

**ScottishPower Renewables** 

# Harestanes West Windfarm: Outline Peat Management Plan

Technical Appendix 10.2

2760911-P10.2 (02)



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## **RSK GENERAL NOTES**

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## **1** INTRODUCTION

- 1.1 This report provides an Outline Peat Management Plan for the Harestanes West Windfarm and associated development infrastructure (hereafter referred to as the 'proposed Development').
- 1.2 The report forms a Technical Appendix to the Environmental Impact Assessment Report (EIA Report) for the proposed Development and should be read in conjunction with this document. It has been produced to address the requirements for excavation of peat and peaty soils during the wind farm construction process.
- 1.3 This report will consider total volumes of peat that need to be excavated and will set out options for reuse of the excavated material. Guidance on management and handling of excavated peat and soils will be provided.
- 1.4 Within this report the following definitions will be used. The 'proposed Development' refers to infrastructure within the Application Boundary. 'Site' refers to the area within the Application Boundary within which the proposed Development lies. 'Access track to the turbine area' refers to the route from the A701 to the 'turbine area', which is the area of the Site in which the proposed Development turbines are located.

## **Site Location**

- 1.5 The proposed Development is located north-west of the village of Ae, approximately 1.3 kilometres (km) from the Application Boundary and 2.2 km from the nearest proposed turbine, and approximately 13 km north of Dumfries. The Site is located wholly within the Dumfries and Galloway Council (DGC) administrative area. The turbine area lies to the west of the Water of Ae and the Windy Hill Burn runs through the centre of the turbine area from north-west to south-east. The Site is made up of undulating hills that form part of the upland plateau or range of hills between Annandale to the east and Nithsdale to the West.
- 1.6 The land within the Site consists mainly of commercial conifer plantation with some areas of native woodland and vegetated hills forming part of an area of forested upland plateau, with minor watercourses networked throughout. Around 32% of the soils comprise carbon-rich soils and deep peat (NatureScot, 2016).

## **Development Proposals**

- 1.7 The proposed Development includes the following key elements:
  - 12 wind turbines, six with a maximum height of 220 m and six with a maximum height of 200 m to blade tip;
  - 12 No hardstanding areas at the base of each turbine, with an approximate total area of 3,856 m<sup>2</sup>;
  - transformer/switchgear housings located adjacent to turbines;



- site entrance from the A701, and 31.5 kilometres (km) of access track with associated watercourse crossings – of which 10.5 km are new access tracks and 21.0 km are upgrades to existing tracks;
- underground cabling linking the turbines with the substation;
- a permanent meteorological mast (PMM) and associated hardstanding area;
- an operations control building with parking and welfare facilities;
- a substation compound;
- a bellmouth and parking area adjacent to the A701;
- two temporary construction compound areas;
- extraction of material from up to three existing quarries owned and operated by Forestry and Land Scotland to provide suitable rock for access tracks, turbine bases and hardstanding;
- health & safety and other directional site signage; and
- additional development components to improve the overall ecological and environmental benefits accruing from the proposed Development in the form of peatland restoration, habitat improvement and native woodland planting.
- 1.8 Full details of the proposed Development design are provided in **Volume 2 Chapter 3 Proposed Development** of the EIA Report.

### Aims

1.9 This report aims to undertake a review of all available peat depth information for the proposed Development and immediate environs, and to provide a series of calculations determining the estimated volumes of peat that will require excavation in order to allow the proposed Development to progress. Options will be provided to address use of the excavated peat within necessary restoration of the proposed Development's infrastructure. A series of good practice measures relating to peat and soil handling and storage will also be provided.

### **Assessment Method**

- 1.10 The assessment has involved the following stages:
  - Desk study;
  - Peat depth surveys and infrastructure design;
  - Volume calculations for excavation and reuse;
  - Peat handling and storage guidance.



