia caerulea* woodland, *Dryopteris dilatata - Rubus fruticosus* sub-community
W4b	*Betula pubescens - Molinia caerulea* woodland, *Juncus effusus* sub-community
W4c	*Betula pubescens - Molinia caerulea woodland, Sphagnum* spp. sub-community
W7	*Alnus glutinosa - Fraxinus excelsior - Lysimachia nemorum* woodland
W7c	*Alnus glutinosa-Fraxinus excelsior-Lysimachia nemorum* woodland, *Deschampsia cespitosa* sub-community
W10	W10 *Quercus robur - Pteridium aquilinum - Rubus fruticosus* woodland
W11	*Quercus petraea - Betula pubescens - Oxalis acetosella* woodland
W11a	*Quercus petraea - Betula pubescens - Oxalis acetosella* woodland, *Dryopteris dilatata* sub-community
W11b	*Quercus petraea - Betula pubescens - Oxalis acetosella* woodland, *Blechnum spicant* sub-community
W17	*Quercus petraea - Betula pubescens - Dicranum majus* woodland
W17a	*Quercus petraea - Betula pubescens - Dicranum majus* woodland, *Isothecium myosuroides - Diplophyllum albicans* sub-community
W17b	*Quercus petraea - Betula pubescens - Dicranum majus* woodland, typical sub-community
W17c	*Quercus petraea - Betula pubescens - Dicranum majus* woodland, *Anthoxanthum odoratum - Agrostis capillaris* sub-community
W17d	*Quercus petraea - Betula pubescens - Dicranum majus* woodland, *Rhytidiadelphus triquetrus* sub-community
W18	*Pinus sylvestris - Hylocomium splendens* woodland
W23	*Ulex europaeus – Rubus fruticosus* scrub
W23a	*Ulex europaeus – Rubus fruticosus* scrub, *Anthoxanthum odoratum* sub-community
W24	*Rubus fruticosus - Holcus lanatus* underscrub
W25	*Pteridium aquilinum - Rubus fruticosus* underscrub
W25a	*Pteridium aquilinum - Rubus fruticosus* underscrub, *Hyacinthoides non-scripta* sub-community
Mires and Heaths	
M1	*Sphagnum denticulatum* bog pool community
M2	*Sphagnum cuspidatum/fallax* bog pool community
M2a	*Sphagnum cuspidatum/fallax* bog pool community, *Rhynchospora alba* sub-community
M3	*Eriophorum angustifolium* bog pool community
M4	*Carex rostrata - Sphagnum* fallax mire
M6	*Carex echinata - Sphagnum fallax/denticulatum* mire
M6a	*Carex echinata - Sphagnum fallax/denticulatum* mire, *Carex echinata* sub-community
M6b	*Carex echinata - Sphagnum fallax/denticulatum* mire, *Carex nigra - Nardus stricta* sub-community
M6c	*Carex echinata - Sphagnum fallax/denticulatum* mire, *Juncus effusus* sub-community
M6d	*Carex echinata - Sphagnum fallax/denticulatum* mire, *Juncus acutiflorus* sub-community
M6-M25	M6-M25 Intermediate
M9	*Carex rostrata – Calliergon cuspidatum/giganteum* mire
M10	*Carex dioica - Pinguicula vulgaris* mire
M10a	*Carex dioica - Pinguicula vulgaris* mire, *Carex viridula - Juncus bulbosus/kochii* sub-community
M10b	*Carex dioica- Pinguicula vulgaris* mire, *Briza media - Primula farinosa* sub-community

