

TECHNICAL APPENDIX 10.1: PEAT LANDSLIDE HAZARD AND RISK ASSESSMENT

Balmeanach Wind Farm

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1.0 Introduction

This Peat Landslide Hazard and Risk Assessment (PLHRA) has been undertaken by SLR Consulting Ltd (SLR).

The Proposed Development is located on moorland approximately 3km to the south of the settlement of Edinbane, approximately 8km to the east of Dunvegan and approximately 7km to the north of Struan on the Isle of Skye (**Figure 10.1.1**). Access to the site would be via the existing Ben Aketil Wind Farm access track from the A850, and then south east via the consented Ben Sca Wind Farm site access track onto the hillside.

The Proposed Development would comprise up to 10 wind turbines, with associated infrastructure including access tracks, crane hardstandings, turning heads, borrow pits, substation, habitat management areas, meteorological mast, and construction compound.

The purpose of this report is to consider the extent of peat and potential peat slide hazard at the site and consider the potential impact to the development, such that areas of deep peat and areas at high risk of a peat slide can be avoided during the design phase. The recommendations of this report have been considered during evolution of the design of the Proposed Development as described in **Chapter 2: Site Description and Design Evolution**.

A number of peat surveys have been undertaken by SLR Consulting in October 2020, November 2022 and March 2023.

The work has been undertaken by a team of Geotechnical Engineers and Geologists, with over 10 years' experience in undertaking peat assessments. The team was led by a chartered Hydrogeologist with 30 years' consultancy experience and specialising in the assessment of soils, geology and water for renewable energy projects in Scotland.

The methods adopted for the assessment follow the best practice guidance¹ issued by the Scottish Government for investigation, assessment and reporting for windfarms in peat areas. Where relevant, reference is also made to guidance published by the Scottish Environment Protection Agency (SEPA) and windfarm construction good practice guidance.

1.1 Background

The importance of assessing the stability of peat deposits in relation to wind farm developments came to the fore as a result of peat failures during the construction of Derrybrien² Wind Farm in Ireland in 2003. Although no fatalities were associated with these failures, there was a significant environmental impact. Wind farms tend to be constructed in high moorland areas which are associated with significant peat deposits (typically blanket bogs). There is a potential for peat instability to occur, particularly where deposits are in excess of 1m thick. Peat instability is influenced by many factors, including, but not limited to, peat thickness, hill slope gradient, underlying geology and subsurface hydrology.

1.2 Objectives of Report

The peat stability assessment is primarily concerned with the influence of the peat on the development of the wind farm. The main objective is to assess the potential peat stability at the Proposed Development, identify areas of potential concern and identify mitigation measures to ensure the maintenance of peat stability before, during and after construction. All aspects of construction should be based on ensuring minimum disruption to the peat areas. The objectives have been achieved by completion of the following:

- a desk based review of available reports which include geological, hydrological and topographical information;

¹ Peat Landslide Hazard and Risk Assessments (Scottish Government, April 2017)

² Lindsay, R.A. and Bragg, O., (2004), 'Windfarm and Blanket Peat, The Bog Slide of 16th October 2003 at Derrybrien, Co. Galway, Ireland'. University of East London

- Phase 1 peat depth survey undertaken by SLR in October 2020;
- Phase 2 peat depth survey, undertaken by SLR in November 2022 and March 2023;
- geomorphological mapping of the site to identify the prevailing conditions influencing the potential for, or any evidence of, active, incipient or relict peat instability, including identification of the location and photographic record, as appropriate;
- reporting on evidence of any active, incipient or relict peat instability, and the potential risk of future instability, describing the likely causes and contributory factors;
- identification of potential controls to be imposed on the Contractors for the Works to minimise the risk of peat instability occurring at the site; and
- provide recommendations for further work or specific construction methodologies to suit the ground conditions at the site to mitigate any unacceptable risk of potential peat instability.

1.3 Peat Landslide Hazard and Risk Assessment

The purpose of a PLHRA is to identify those parts of the site that are naturally susceptible to a higher risk of instability so that they can be avoided or accommodated. It should be noted that all peat slopes have a risk of instability and the vast majority of peat slope failures occur naturally.