## 2 PEAT CONDITION

## **Developments On Peat**

#### **Definition of Peat**

2.1 Scotland's Soils (2024) classifies peat as:

An accumulation of partially decomposed organic material, usually formed in waterlogged conditions. Peat soils have an organic layer more than 50 cm deep from the soil surface which has an organic matter content of more than 60%.

- 2.2 Organic soils which are 50 cm or thinner can also support peatland vegetation and as a result are also considered within Scotland's broader peatland system in Scotland's National Peatland Plan (NatureScot, 2015). These are often described as 'peaty gleys' or 'peaty podzols', reflecting key aspects of the underlying soil. Peaty soils have a higher plant fibre content and are less decomposed than peat.
- 2.3 Active peatland typically consists of two layers: the surface layer or *acrotelm* and the deeper layer or *catotelm*. The acrotelm contains the living vegetation and consists of living and partially decayed plant material. It typically has a low but variable hydraulic conductivity and allows some through-flow of water within the plant material. The underlying catotelm is denser, with a very low hydraulic conductivity, and is formed from older decayed plant material. The catotelm varies in structure, in some areas retaining a proportion of fibrous material and in other areas being more humified and amorphous. The degree of humification typically increases with depth.
- 2.4 Underneath the peat-forming layers, the basal substrate can be a mineral soil, a superficial deposit such as glacial material, or bedrock. There may be a transition zone through a mineral-rich peaty layer at the base of the peat, although this is usually no more than 5 cm in thickness.

#### **Importance of Peat**

- 2.5 Peatland forms a key part of the Scottish landscape, covering more than 20% of the country's land area, and forming a significant carbon store (Scotland's Soils, 2019). In addition, peatland is an internationally important habitat.
- 2.6 Active and healthy peatlands develop continuously, removing carbon dioxide from the atmosphere and storing it within the peat soil. Peatland protection and restoration form key parts of the Scottish Government's Climate Change Plan, which targets restoration of 250,000 ha by 2030 (Scottish Government, 2018). As of March 2020, over 25,000 ha of peatland had begun restoration, and in 2020 the government announced a £250 million ten-year funding package to support the restoration of degraded peat (Scottish Government, 2020). Restoration will need to be conducted at a faster pace to reach targets.
- 2.7 It is therefore important that developments in peatland areas recognise the importance of peatland as a habitat and carbon store. Careful planning of developments, and careful infrastructure design, can remove or minimise the disturbance of peat that would be needed to allow the development to proceed.



## **Development Setting**

#### **Topography and Geomorphology**

- 2.8 Topography within the Application Boundary is variable, with elevations ranging from 108 m to 380 m above Ordnance Datum (AOD). The highest point on Site is towards the north-east of Holehouse Hill, situated within the eastern part of the access track, lying at 380 m AOD. Topography undulates across the Site with scattered peaks including: Auchengeith (299 m) in the south-west, Shiel Cleuch (300 m AOD) to the east, and Hound Knowe (340 m AOD) to the north.
- 2.9 The lowest point within the Site is to the south-east of the access track where it meets the A701, lying at 108 m AOD. Valleys caused by the incision of river systems account for several other areas of low elevation on Site, at roughly 200 m AOD.
- 2.10 The Site is bounded to the north by Threap Moor and a series of peaks including Queensberry (697 m AOD), Wee Queensberry (512 m AOD) and Earncraig (611 m AOD). The Site is bounded to the east by the operational Harestanes Windfarm in conjunction with several hills and fells including Green Hill (314 m AOD), Knockespen (344 m AOD) and Brownmoor Hill (347 m AOD). The southern side of the Site is bounded by the village of Ae to the south-east, Cocklet Hill (269 m AOD) to the south, and the operational Dalswinton Windfarm to the south-west. The western side of the Site is bounded by three hills: Dins Rig (324 m AOD), Great Hill (353 m AOD) and White Hill (302 m AOD), in addition to Loch Ettrick.