NVC Code	NVC Community Name
M11	*Carex viridula - Saxifraga aizoides* mire
M14	*Schoneus nigricans - Narthecium ossifragum* mire
M15	*Trichophorum germanicum - Erica tetralix* wet heath
M15a	*Trichophorum germanicum - Erica tetralix* wet heath, *Carex panicea* sub-community
M15b	*Trichophorum germanicum - Erica tetralix* wet heath, typical sub-community
M15c	*Trichophorum germanicum - Erica tetralix* wet heath, *Cladonia* spp. sub-community
M15d	*Trichophorum germanicum - Erica tetralix* wet heath, *Vaccinium myrtillus* sub-community
M15-U4	M15-U4 Intermediate
M15-U6	M15-U6 Intermediate
M15-M17	M15-M17 Intermediate mire
M17	*Trichophorum germanicum - Eriophorum vaginatum* blanket mire
M17a	*Trichophorum germanicum - Eriophorum vaginatum* blanket mire, *Drosera rotundifolia-Sphagnum* spp. sub-community
M17b	*Trichophorum germanicum - Eriophorum vaginatum* blanket mire, *Cladonia* spp. sub-community
M17c	*Trichophorum germanicum - Eriophorum vaginatum* blanket mire, *Juncus squarrosus - Rhytidiadelphus loreus* sub-community
M17-M19	M17-M19 Intermediate mire
M17-M20	M17-M20 Intermediate mire
M17-M25	M17-M20 Intermediate mire
M19	*Calluna vulgaris - Eriophorum vaginatum* blanket mire
M19a	*Calluna vulgaris - Eriophorum vaginatum* blanket mire, *Erica tetralix* sub-community
M19b	*Calluna vulgaris - Eriophorum vaginatum* blanket mire, *Empetrum nigrum* sub-community
M19c	*Calluna vulgaris - Eriophorum vaginatum* blanket mire, *Vaccinium vitis-idaea - Hylocomium splendens* sub-community
M19-M25	M19-M25 Intermediate mire
M20	*Eriophorum vaginatum* blanket and raised mire
M20a	*Eriophorum vaginatum* blanket and raised mire, species-poor sub-community
M20b	*Eriophorum vaginatum* blanket and raised mire, *Calluna vulgaris - Cladonia* spp. sub-community
M20-M25	M20-M25 Intermediate mire
M23	*Juncus effusus/acutiflorus - Galium palustre* rush-pasture
M23a	*Juncus effusus/acutiflorus - Galium palustre* rush-pasture, *Juncus acutiflorus* sub-community
M23b	*Juncus effusus/acutiflorus - Galium palustre* rush-pasture, *Juncus effusus* sub-community
M25	*Molinia caerulea - Potentilla erecta* mire
M25a	*Molinia caerulea - Potentilla erecta* mire, *Erica tetralix* sub-community
M25b	*Molinia caerulea - Potentilla erecta* mire, *Anthoxanthum odoratum* sub-community
M25c	*Molinia caerulea - Potentilla erecta* mire, *Angelica sylvestris* sub-community
M25-M23b	M25-M23b Intermediate
M28	*Iris pseudacorus - Filipendula ulmaria* mire
M32	*Philonotis fontana - Saxifraga stellaris* spring
H9	*Calluna vulgaris - Avenella flexuosa* heath
H9d	*Calluna vulgaris - Avenella flexuosa heath, Galium saxatile* sub-community
H9-H12	H9-H12 Intermediate heath
H10	*Calluna vulgaris - Erica cinerea* heath
H10a	*Calluna vulgaris - Erica cinerea heath*, typical sub-community
H10b	*Calluna vulgaris - Erica cinerea* heath, *Racomitrium lanuginosum* sub-community
H10c	*Calluna vulgaris - Erica cinerea* heath, *Festuca ovina - Anthoxanthum odoratum* sub-community
H10d	*Calluna vulgaris - Erica cinerea* heath, *Thymus polytrichus - Carex pulicaris* sub-community
H10-M15	H10-M15 Intermediate
H10-M25	H10-M25 Intermediate
H12	*Calluna vulgaris - Vaccinium myrtillus* heath
H12a	*Calluna vulgaris - Vaccinium myrtillus* heath, *Calluna vulgaris* sub-community