Construction of the Proposed Development would only increase the risk of peat slope instability if good geotechnical construction practice is ignored and it is a requirement of all renewable energy developments to follow a very carefully worded and designed Construction and Environmental Management Plan (CEMP) which uses many of the recommendations of the PLHRA.

Without the guidance contained in a Construction Method Statement or CEMP, the following factors would increase the risk of instability:

- construction of access tracks;
- excavation and stockpiling for foundations;
- construction of hardstanding area; and
- blocking of natural drainage, inappropriate new drainage or drainage discharge.

It is important to note that peat instability and the impacts of any instability are not constrained by artificial site or ownership boundaries but by topographic and geomorphologic boundaries. It is therefore important to ensure that the breadth of scope of any assessment adequately covers the areal extent of possible impact.

The risk assessment is based on ground models developed using a Geographical Information System (GIS) specifically for this site. A numerical analysis was undertaken in which coefficients were allocated for each of the factors influencing peat stability and their impact on possible receptors. This aspect is described in greater detail in Section 6.0.

The conceptual layout of the wind turbines and access routes, the findings from the peat probing, sampling and analysis were used by the design team to optimise the wind turbine layout to avoid or mitigate areas of unacceptable peat slide risk. The layout presented in the drawings represents the final iteration of the wind turbine layout.

This system outlined above was developed in accordance with the guidelines on PLHRA by the Scottish Government (SG)¹ for the investigation, assessment, and reporting for windfarms in peat areas. The analysis and interpretation are based upon the results obtained from this process as well as previous experience and the results of case studies elsewhere. Where deviations from this guidance have occurred, this is highlighted and explained in the text.

1.4 Site Location and Description

The Proposed Development is located on moorland approximately 3km to the south of the settlement of Edinbane, approximately 8km to the east of Dunvegan and approximately 7km to the north of Struan on the Isle of Skye. Access to the site would be via the existing Ben Aketil Wind Farm access track from the A850, and then south east via the consented Ben Sca Wind Farm site access track onto the hillside.

The site is comprised of an area of undulating hillside, with numerous steeper river valleys and open hillside. The site rises to a height of 283m AOD in the north of the site between the peaks of Ben Atekil and Ben Sca. Here, the peat is deeply eroded, and large hagsgs are present. The topography drops to a height of 70m AOD at the southernmost point of the site boundary, where the ground is flat and the peat is deep.

The turbines are generally proposed on the south easterly dipping slope, where there are plateaued areas.

There is a small loch, Loch Cnoc a'Chrochaire located in the south western of the site boundary, which drains to the west and out of the site boundary.

The site is located between two operational wind farms: Ben Aketil to the west Edinbane Wind Farm to the east.

Photo 1-1

View north east towards Edinbane Wind Farm from NGR 133345, 847474 showing haggy peat



Photo 1-2
View north at NGR 133442, 846264



Photo 1-3
View towards the north east of the site from NGR 134176, 847135



The Proposed Development would include the following key components:

- ten wind turbines;
- one met mast;
- turbine and met mast foundations and hardstanding areas;
- onsite tracks with associated turning heads;
- underground cabling along access tracks;
- one onsite substation;
- up to four borrow pits;
- one construction compound; and
- associated ancillary works.

2.0 Desk Based Review

2.1 Topographic Surveys

All of the surveys were based on 5m DTM data which was used to determine slopes across the site and to determine slope coefficient (score) factors at each probe hole location. The site has been characterised into slope classes and a slope plan produced to identify slope areas where potential gradients are more or less susceptible to slope failure mechanisms.

2.2 Aerial Photo Interpretation

The aerial photography reviewed indicates changes in vegetation on the ground, and it is also possible to identify forestry, stream courses, ditches, and roads/tracks. The aerial photographs were used in conjunction with the site DTM data to identify the major geomorphological features such as the breaks of slope and landslips. These were inspected where identified during site visits when more detailed assessment of the site was undertaken.