#### Habitats and Vegetation

- 2.11 The majority of the proposed Development and surrounding Site is under commercial conifer plantation managed by Forestry and Land Scotland (FLS). Within this, there are firebreaks and rides where varied habitats have developed, ranging from grassland to mire communities and native woodland in places.
- 2.12 The vegetation within the Site has been surveyed using a combined UK habitat classification and National Vegetation Classification (NVC) survey method. Apart from the conifer plantation, the main communities present are:
  - M15 Scirpus cespitosus-Erica tetralix wet heath;
  - M19 Calluna vulgaris-Eriophorum vaginatum blanket mire; and
  - M23 Juncus effusus/acutiflorus-Galium palustre rush-pasture.
- 2.13 Other habitats are present within the Site with smaller or more patchy area coverage or as part of mosaic habitats.

#### Hydrology

2.14 Catchment data have been derived from the Flood Estimation Handbook Web Service (UKCEH, 2024). The Application Boundary is situated across five catchment areas: Water of Ae (u/s Goukstane Burn), Goukstane Burn, Pennyland Burn, Glenkiln Burn and Garrel Water. The catchment areas are shown on Figure 10.5. The Water of Ae, Goukstane Burn, Glenkiln Burn and Garrel Water are all tributaries to the River Annan. The Pennyland Burn is a tributary to the River Nith.



- 2.15 The majority of the land within the Application Boundary lies within the Water of Ae (u/s Goukstane Burn) catchment, including the northern half of the turbine area and a large part of the access track to the turbine area. The southern half of the turbine area primarily lies within the Goukstane Burn catchment, while a small area to the south west of the turbine area is drained by the Pennyland Burn catchment. The eastern part of the access track to the turbine area is drained by the Glenkiln Burn and Garrel Water catchments.
- 2.16 The catchment wetness index for the catchment areas is between 0.60-0.64, indicating the Site is wet 60-64% of the time. The area has a base flow index (BFI HOST19) of between 0.32 and 0.55 indicating a moderate to low input of groundwater baseflow to surface watercourses. The standard percentage runoff (SPR HOST) is 35-48%, which indicates that this percentage of rainfall on Site is converted into surface runoff from rainfall events. This represents a high runoff rate where soils have limited capacity to store rainfall and/or a slow infiltration rate and would quickly saturate, leading to rapid runoff.

#### **Peat Characteristics**

- 2.17 Most of the development area consists of a patchwork of peaty soils, with areas of soil, peaty soil, shallow peat and deeper peat reflecting the underlying topography and hydrological setting.
- 2.18 Across the whole Site, peat and peatland have been considerably disrupted by the plantation of coniferous forestry. Drainage ditches have been excavated throughout the forested areas in an attempt to improve the ground for tree growth. Parts of the forestry has recently been clear-felled, resulting in additional disruption to the ground conditions from the felling works.
- 2.19 Very deep peat (greater than 2.5 m) is most notably found north-east of Turbine 1, to the west of the upgraded track, where peat reaches depths greater than 6.5 m, and to the east of Turbine 12, where it reaches a maximum depth of 5.8 m. Isolated areas of very deep peat also exist south of Turbine 3. Areas of deep peat (greater than 1.5 m) are present in the area between Turbines 3 and 4, and centrally between Turbines 8, 10 and 11.

## Peat at the Proposed Development

- 2.20 The Site was identified to include areas of peat at an early stage, as indicated by superficial geology and soils mapping for the region. A broad-scale peat depth survey on a 100 m grid was undertaken by WRc in May and June 2023. The peat depth data from these surveys were used to inform the infrastructure layout design process, in order to avoid peat where possible.
- 2.21 A second phase of peat depth surveying was undertaken by WRc in February and March 2024, focusing on the proposed infrastructure layout. Further changes to the layout required an additional survey in July 2024, also undertaken by WRc.
- 2.22 The combined peat depth data were used to generate a detailed map of peaty soil and peat depth for the proposed Development. This is provided in Volume 2 Chapter 10: Hydrology, Hydrogeology, Geology and Soils of the EIA Report. Measured peat and soil depths range from 0 (bedrock at surface) to 6.8 m. A total of 5,700 peat depth



measurements have been recorded for the proposed Development and immediate surroundings.