NVC Code	NVC Community Name
H12b	*Calluna vulgaris - Vaccinium myrtillus heath, Vaccinium vitis-idaea - Cladonia impexa* sub-community
H12c	*Calluna vulgaris - Vaccinium myrtillus* heath, *Galium saxatile - Festuca ovina* sub-community
H12-M25	H12-M25 Intermediate
H21	*Calluna vulgaris - Vaccinium myrtillus - Sphagnum capillifolium* heath
H21a	*Calluna vulgaris - Vaccinium myrtillus - Sphagnum capillifolium* heath, *Calluna vulgaris - Pteridium aquilinum* sub-community
Grassland and Montane Communities	
U4	*Festuca ovina - Agrostis capillaris - Galium saxatile* grassland
U4a	*Festuca ovina - Agrostis capillaris - Galium saxatile* grassland, typical sub-community
U4b	*Festuca ovina - Agrostis capillaris - Galium saxatile* grassland, *Holcus lanatus - Trifolium repens* sub-community
U4d	*Festuca ovina - Agrostis capillaris - Galium saxatile* grassland, *Luzula multiflora - Rhytidiadelphus loreus* sub-community
U5	*Nardus stricta - Galium saxatile* grassland
U5a	*Nardus stricta - Galium saxatile* grassland, species-poor sub-community
U5b	*Nardus stricta - Galium saxatile* grassland, *Agrostis canina - Polytrichum commune* sub-community
U5c	*Nardus stricta - Galium saxatile* grassland, *Carex panicea - Viola riviniana* sub-community
U5d	*Nardus stricta - Galium saxatile* grassland, *Calluna vulgaris - Danthonia decumbens* sub-community
U6	*Juncus squarrosus - Festuca ovina* grassland
U6a	*Juncus squarrosus - Festuca ovina* grassland, *Sphagnum* spp. sub-community
U6c	*Juncus squarrosus - Festuca ovina* grassland, *Vaccinium myrtillus* sub-community
U16	*Luzula sylvatica - Vaccinium myrtillus tall-herb community*
U16c	*Luzula sylvatica - Vaccinium myrtillus* tall-herb community, species-poor sub-community
U19	*Oreopteris limbosperma - Blechnum spicant community*
U20	*Pteridium aquilinum - Galium saxatile* community
U20a	*Pteridium aquilinum - Galium saxatile* community, *Anthoxanthum odoratum* sub-community
U20b	*Pteridium aquilinum - Galium saxatile* community, *Vaccinium myrtillus - Dicranum scoparium* sub-community
U20c	*Pteridium aquilinum - Galium saxatile* community, species-poor sub-community
MG1	*Arrhenatherum elatius* grassland
MG1a	*Arrhenatherum elatius grassland, Festuca rubra* sub-community
MG6	*Lolium perenne - Cynosurus cristatus* grassland
MG6a	*Lolium perenne - Cynosurus cristatus* grassland, typical sub-community
MG7	*Lolium perenne* leys and related grasslands
MG9	*Holcus lanatus - Deschampsia cespitosa* grassland
MG9a	*Holcus lanatus - Deschampsia cespitosa* grassland, *Poa trivialis* sub-community
MG10a	*Holcus lanatus - Juncus effusus* rush-pasture, typical sub-community
MG10c	*Holcus lanatus - Juncus effusus* rush-pasture, *Iris pseudacorus* sub-community
CG10	*Festuca ovina – Agrostis capillaris – Thymus polytrichus* grassland
CG10a	*Festuca ovina – Agrostis capillaris – Thymus polytrichus* grassland, *Trifolium repens - Luzula campestris* sub-community
Aquatic Communities, Swamps and Tall-Herb Fens	
S4	*Phragmites australis* swamp and reed-beds
S9	*Carex rostrata* swamp
S9a	*Carex rostrata* swamp, *Carex rostrata* sub-community
Maritime Communities and Vegetation of Open Habitats	
SM16	*Festuca rubra* saltmarsh community
OV25	*Urtica dioica – Cirsium arvense* community
OV27	*OV27 Chamaenerion angustifolium* community

Annex C. Non-NVC Community or Feature Types Recorded

1.6.98 The following table provides a list of the non-NVC communities or features recorded during surveys for the Proposed Development, with a brief description of the associated character or composition of the vegetation / feature and associated Phase 1 habitat classification.