Interpretation of available aerial photographs was undertaken to assess and identify evidence of historic peat instability. The photographs were examined to highlight features of interest, where present, including:

- possible extension and/or compression features;
- areas of historic failure scars and debris;
- evidence of peat creep;
- areas with apparently poor drainage;
- areas with concentrations of surface drainage networks; and
- steeply incised stream cuttings within peat deposits.

2.2.1 Peat Hags

Peat erosional features were present as Peat hags at the location of the proposed substation and the proposed construction compound in the north western section of the main site down slope of Ben Sca summit, in these locations the peat was considerably deeper than the average peat depths across the site. Deeply eroded peat, and large hags are present near to the plateau between Ben Aketil and Ben Sca.

2.2.2 Drainage Channels

Drainage across the site is characterised by a number of streams. The large majority of drainage channels were located to the south of the site which is not currently part of the main area of the Proposed Development infrastructure. The drainage channels observed within the site can be seen on OS mapping on the south eastern slopes of the hillside. The channels drain out to the stream Allt Ruairidh.

2.2.3 Forestry

No forestry was observed from the aerial photos within the main development area which is consistent with onsite observations. Forestry is only present surrounding the existing Ben Aketil and consented Ben Sca access track corridor located in the northern most section of the site and within the proposed habitat management area.

2.2.4 Bedrock

The OS maps show outcrops onsite in areas of higher elevations around Ben Sca and Beinn a' Chleirich. This is also confirmed by the site visit where bedrock was recorded.

2.2.5 Extension/Compression Features

There was no evidence visible on the aerial photographs of any extension or compression features in the peat. It was not possible to identify evidence of any significant historic peat failures or slides from the aerial photographs. The observations from the peat surveying confirmed that there were no significant features of this nature in the vicinity of the site.

From the aerial photograph and topographic survey interpretation no significant features or obvious evidence of concern were identified that indicate evidence of peat instability which warranted further attention.

None of these features demonstrate any significant evidence of failure in the vicinity of the Proposed Development. A summary of the main geomorphological features at the site are included on **Figure 10.1.5**.

2.3 Geological Setting

2.3.1 Soils

The principal soil type underlying the site is peaty gleys, with mineral podzols and peat also present. The peaty gleys' parent materials are drifts derived from basaltic rocks.

2.3.2 Superficial Geology

The superficial geology onsite comprises of peat present across the flatter hill tops, and valley sides. Bedrock has been recorded as at or near the surface across some of the hill tops and steeper valley sides. Till deposits are recorded towards the south of the site, typically recorded in flat lying areas and along river valleys and likely present beneath the peat deposits.

The superficial geology of the site is detailed on **Figure 10.1.3**.

2.3.3 Bedrock Geology

The site is predominantly underlain by various sub-units of the igneous Skye Lava Group as well as an igneous dyke suite. The lithologies are of Palaeogene age, with the dyke suite trending north west to south east. The majority of the site is underlain by the Hawaiiite and Mugearite subunit, followed by the Basalt and Microgabbro subunit.

There is one recorded igneous dyke present on the site. It belongs to the North Britain Palaeogene Dyke Suite and is present in the south of the site.

The bedrock geology of the site is detailed on **Figure 10.1.4**. Details of the geological units present onsite and immediately adjacent to site are detailed in **Table 2-1**.

Table 2-1: Bedrock Geology Summary

Age	Stratigraphic Group	Unit	Subunit	Description
Palaeogene 66.0 – 23.03 Ma	Hebridean Province	North Britain Palaeogene Dyke Suite	-	Troctolite and bytownite
	Skye Lava Group	-	Hawaiiite and mugearite	Hawaiiite and mugearite
		-	Basalt and microgabbro	Basalt and microgabbro
		-	Trachyte	Trachyte

2.3.4 Mining and Quarrying

Following review of publicly available records, there is no evidence of historic mining on-site.

2.3.5 Hydrogeology

The BGS groundwater vulnerability and regional hydrogeological mapping confirm that the superficial deposits, where present, and the bedrock beneath the site are unlikely to contain significant quantities of groundwater. The BGS classify the bedrock as a low productivity aquifer, whereby small amounts of groundwater may be present within the near surface weathered zone or secondary fractures.