2.23 The intention has been to avoid areas of peat where possible, and to minimise incursion into peatland where it has not been possible to avoid it altogether. Approximately 93% of the development infrastructure including drainage is underlain by peaty soil or topsoil no greater than 0.5 m deep, with 7% of infrastructure underlain by peat. Furthermore, small sections of floating track are proposed to minimise excavation in areas underlain by deeper peat.

### **Peat Excavation Volumes**

- 2.24 The tables below set out the estimated volumes of peat that need to be excavated in order to allow construction of the proposed Development to proceed. The calculations are provided per 'scheme element', as totals for each element type, and as an overall total. Each set of calculations provides subdivision into 'acrotelm' and 'catotelm'.
- 2.25 For the purposes of these calculations, the acrotelm has been assumed to form the uppermost 0.5 m where peat is present. Acrotelm is known to vary in thickness, but is recommended that peat turves are excavated to approximately 0.5 m where possible, including the uppermost part of the catotelm to promote quicker regeneration of disturbed areas following reinstatement.
- 2.26 Volumes of peaty soil and topsoil have not been included, in line with the definition of peat quoted above. Soils would also require excavation but are less sensitive than peat to both excavation and restoration.
- 2.27 **Table 10.2.1** provides peat volumes that require excavation in order to allow construction of the access track network and associated drainage. The proposed new access track width will be approximately 5.5 m when completed. For calculation purposes, a working corridor of 12 m has been used, to allow for inclusion of trackside drainage, cable trenching and vehicle movements during construction.

Scheme element	Acrotelm (m <sup>3</sup> )	Catotelm (m³)	Total (m <sup>3</sup> )
New track from Site entrance to Eastern Compound	136	49	185
New track within the turbine area, from the Eastern Compound	5,065	3,614	8,679
Upgraded access track	6,433	4,385	10,818
Upgraded turbine area track	536	145	681
Total	12,170	8,193	20,363

#### Table 10.2.1: Peat excavation volumes for access tracks

2.28 **Table 10.2.2** provides peat volumes that require excavation in order to allow construction of the turbine foundations and hardstanding areas plus associated drainage. Calculations have been made for each turbine base plus necessary hardstanding areas, making use of peat depth data for the relevant turbine and hardstanding footprint.



Scheme element	Acrotelm (m <sup>3</sup> )	Catotelm (m <sup>3</sup> )	Total (m <sup>3</sup> )
T1 hardstanding	202	8	210
T2 hardstanding	0	0	0
T3 hardstanding	800	144	944
T4 hardstanding	1,646	1,679	3,325
T5 hardstanding	0	0	0
T6 hardstanding	0	0	0
T7 hardstanding	166	3	169
T8 hardstanding	0	0	0
T9 hardstanding	0	0	0
T10 hardstanding	0	0	0
T11 hardstanding	829	126	955
T12 hardstanding	0	0	0
Total	3,643	1,960	5,603

 Table 10.2.2: Peat excavation volumes for turbines, hardstandings and associated drainage

2.29 **Table 10.2.3** provides peat volumes that require excavation in order to allow construction of additional infrastructure, including construction compounds, substation, met mast and borrow pits, plus associated drainage. Calculations have been made for each footprint, making use of peat depth data for the relevant infrastructure element.