Table 1.12: Non-NVC Community or Feature Types Recorded

Non-NVC Community or Feature Types Code	Description	Phase 1 Habitat (Code)
W1x	This is short willow scrub either solely comprised of, or dominated by *Salix aurita*, without the W1 community constant of *Salix cinerea*. The ground vegetation beneath is generally varied and can be marshy, heathy, or grassy – often reflecting the immediately surrounding open habitats. The areas of W1x are scattered throughout the survey area and Proposed Development study area but tend to be small and relatively widely scattered patches, often where grazing is moderate to light, or absent.	Dense/Continuous or Scattered Scrub (A2.1/A2.2)
W17x	An area of broadleaved planting over an area of heath/mire vegetation that would reflect the W17 community composition, recorded mainly in Section 4 around Allt Choire nan Eiricheallach.	Broadleaved Woodland Plantation (A1.1.2)
AG	Young *Alnus glutinosa* woodland planting.	Broadleaved Woodland Plantation (A1.1.2)
CP & YCP	Coniferous plantation and young coniferous plantation.	Coniferous Woodland Plantation (A1.2.2)
CF	Clear-felled woodland – areas of forestry that have been clear-felled and contain much ground disturbance, brash, felled material and stumps, and which has not been replanted nor regenerated sufficiently to be classified as a vegetation community.	Recently felled coniferous woodland (A4.2)
BP & YBP	Broadleaved plantation and young broadleaved plantation.	Broadleaved Woodland Plantation (A1.1.2)
MP	Mixed broadleaved and coniferous plantation.	Mixed Woodland Plantation (A1.3.2)
SBT	Scattered broadleaved trees.	Scattered Trees – Broadleaved (A3.1)
SCT	Scattered coniferous trees.	Scattered Trees - Coniferous (A3.2)
SMT	Scattered mixed trees – broadleaved and conifer.	Scattered Trees – Mixed (A3.3)
RP	*Rhododendron ponticum*. Dense areas of *Rhododendron ponticum* introduced shrub.	Introduced shrub (J1.4)
M25Ph	*Molinia caerulea - Potentilla erecta* mire containing abundant *Phragmites*. Vegetation with abundant *Molinia caerulea* and an associated flora overlapping those for M25a and M25c and overtopped conspicuously by an abundance of *Phragmites australis*. Recorded on wet, level to very gently sloping ground in the northwest of Section 0.	Fen (E3)
M29x	*Potamogeton polygonifolius* soakaway, but without *Hypericum elodes*.	Acid/Neutral Flush (E2.1)

Non-NVC Community or Feature Types Code	Description	Phase 1 Habitat (Code)
Mx	The Mx code refers to areas of small to medium sized *Carex* spp. dominated sedge mire on neutral soils, and which is not described within the NVC. The vegetation does not generally contain the acidophilous species of M6 mire and the basiphilous species of M10 mire. It could be described as floristically very similar to M23 mire but with the smaller *Carex* spp. (sedges) replacing the *Juncus* spp. (rushes) as the main vascular feature. Sedges recorded in these stands include *Carex echinata, C. flacca, C. nigra, C. panicea* and *C. pulicaris*. Other graminoids include *Nardus stricta, Festuca vivipara, Holcus lanatus, Cynosurus cristatus* and *Juncus articulatus*. Herbs are often common and include *Ranunculus acris, R. flammula, Potentilla erecta, Cardamine pratensis, Prunella vulgaris, Filipendula ulmaria, Scorzoneroides autumnalis, Caltha palustris, Montia fontana, Potamogeton polygonifolius, and Viola palustris*. Bryophytes are abundant and include the mosses *Breutelia chrysocoma, Calliergonella cuspidata, Plagiomnium undulatum, Rhytidiadelphus squarrosus, Bryum pseudotriquetrum, Aulacomnium palustre, Sphagnum teres, S. contortum, Rhizomnium punctatum, Warnstorfia exannulata, Cratoneuron filicinum* and *Philonotis fontana*, and the liverwort *Riccardia chamedryfolia*. Mx mires are widely but thinly scattered on damp to wet, flushed ground on gentle slopes, in association with grasslands and rush mires.	Marsh/Marshy Grassland (B5)
Je	*Juncus effusus* acid grassland community. This vegetation consists of tall tussocks of *Juncus effusus* growing among lower swards of acidophilous species including *Holcus lanatus, Agrostis capillaris, Nardus stricta, Potentilla erecta, Galium saxatile, Ranunculus acris, Rumex acetosa, Trifolium pratense, Cerastium fontanum, Prunella vulgaris* and *Sagina procumbens*. The moss *Rhytidiadelphus squarrosus* is common, and *Hylocomium splendens, Pleurozium schreberi* and *Polytrichum commune* can be locally abundant. Small patches of 'Je' are widespread and common on damp, level to sloping ground among grasslands, bogs, heaths and in formerly disturbed or felled ground. This vegetation does not fit into any NVC community as it lacks the wetland element of M6 and M23 *Juncus* spp. mires and has a more acidophilous flora than MG10 *Juncus effusus* rush-pasture. It is therefore classed separately.	Marsh/Marshy Grassland (B5)
Hl	*Holcus lanatus* dominated neutral grassland. This classification has been used to describe areas of vegetation that are near pure swards of *Holcus lanatus* that do not fit well within the closest similar type of vegetation, i.e., the U4b *Holcus lanatus – Trifolium repens* sub-community of U4. Areas of Hl are more neutral and lack any of the more calcifuge associates that can be found in U4b, in particular species such as *Potentilla erecta* and *Galium saxatile*; Hl also lacks the characteristic bryophytes of a U4 grassland.	Semi-improved Neutral Grassland (B2.2)
PC	*Polytrichum commune* vegetation. This is vegetation consisting mainly of extensive patches of the moss *Polytrichum commune*. The *Polytrichum commune* is strongly dominant but there are also often a sparse scattering of a few other species including *Juncus effusus, Molinia caerulea and Calluna vulgaris.*	Wet Modified Bog (E1.7)
Daff	Areas where *Dryopteris affinis* is dominant.	Tall Herb & Fern: Non-Ruderal (C3.2)
RW	Running water such as streams and rivers.	Running Water (G2)
SW	Standing or open surface waters, including ponds, lochs and the sea.	Standing Water (G1)