2.3.6 Local Hydrology

The site is located within the following three main surface water catchment areas:

- the River Ose to the south of the site which flows southwest discharging into Loch Bracadale;
- the Red Burn to the north west of the site generally flowing northwards before discharging into Loch Greshornish; and
- the Abhann Coishleader to the north east of the site also generally flowing northwards towards Coishletter before discharging into Loch Greshornish.

3.0 Peat Instability

This section reviews the nature of peat and how current and past activities can influence stability. The factors which are likely to influence the potential for peat instability are:

- significant peat depths over impermeable bedrock or minimal soil;
- the presence of slope gradients greater than 4° (approximately) and general topography;
- natural drainage paths;
- evidence of past failures, including soil creep;
- drainage features at the base of slopes which could lead to undercutting;
- forestry plantations and artificial drainage; and
- recent climate patterns.

It should be noted that peat instability is not a recent phenomenon and there is documentary evidence of peat landslides dating back over 500 years³. Many landslides that involve peat have no human interference that could be considered as a trigger and this should be borne in mind when considering the susceptibility of a site to potential instability.

3.1 Background Information Regarding Peat

Peat is found in extensive areas in the upland and lowland regions of the UK and is defined as the partly decomposed plant remains that have accumulated in-situ, rather than being deposited by sedimentation. When peat forming plants die, they do not decay completely as their remains become waterlogged due to regular rainfall. The effect of water logging is to exclude air and hence limit the degree of decomposition. Consequently, instead of decaying to carbon dioxide and water, the partially decomposed material is incorporated into the underlying material and the peat 'grows' in-situ.

Peat is characterised by low density, high moisture content, high compressibility and low shear strength, all of which are related to the degree of decomposition and hence residual plant fabric and structure. To some extent, it is this structure that affects the retention or expulsion of water in the system and differentiates one peat from another.

Lindsay⁴ defined two main types of peat bog, raised bog and blanket bog, which are prevalent on the west coast of Europe along the Atlantic seaboard. In Britain, the dominant peatland is blanket bog which occurs on the gentle slopes of upland plateaux, ridges and benches and is predominantly supplied with water and nutrients in the form of precipitation. Blanket peat is usually considered to be hydrologically disconnected from the underlying mineral layer.

There are two distinct layers within a peat bog, the upper acrotelm and the lower catotelm. The acrotelm is the fibrous surface to the peat bog⁵, typically less than 0.5m thick; which exists between the growing bog surface and the lowest position of the water table in dry summers. Below this are various stages of decomposition of the vegetation as it slowly becomes assimilated into the body of the peat.

For geotechnical purposes the degree of decomposition (humification) can be estimated in the field by applying the 'squeezing test' proposed by von Post and Grunland⁶ (1926). The humification value ranges from H1 (no

³ Smith, L.T., (Ed) (1910), 'The literary of John Leland in or about the years 1535-1543.' Vol.5, Part IX. London: AF Bell and Sons.

⁴ Lindsay, R.A., (1995), 'Bogs: The ecology, classification and conservation of Ombrotrophic Mires.' Scottish Natural Heritage, Perth.

⁵ Ingram, H.A.P., (1978), 'Soil layers in mires: function and terminology'. *Journal of Soil Science*, 29, 224-227.

⁶ Von Post, L. and Grunland, E., (1926), 'Sodra Sveriges torvillganger 1' *Sverges Geol. Unders. Avh.*, C335, 1-127.

decomposition) to H10 (highly decomposed). The extended system set out by Hobbs⁷ provides a means of correlating the types of peat with their physical, chemical and structural properties.

The relative position of the water table within the peat controls the balance between accumulation and decomposition and therefore its stability, hence artificial adjustment of the water table by drainage requires careful consideration.

3.1.1 Peat Shear Strength

In geotechnical terms, the shear strength of a soil is the physical characteristic that provides stability and coherence to a body of soil. For mineral soils such as clays or sands, such strength is variously given by an inter-particle friction value and cohesion. Depending whether the mineral soil is predominantly cohesive (clay) or non-cohesive (sand) governs which of the components of strength control the behaviour of the soil.