Table 10.2.3: Peat excavation calculations for other infrastructure elements

Scheme element	Acrotelm (m <sup>3</sup> )	Catotelm (m <sup>3</sup> )	Total (m <sup>3</sup> )
West construction compound	1,532	562	2,094
East construction compound	44	9	53
Substation	43	9	52
Parking area	0	0	0
Met mast	0	0	0
Borrow pit 1	0	0	0
Borrow pit 2	0	0	0
Borrow pit 3	517	257	774
Total	2,136	837	2,973

2.30 A summary of the total peat volumes is provided in **Table 10.2.4**.

#### Table 10.2.4: Summary of estimated peat excavation volumes

Scheme element	Acrotelm (m <sup>3</sup> )	Catotelm (m <sup>3</sup> )	Total (m <sup>3</sup> )
Access tracks	12,170	8,193	20,363
Turbines and hardstandings	3,643	1,960	5,603
Other infrastructure elements	2,136	837	2,973
Total	17,949	10,990	28,939



### **Peat Reuse**

2.31 The guidance document 'Developments on Peatland: Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste' (Scottish Renewables/SEPA, 2012) identifies a number of reuse options for excavated peat within wind farm developments. These have all been tested in practice and found to be effective, if undertaken with care and appropriate handling of peat.

#### Dressing-off Edges of Constructed Infrastructure

- 2.32 Excavated peat can provide a valuable means for dressing-off and reinstating the slopes and edges of constructed infrastructure. This should be undertaken as soon as practicable after construction and should be managed such that a suitable tie-in to the surrounding topography is created as part of the process. This has a two-fold purpose – to reduce the visual effect of the infrastructure and to retain as much of the existing habitat as possible.
- 2.33 A secondary part of this would involve full reinstatement of elements of infrastructure only required for the construction phase, principally temporary construction compounds. Temporary parts of the turbine hardstandings may also be reinstated following installation of the turbines.

#### Verge Reinstatement on Track Sections

- 2.34 For cut tracks, the track margins can be reinstated to form a verge slightly raised above the track level. This acts as a partial visual screen for the track network. Well-designed track margins also help to direct track surface runoff into trackside drainage, where it can be directed for treatment.
- 2.35 Where existing tracks require upgrading, new works are typically focused on one side of the track and reinstatement would also usually be focused on the track side with new works. Reinstatement of the already-existing track verge can be undertaken where the ground has been left raw or where previous reinstatement has not been effective.

#### **Borrow Pit Restoration**

2.36 Excavated peat has been used successfully in borrow pit restoration, where the method of reuse and the final restoration profile is in keeping with overall habitat and environmental reinstatement objectives. Care must be taken to ensure that no residual risks from pollution of the environment or harm to human health results from the restoration. Fencing of the restored area may be appropriate if required to exclude grazing in order to encourage vegetation recovery or to allow stabilisation of the surface until vegetation cover has established.

#### **Peatland Restoration**

2.37 Peat can provide a valuable material for ditch and channel blocking as part of a peatland restoration plan on blanket bog or other areas of peatland. In areas with wider ditches, it may be appropriate to use saturated or unconsolidated peat behind dams in order to speed up the restoration process and regeneration of associated vegetation.



## **Peat Reuse Volumes**

2.39

2.38 Calculations have been made to determine where excavated peat can usefully be reused within the proposed Development, for the purposes of reinstatement and restoration. Estimated volumes for reuse are provided in **Table 10.2.5**, subdivided by the different reinstatement and restoration methods that are appropriate for the proposed Development.

Reuse option		Acrotelm (m³)	Catotelm (m <sup>3</sup> )	Total (m³)
New access track		13,100	1,400	14,500
2x construction compounds		550	50	600
1x substation		100	0	100
1x substation construction compound		100	0	100
12x turbine hardstandings		3,900	400	4,300
Peatland restoration		200	9,200	9,400
	Totals	17,950	11,050	29,000

All figures provided in **Table 10.2.5** have been rounded down to the nearest 100 m<sup>3</sup> (or