Non-NVC Community or Feature Types Code	Description	Phase 1 Habitat (Code)
BG	Various bare ground occurrences including roads, tracks, hardstandings, river shingle, coastal rocks/shoreline, scree and rocky outcrops on hill ground.	Intertidal Shingle/ Cobble (H1.2), Intertidal Boulders/ Rocks (H1.3), Scree – Acid/ Neutral (I1.2.1), Other Exposure – Acid/ Neutral (I1.4.1), and Bare Ground (J4)
ExP	Exposed or bare peat surfaces.	Bare Peat (E4)
QY	Quarry or borrow pit areas.	Quarry (I2.1)
BD	Buildings.	Buildings (J3.6)
PG	Private gardens, lawns, and the curtilage of private properties.	Amenity Grassland (J1.2)
DG	Artificially disturbed ground (e.g., around pylons) that has not yet revegetated.	Other Habitat (J5)

Annex D. Target Notes

1.6.99 The table below provides detail of the TNs recorded during NVC surveys, the first digit in the TN number relates to its respective Section (see also **Figures V2-4.3: National Vegetation Classification Survey Area and Results** and for the Alternative Alignment **Figures V6-4.3: National Vegetation Classification Survey Area and Results**).

Table 1.13: NVC Survey Target Notes

TN No.	Survey Date	Grid Reference	Feature	Notes/Description
0:1	23/02/2022	NG 23785 60600	Species Record	Several small *Juniperus communis* shrubs found amongst the *Calluna vulgaris*.
0:2	23/10/2020	NG 23878 60397	Species Record	*Schoenus nigricans* in M15a.
0:3	23/10/2020	NG 24047 60472	Species Record	Species include *Antennaria dioica*.
0:4	23/10/2020	NG 24077 60477	Species Record	*Schoenus nigricans* in M15a.
0:5	23/10/2020	NG 24472 60215	Species Record	Small patch of *Rorippa nasturtium-aquaticum*.
0:6	23/10/2020	NG 24550 60159	Species Record	*Schoenus nigricans* in M15a.
0:7	23/10/2020	NG 25175 60045	Flush	M10 flush among M15 wet heath.
0:8	23/10/2020	NG 25219 60034	Flush	M10 flush and *Schoenus nigricans* in nearby M15a.
0:9	23/10/2020	NG 25261 60025	Species Record	Species include *Schoenus nigricans* and *Pinguicula lusitanica*.
0:10	23/10/2020	NG 25380 59960	Species Record	Species include *Dactylorhiza purpurella* and *Comarum palustre*.
0:11	23/10/2020	NG 25412 59931	Species Record	Species include *Campylopus shawii*, a Nationally Scarce moss[Error! Bookmark not defined.].
0:12	23/10/2020	NG 25499 59889	Species Record	Species include *Schoenus nigricans*.
0:13	23/10/2020	NG 25687 59898	Species Record	Species include *Schoenus nigricans*.
0:14	23/10/2020	NG 25723 59861	Species Record	Species include *Sphagnum strictum*.
0:15	23/10/2020	NG 25776 59873	Species Record	Species include *Schoenus nigricans*.
0:16	23/02/2022	NG 26067 59271	Bog pools	Area contains numerous small bog pools.
0:17	20/10/2020	NG 26273 59290	Bog pool	Bog pool with *Eriophorum angustifolium* along with the mosses *Sphagnum fallax*, occasional *Sphagnum papillosum* and *S. cuspidatum*. Located within an area of M17 bog.
0:18	23/10/2020	NG 27526 49274	Species Record	Species include *Galium boreale*.
0:19	23/10/2020	NG 27568 47938	Species Record	Species include *Campylopus shawii,* a Nationally Scarce moss[Error! Bookmark not defined.].
0:20	22/10/2020	NG 27770 52731	Flush	*Eriophorum angustifolium, Carex panicea, C. nigra, Erica tetralix, Succisa pratensis, Festuca vivipara, Potentilla erecta, Molinia caerulea*.
0:21	22/10/2020	NG 27784 52717	Flush	*Eriophorum angustifolium, Carex panicea, C. nigra, Erica tetralix, Succisa pratensis, Festuca vivipara, Potentilla erecta, Molinia caerulea.*
0:22	22/10/2020	NG 27849 52392	Bog pool	*Eriophorum angustifolium, Sphagnum fallax, S. cuspidatum* and small amount of *S. papillosum.*
0:23	23/10/2020	NG 27861 50715	Species Record	Species include western liverworts *Colura calyptrifolia* (on *Calluna* and *Blechnum*) and *Anastrepta orcadensis*.
0:24	23/10/2020	NG 28448 51074	Flush	Small M9 flush among M19/M25.
0:25	23/10/2020	NG 28450 50809	Species Record	*Erica cinerea* in M19 bog.
0:26	23/10/2020	NG 28508 50829	Species Record	Oceanic moss *Isothecium myosuroides var. brachythecioides* on heathy cliff.
0:27	22/10/2020	NG 29193 45583	Wet heath	Large area of wet heath with species such as *Calluna vulgaris, Avenella flexuosa, Trichophorum germanicum, Molinia caerulea, Nardus stricta, Potentilla erecta, Carex panicea, Juncus squarrosus, Vaccinium myrtillus* and pleurocarpous mosses.
0:28	23/10/2020	NG 30165 45397	Flush	M10 flush among taller *Juncus* spp. vegetation.
0:29	23/10/2020	NG 30211 45526	Flush	M9 and M10 flushes.
0:30	23/10/2020	NG 30234 45541	Flush	M10 flush.
0:31	23/10/2020	NG 30234 45460	Species Record	Species include *Sphagnum strictum*.
0:32	23/10/2020	NG 30236 45402	Flush	M9 flush.
0:33	23/10/2020	NG 30259 45352	Species Record	Species include *Sphagnum teres* (at edge of this M10 flush).
0:34	23/10/2020	NG 30286 45454	Flush	Large Mx flush.