For peat soils, where the major constituent is organic and there is likely to be little or no mineral component, the geotechnical definition of shear strength does not strictly apply. At present there is no real alternative method for defining the shear strength of peat, therefore the geotechnical definition is generally adopted, in the knowledge that it should be used with great caution.

As noted previously, the acrotelm or near surface peat comprises a tangle of fresh and slightly rotted roots and vegetable fibres. These roots and fibres impart a significant tensile shear strength capacity to the material which provides it with a significant load carrying capacity. The acrotelm is, in effect, a fibre reinforced soil.

In the more decomposed catotelm, the tensile shear strength is reduced as the roots and fibres become more rotted. However, the loss in strength due to decomposition is off-set to a limited degree, by a gain in strength due to the overburden pressure. In geotechnical engineering there is an established relationship for recently deposited soils, between the shear strength of a sample and the thickness of overburden above it.

Consequently, it is almost impossible to predict a shear strength profile in peat and attempts to measure the shear strength using normal geotechnical methods can be misleading. Typical values of shear strength from hand shear vanes would be in the range 10-60 kilopascal (kPa) although values over 100 kPa have been recorded in peat elsewhere. The higher strengths are almost certainly the influence of roots or other non-decomposed material. It is believed that the strength of peat should be quoted as a cohesion value as there are few, if any, discrete particles to give the material a significant frictional resistance. It should be noted, however, that any quotation of shear strength for peat should be treated with extreme caution.

3.1.2 Peat Stability – Factors to be Considered

There is considerable observational information relating to debris and peat flows although the actual mechanisms involved in peat instability are not fully understood. The main influences on slope stability are geological, geotechnical, geomorphic, hydrological, topographic, climatic, agricultural and human influences such as drainage and construction activity. Peat is affected to a degree by changes in any of the above list and it is vital to appreciate that changes to the existing equilibrium would affect the level of slope stability during construction and operation of the Development.

Some of the contributory factors to peat instability are summarised as follows:

- the geographical limits which could be affected by potential instability are not confined to the artificial boundaries imposed by land ownership; landslip occurring above a site could affect the site and property down slope or downstream of the site for several kilometres;
- agriculture and grazing have a substantial effect on peat areas and this can be compounded in areas that have been managed to improve grazing. Grazing compacts the peat surface reducing the rainwater

⁷ Hobbs, N.B., (1986), 'Mire morphology and the properties and behaviour of some British and foreign peats.' Quarterly Journal of Engineering Geology, London, 19, 7-80.

infiltration and the additional nutrients change the ecological balance of the original peat bog. Agricultural management can include surface drainage and periodic burning, both of which can leave the surface of the peat bare for a period of time resulting in temporary desiccation of the surface. Subsequent wetting of the peat and resumption of peat accumulation results in the former desiccated and possibly ash covered surface being incorporated into the body of the peat which introduces a weak discontinuity in the profile; this in turn becomes another unknown factor in the stability assessment.

- forestry has a substantial effect on slope stability particularly in the early stages as the creation of a forest involves disruption of the natural equilibrium and drainage of the slopes and the installation of artificial drains by deep ploughing. The construction of access tracks further disrupts the drainage and concentrates groundwater flow into narrow, fast flowing erosive streams. The work by Winter *et al*⁸ noted that forest tracks can act to retard or concentrate the down slope flow of water and thus aid its penetration into the slope below. Such a mechanism has been observed at a number of recent landslips that have affected the road network in Scotland.
- natural drainage – some of the precipitation falling onto a natural upland peat bog would be absorbed into the low permeability catotelm peat. However, most of the water would run-off as sheet flow through upper, high permeability acrotelm. Thus, the water is transmitted to the lower slopes in a reasonably controlled manner through a range of interconnections that operate at different scales and speed. Failure to understand this and to disrupt the transmission process for the groundwater could result in instability.
- artificial drainage - where agricultural drainage has been used to improve the quality of the grazing or to promote forestry it reduces the overall volume of water entering the bog and transfers this water to the edges more rapidly. This can result in ditches and streams becoming enlarged, causing increased erosion and a greater silt burden in the stream water.