#### Table 10.2.5: Estimated soil and peat volumes for different reuse options

- 50 m<sup>3</sup> where the values were below 100), to make allowances for the uncertainties present within the figures.
  2.40 It has been assumed that limited catotelmic peat would be reused for dressing-off edges and reinstatement of construction infrastructure. In areas with natural hollows, use of
- 2.40 It has been assumed that limited catotelmic peat would be reused for dressing-off edges and reinstatement of construction infrastructure. In areas with natural hollows, use of some catotelmic peat may be appropriate but it is likely in practice that most of this work would make use of acrotelmic peat.
- 2.41 It has been assumed that all track verge reinstatement would use 90% acrotelmic peat, with up to 10% catotelmic peat to be used in areas with natural hollows.
- 2.42 Reinstatement and dressing-off have assumed a maximum depth of 0.4 m and a maximum width of 2 m (1.5 m for turbine hardstandings) from the infrastructure or track margin, to be varied in practice as best suits the local ground conditions.
- 2.43 The majority of the catotelmic peat and any acrotelmic peat not required elsewhere would be targeted for use in peatland restoration. A number of areas potentially suitable for peatland restoration have been identified within the Site, including areas with existing drainage ditches and areas where forest to bog restoration may be appropriate and where reuse of peat in a restoration programme would be targeted. **Figure 8.1** within **Technical Appendix 8.9** (Outline Habitat Management Plan) indicates areas identified as potential peatland restoration areas within the proposed Development.



## **3 PEAT HANDLING & STORAGE**

## **Peat Excavation**

- 3.1 During the construction of the proposed Development infrastructure, the Contractor would adopt the following good practice guidelines with relation to peat excavation:
  - Where peat conditions are suitable, peat turves would be excavated as intact blocks of the uppermost 0.5 m including the vegetated surface acrotelm layer and the upper part of the catotelm;
  - In areas where peat conditions do not allow clean removal of peat turves, the upper layer of peat would be removed as divots or mulch rather than as turves. Careful handling would help to keep the vegetated blocks largely the right way up;
  - Underlying peat would be extracted as close to intact as is feasible within the constraints of the area. Remoulding of the peat by the excavator would be kept to a minimum;
  - Excavated materials would be classified depending on their composition, and each type would be stored separately. Anticipated material classes are: peaty soils and topsoil, subsoil, acrotelmic peat, catotelmic peat, mineral soil and rock; and
  - Excavated peat would be transported as short a distance as practicable for either reuse or temporary storage, in order to minimise loss of structure during transport.
- 3.2 Peat and soil stripping can be adversely affected by wet weather. The following 'stop' conditions are recommended to guide any peat and soil stripping activity (CH2M & Fairhurst, 2018):

'Stop' rule	Requirements
High intensity rainfall	Rainfall during construction greater than 10 mm per hour
Long duration rainfall	Rainfall in the preceding 24 hours greater than 25 mm
7-day cumulative rainfall (1)	Preceding 7 days of rainfall greater than 50% of the monthly average
7-day cumulative rainfall (2)	Preceding 7 days of rainfall greater than 50 mm

#### Table 10.2.6: Recommended 'Stop' conditions (CH2M & Fairhurst, 2018)

3.3 Monitoring of rainfall for 'stop' conditions would require access to a suitable local source of data, such as the UK Met Office's monitoring station at Dumfries Crichton Royal No 2, or a site-specific rainfall station, to allow identification of these conditions being exceeded in order to allow appropriate action to be taken.

## **Temporary Storage**

3.4 Temporary storage of peat should be avoided or minimised wherever possible. This is best achieved by transporting the peat to an allocated reuse location as soon as practicable following excavation. This would help to retain its structural integrity as far as



possible, would minimise volumes of peat requiring storage and would help to prevent the peat drying out.