TN No.	Survey Date	Grid Reference	Feature	Notes/Description
0:35	23/10/2020	NG 30372 45237	Flush	M10 flush among area of mainly M19 (and some M6).
1:1	24/02/2022	NG 47137 34425	Species Record	Two *Juniperus communis* bushes.
3:1	29/04/2022	NG 70559 23587	Species Record	*Sorbus aucuparia* with epiphytes including the lichens *Lobaria pulmonaria, Sticta fuliginosa, S. limbata, Pectenia cyanoloma, Pannaria rubiginosa, Nephroma laevigatum and Leptogium burgessii,* the mosses *Ulota phyllantha* and *U. drummondii*, and the liverworts *Cololejeunea minutissima* and *Frullania teneriffae*.
3:2	29/04/2022	NG 72230 21960	Species Record	Species-rich vegetation on streamside shingle. *Betula* sp., *Salix aurita* and *Sorbus aucuparia* seedlings, and an open community of *Thymus polytrichus, Ficaria verna, Hypochoeris radicata, Teucrium scorodonia, Geum rivale, Lathyrus linifolius, Linum catharticum, Valeriana officinalis, Angelica sylvestris, Primula vulgaris, Viola riviniana, Hypericum pulchrum, Ranunculus acris, Anemone nemorosa, Calluna vulgaris, Erica cinerea, Succisa pratensis, Potentilla erecta, Taraxacum officinale, Tussilago farfara, Alchemilla glabra, A. alpina, Sanicula europaea, Plantago lanceolata, Achillea millefolium, Juncus articulatus* and *Luzula sylvatica*.
3:3	29/04/2022	NG 73500 21569	Species Record	Large *Salix aurita* bush with epiphytes including lichens *Lobaria pulmonaria, L. scrobiculata, Hypotrachyna sinuosa, Pannaria rubiginosa, Pectenia cyanoloma, Parmotrema perlatum, Leptogium dendriscum* and *Cetrelia olivetorum*, the mosses *Ulota phyllantha, U. drummondii* and *Orthotrichum pulchellum*, and the liverwort *Frullania teneriffae*.
3:4	29/04/2022	NG 74324 21309	Species Record	A few plants of *Thalictrum alpinum* among sedges, herbs and mosses on damp, flushed ground. Other evidence of base-enrichment in Mx, M10 and U5c nearby in this same small polygon (species including *Carex panicea, Selaginella selaginoides, Lysimachia nemorum* and the mosses *Campylium stellatum, Scorpidium revolvens* and *Sphagnum contortum*).
3:5	14/03/2022	NG 75122 20526	Flush	Small M10 stony flush with lots of small *Carex* spp. and *Narthecium ossifragum*.
3:6	04/10/2021	NG 65863 21991	Spring	M32 spring with water upwelling and mound of typical vegetation with mosses and *Carex* species.
3:7	04/10/2021	NG 65702 21995	Spring	Large M32 spring with water upwelling and mound of typical vegetation with mosses, *Carex* species and *Montia fontana*.
3:8	05/10/2021	NG 79258 23926	Species Record	Single *Juniperus communis* bush.
3:9	05/10/2021	NG 79051 24746	Flush	M10 flush with *Carex* spp., *Narthecium ossifragum*, brown mosses and *Sphagnum denticulatum*.
3:10	04/10/2021	NG 64487 22294	Bog pool	Represents a number of small bog pools within the area. Main species comprise *Eriophorum vaginatum, Narthecium ossifragum, Trichophorum germanicum, Sphagnum cuspidatum* and *S. capillifolium*. Found within an area of M15 wet heath.
4:1	21/03/2022	NG 79542 21804	Species Record	Large *Juniperus communis* bush.
4:2	23/03/2022	NG 87494 13824	Flush	M10 flush.
4:3	23/03/2022	NG 87624 13682	Flush	M10 flush. *Erica tetralix* and *Carex* species.