3.2 Peat Mass Stability

The principal surface indicator of peat slide potential is cracking of the peat land surface and it is the identification of crack patterns in the field and the attendant causes of the cracking that is fundamental to a peat stability assessment.

Sites that have exhibited natural instability in the past are likely to be more susceptible to future instability during and following construction of a renewable energy development, therefore it is important to identify such instability as part of the Peat Stability Assessment.

3.2.1 Types of Failure

The result of instability in peat is the down-slope mass movement of the material; there are a number of definitions of peat instability which are used to characterise the type of failure including:

- bog bursts or bog flows – the emergence of a fluid form of well humified, amorphous peat from the surface of a bog, followed by the settling of the residual peat, in-situ⁹;
- peat slides – the failure of the peat at or below the peat/ substratum interface leading to translational sliding of detached blocks of surface vegetation together with the whole underlying peat stratum⁹; and
- bog slide – an intermediate form of instability where failure occurs on a surface within the peat mass with rafts of surface vegetation being carried by the movement of a mass of liquid peat.

⁸ Winter, M.R., Macgregor, F. and Shackman, L. (2005a), 'Scottish tracks networks landslide study' Trunk tracks: network management division, published report series. The Scottish Government.

⁹ Dykes, A.P and Kirk, K.J., (2001), 'Initiation of a multiple peat slide on Cuilcagh Mountain, Northern Ireland.' *Earth Surface Processes and Landforms*, 26, 395-408.

3.2.2 Bog Bursts

Accounts of bog bursts are generally associated with very wet climates or areas which have received storm rainfall events. Bog bursts can be associated with particularly wet peat landscapes; therefore, it is possible to identify broad regions of a higher susceptibility to these failures. The constraints used to identify the areas of higher susceptibility to bog burst failure are given below:

- peat thickness in excess of 1.5m with no upper limit;
- shallow gradients, generally within the range of 2 to 10°, peat thicker than 1.5m is generally not observed on slopes steeper than 10°, also moisture content is generally reduced on steeper slopes due to drainage);
- ground which is annually waterlogged to within the upper 1m below ground level, (the groundwater level may rise above this but rarely falls below)¹⁰;
- greater humification of the lower catotelm within the waterlogged ground; and
- lower surface tensile strength of the fibrous peat and vegetation.

The humified mass can be considered as analogous to a heavy liquid and the stability of this mass is maintained by the strength of the surface or acrotelm peat. Should the surface become weakened through erosion or desiccation or the construction of a surface drainage ditch for agricultural or forestry reasons or through turbary (peat cutting), failure is made more likely.

3.2.3 Peat Slides

Peat slides tend to be translational failures with a defined shear surface at or close to the interface with the substrate.

The factors generally considered to influence susceptibility to peat slide failures are listed below:

- peat depth up to 2m;
- slope gradients between 5° and 15°;
- natural or artificial drainage cut into the surrounding peat landscape;
- greater humification of the lower catotelm within the waterlogged ground; and
- lower surface tensile strength of the fibrous peat and vegetation.

It is noted that some of the factors causing instability are common to both bog bursts and peat slides.

The peat – substrate interface is the primary zone of failure and is enhanced by elevated water content at this boundary and softening or weathering of the lower mineral surface. For this reason, any investigation or probing should try to distinguish the nature of the lower mineral substrate.

3.2.4 Bog Slides

A bog slide is a variation on a peat slide where part of the peat mass is subject to movement, usually on an internal layer of material, which may be more prone to movement, such as an interface between the acrotelmic and catotelmic layer.

¹⁰ Crisp, D.T., Dawes, M. & Welch, D. (1964), 'A Pennine Peat Slide', The Geographical Journal, Vol 130, No4, pp519-524.

3.2.5 Natural Instability

The stability of a peat mass is maintained by a complex interrelationship of many factors, some of which may not be immediately obvious. Key factors include sloping rock head and proximity to a water body. Rainfall often acts as the trigger after the slope has already been conditioned to fail by natural processes.