- 3.5 The Environmental Clerk of Works (ECoW) would maintain a schedule of reuse and restoration areas and would direct whether excavated peat should be stored or transported directly to a suitable reuse location. Immediate reuse is likely to be more practicable in the later stages of construction.
- 3.6 Soils, peat turves/divots and peat would all be stored separately. The following outline good practice would be applied to all areas of peat and soil storage:
  - Excavated materials would not be stored immediately above excavation faces, in order to prevent overburden-induced failure;
  - Local drainage lines, areas of very wet ground and locally steep slopes would be avoided for excavated material storage, including peat;
  - Peat turves would be stored vegetation-side up where possible;
  - Careful handling of upper-layer peat divots, from areas where peat turves cannot be excavated, would help to retain vegetated blocks the right way up;
  - Catotelmic peat would be stored separately from vegetated peat blocks, in mounds up to 1 m high;
  - Limited smoothing or 'blading' of stockpiled catotelm peat, topsoil and subsoil would help to shed rainwater and prevent ponding of water on the stockpile;
  - In periods of dry weather, light spraying of the temporary peat stores would be applied in order to minimise drying;
  - All temporary storage areas for excavated peat and soils would be at least 50 m from any watercourses;
  - Runoff from stored peat and soils would be managed to avoid impacts to habitats and watercourses. Where necessary, drainage control measures such as use of silt fences would be put in place; and
  - Monitoring of peat storage areas may be required during wet weather or snowmelt. This would be undertaken by the Contractor, with findings reported to the ECoW.
- 3.7 Areas identified as potentially suitable for peat and soil stockpiles are detailed in Table 10.2.7 and shown on Figure 10.2.1. Storage areas would be assessed for suitability during construction works and priority would be given to areas near to the material source; key constraints would be slope, watercourses and sensitive habitats.

#### Table 10.2.7: Potential areas for peat and soil stockpiles

Location	Grid Reference
South of access track, south-east of borrow pit 3	29866 59536
North and East of Construction Compound adjacent (near T02)	29525 59303
North of T11, West of access track	29552 58977



## **Reinstatement and Restoration**

- 3.8 The following principles would be applied in all situations where peat is being reinstated or used in restoration:
  - Reinstatement of peat turves and vegetated peat divots would ensure that surface re-vegetation is encouraged as early as possible. Vegetated peat must only be used for surface layer reinstatement and restoration;
  - Re-seeding of any significant areas of bare peat would be undertaken with a suitable species mix appropriate to the surrounding habitats. Careful planning of reinstatement should minimise areas of bare peat by appropriate distribution of vegetated peat turves and divots;
  - Grazing by livestock and deer may need to be prevented in sensitive areas, by selective use of fencing, until re-vegetation has become established; and
  - In the event that stored peat becomes dewatered or desiccated, this material would not be exposed in the upper part of any reinstatement or restoration area in order to minimise any further character loss. Storage of excavated peat would be minimised in order to prevent or limit dewatering and desiccation.

### **Updated Peat Management**

3.9 The Outline Peat Management Plan presented here would be updated and refined as necessary with further site-specific detail once site investigation results become available. This would involve recalculation of peat volumes requiring excavation and storage. Location-specific reinstatement and restoration would be directed by the ECoW, taking account of specific local variation in topography and natural ground conditions. The Construction Peat Management Plan would be a live document, with revisions added as necessary during the construction process.



## 4 SUMMARY

- 4.1 This Outline Peat Management Plan provides an assessment of the likely volumes of peat that would require excavation during the construction of the proposed Development, and of the volumes of peat that can legitimately be used in reinstatement of development infrastructure. The assessment has included consideration of all proposed infrastructure that would require construction and excavation work where peat would require removal.
- 4.2 Approximately 62% of the excavated peat would be acrotelmic, which provides good opportunities for promoting re-establishment of peatland vegetation around construction areas. Sensitive reinstatement would help to minimise the visual impact of the construction works as well as minimising the habitat loss from construction.