4:4	22/03/2022	NG 88420 11711	Flush	M10 flush.
4:5	22/03/2022	NG 89366 11617	Flush	M10 flush with brown mosses, *Carex dioicia* present along with *Erica tetralix* and *Narthecium ossifragum*.

TN No.	Survey Date	Grid Reference	Feature	Notes/Description
5:1	08/03/2022	NH 08997 01942	Bog pool	Representative of the smaller bog pools in the area, too small to map. Dominated by *Eriophorum angustifolium* with *Sphagnum fallax, S. cuspidatum*, and occasional *S. papillosum*.
5:2	10/03/2022	NH 14119 01761	Peat erosion	Signs of peat erosion within this area where small patches of bare peat are starting to become exposed. No clear signs of heavy grazing therefore erosion probably more natural erosion.
5:3	10/03/2022	NH 15618 01187	Invasive species	Scattered clumps of *Rhododendron ponticum.*
5:4	02/11/2021	NH 27243 02784	Tree	Mature *Betula* sp. tree
5:5	02/11/2021	NH 27266 02858	Tree	Very mature *Betula pubescens* with large canopy.
5:6	02/11/2021	NH 27337 02597	Trees	Four mature *Betula pubescens* trees.
5:7	02/11/2021	NH 27450 02606	Tree	Mature *Fraxinus excelsior*.
5:8	10/03/2022	NH 15548 01643	Bog pool	M3 with *Eriophorum angustifolium, E. vaginatum, Sphagnum papillosum, S. capillifolium* and *S. cuspidatum*.
6:1	29/03/2022	NH 29739 02870	Invasive Species	Large rhododendron bush in *Pteridium aquilinum*.
6:2	29/03/2022	NH 29870 02864	Invasive Species	Rhododendron (x1) in M15 wet heath.
6:3	29/03/2022	NH 29944 02807	Species Record	*Rhynchospora alba* and *Sphagnum medium* in M17 bog.
6:4	29/03/2022	NH 30090 03080	Invasive Species	Small rhododendron in M15 wet heath.
6:5	29/03/2022	NH 30155 03255	Species Record	*Rhynchospora alba* and *Sphagnum medium* in M17 bog.
6:6	29/03/2022	NH 30161 03202	Species Record	*Sphagnum medium* in M17 bog.
6:7	29/03/2022	NH 30378 03705	Species Record	*Sphagnum medium* in M17 bog.
6:8	29/03/2022	NH 30405 03849	Species Record	Small hummock of *Sphagnum austinii* in M15 wet heath 14 m south-southwest of pylon.
6:9	29/03/2022	NH 30466 04210	Species Record	*Juniperus communis* in M15 wet heath.
6:10	29/03/2022	NH 30970 04998	Species Record	North facing U20 bracken area with species including the moss *Ptilium cristacastrensis*, *Juniperus communis* and small *Quercus petraea* x *robur*. Epiphytes on the oak include the moss *Ulota phyllantha* and the lichen *Hypotrachyna sinuosa*.
6:11	29/03/2022	NH 30971 04976	Species Record	Group of aspens (*Populus tremula*) on east facing slope.
6:12	29/03/2022	NH 31032 05062	Species Record	*Juniperus communis* in M15 wet heath.
6:13	29/03/2022	NH 31075 05123	Species Record	*Rhynchospora alba* in M17 bog.
6:14	29/03/2022	NH 31102 05414	Flush	M10 base-enriched flush with species including *Selaginella selaginoides, the mosses Scorpidium scorpioides, Scorpidium revolvens, Campylium stellatum* and *Blindia acuta*, and the liverwort *Aneura pinguis*.
6:15	28/03/2022	NH 32757 07158	Species Record	*Gnaphalium sylvaticum* at southeast edge of forest road, an Endangered species[14].
6:16	30/03/2022	NH 33957 07843	Invasive Species	Rhododendron at edge of U20 bracken.
6:17	30/03/2022	NH 34098 08005	Invasive Species	Rhododendron (1 m tall) in heathy vegetation just east of forest road.