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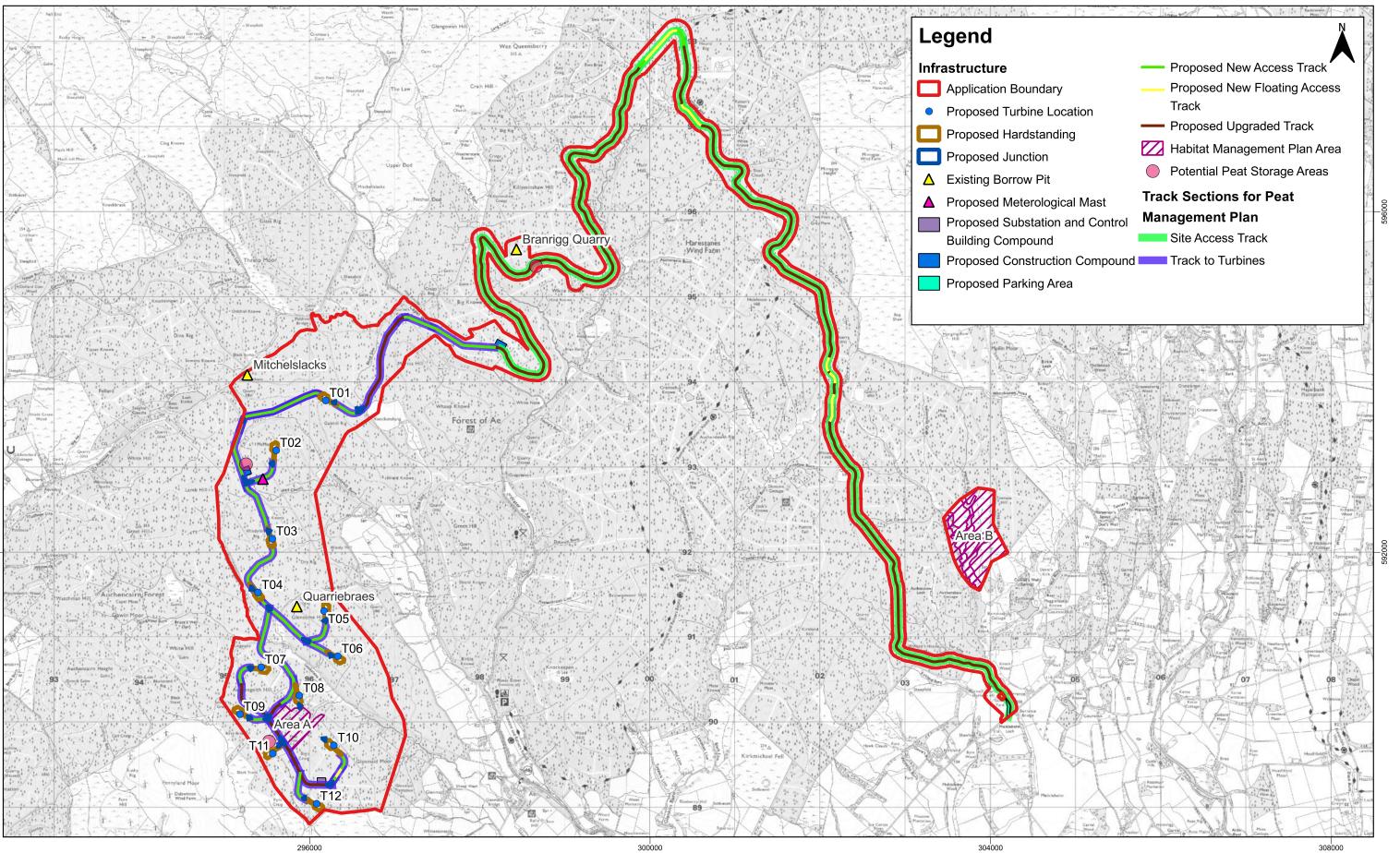
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	В	02/12/24	СР	Revised Legend and Symbology	1:41000 Scale @A3	0	0.75	Km 1.5	Harestanes West Wind Figure 10.2.1
<b>ScottishPower</b> Renewables	A		СР			opyright 2024. Survey Licence			Track Sections and Poter
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	Figure	10.2.1	TM	