Annex E. Potential GWDTE Communities

1.6.100 **Table 1.14: Communities within the survey area which may potentially be classified as GWDTE** below details NVC communities and other habitat types recorded within the survey area which may potentially be classified as GWDTE in line with SEPA guidance[17]. For any relevant non-NVC communities or features, the respective potential groundwater dependency has solely been assigned on floristic composition and similarity to other potential GWDTEs in the SEPA listings. For example, the 'Je' non-NVC community should also qualify for potential GWDTE status, and the classification of moderate sensitivity is keeping in line with other similar *Juncus* spp. dominated grassland communities, e.g., MG10.

1.6.101 Those communities which may have limited or moderate dependency on groundwater in certain settings are marked in yellow and NVC communities recorded that are likely to be considered high, or sensitive GWDTE in certain hydrogeological settings are highlighted in red.

Table 1.14: Communities within the survey area which may potentially be classified as GWDTE

NVC Types & Other Habitats Recorded	Community Name
M15	*Trichophorum germanicum - Erica tetralix* wet heath
M15-U4	M15-U4 Intermediate
M15-U6	M15-U6 Intermediate
M15-M17	M15-M17 Intermediate mire
M25 & M25Ph	*Molinia caerulea - Potentilla erecta* mire
M25-M23b	M25-M23b Intermediate community
M28	*Iris pseudacorus - Filipendula ulmaria* mire
U6	*Juncus squarrosus - Festuca ovina* grassland
MG9	*Holcus lanatus - Deschampsia cespitosa* grassland
MG10	*Holcus lanatus - Juncus effusus* rush-pasture
Je	*Juncus effusus* acid grassland community
W1x	*Salix aurita* scrub
W4	*Betula pubescens - Molinia caerulea* woodland
W7	*Alnus glutinosa – Fraxinus excelsior – Lysimachia nemoreum* woodland
M6	*Carex echinata – Sphagnum fallax/denticulatum* mire
M6-M25	M6-M25 Intermediate
M9	*Carex rostrata – Calliergon cuspidatum/giganteum* mire
M10	*Carex dioica - Pinguicula vulgaris* mire
M11	*Carex viridula - Saxifraga aizoides* mire
M14	*Schoneus nigricans - Narthecium ossifragum* mire
M23	*Juncus effusus/acutiflorus – Galium palustre* rush pasture
M29x	*Hypericum elodes – Potamogeton polygonifolius* soakway
M32	*Philonotis fontana – Saxifraga stellaris* spring
U16	*Luzula sylvatica - Vaccinium myrtillus* tall-herb community
CG10	*Festuca ovina – Agrostis capillaris – Thymus polytrichus* grassland
Mx	*Carex* spp. neutral sedge mire