It should also be remembered that peat bogs are growing environments and that there would come a time, on sloping ground, where the forces causing instability, the weight of the bog, can no longer be resisted by the internal strength of the peat and its interface with the underlying mineral surface. At this point, failure would occur.

The weight of the peat bog or any soils mantling steep hill slopes would be increased during periods of very heavy rain and it is common to see landslips occurring following extreme rain events. This may be a concern for future developments where one of the predicted effects of global warming will be a greater frequency of extreme weather, intense storms being one element.

4.0 Site Work

4.1 Peat Depth Survey Methodology

Peat depth surveys were undertaken by SLR in October 2020 (Phase 1), November 2022 (Phase 2) and March 2023 (Phase 2 follow up) to ensure that the footprint of the Proposed Development was fully covered. The surveys carried out followed best practice guidance for developments on peatland^{11,12}.

Phase 1 peat probing resulted in probing on a 100m grid to allow for initial assessment of the site which was used in preliminary site layout designs. Phase 2 probing included detailed probing across the proposed infrastructure layout, focussing on access tracks, turbine locations and other site infrastructure.

Peat is generally defined as an organic soil in excess of 0.5m, if the soil is less than 0.5m, then it is considered peaty soil. The peat was found to vary across the site in terms of thickness and coverage.

Thin peat was classed as being 0.5m to 1.5m thick, with deposits in excess of this being classed as thick peat. The thickness ranges used were intended to reflect the probability of instability associated with both peat slides (in thin peat) and bog slides. Where the probing recorded less than 0.5m thick, this has been considered to be an organic/peaty soil rather than peat.

The thickness of the peat was assessed using a graduated peat probe, approximately 6mm diameter and capable of probing depths of up to 10m. This was pushed vertically into the peat to refusal and the depth recorded, together with a unique location number and the co-ordinates from a handheld Global Positioning System instrument (GPS). The accuracy of the GPS was quoted as $\pm 2\text{m}$, which was considered sufficiently accurate for this survey. All data was uploaded into a GIS database for incorporation into various drawings and analysis assessments.

Where the peat probing met refusal on a hard substrate, the 'feel' of the refusal can provide an insight into the nature of the substrate. The following criteria were used to assess material:

- solid and abrupt refusal – rock;
- solid but less abrupt refusal with grinding or crunching sound – sand or gravel or weathered rock;
- rapid and firm refusal – clay; or
- gradual refusal – dense peat or soft clay.

An assessment of the substrate was made and recorded at each probe hole.

The relative stiffness of the peat was also assessed from the resistance to penetration of the probe and to the effort required to extract the probes. In all instances refusal was met on obstructions allowing identification of subsurface geology.

4.2 Peat Depth Results

The results from all probing exercises listed above in Section 4.1 are detailed in the following sections and the peat depths identified on-site are shown on **Figure 10.1.6** and **Figure 10.1.7**. Interpolation of peat depth was undertaken using Inverse Distance Weighting (IDW). All probing data is provided in Annex A.

The peat was found to vary across the site in terms of thickness and coverage. The slopes onsite are detailed on **Figure 10.1.8**. When viewed in conjunction with the peat depth figures (**Figure 10.1.6** and **Figure 10.1.7**), it is

¹¹ Scottish Renewables & SEPA (2012) 'Developments on Peatland Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste'.

¹² Scottish Natural Heritage (SNH), SEPA, Scottish Government & James Hutton Institute. (2014) 'Peat Survey Guidance; Developments on Peatland: Site Surveys'.

evident that blanket peat is dominant over the site with deeper peat limited to flat expanses that mimic the topographic flat lying areas.

A total of 1,596 probe holes were undertaken across all survey phases, with the results summarised in **Table 4-1**.

Table 4-1: Peat Probing Data

Peat Thickness (m)	No. of Probes	Percentage (of total probes undertaken on-site)
0 (no peat)	100	6.3
0.01 – 0.49 (peaty soil)	1231	77.1
0.50 – 0.99	171	10.7
1.00 – 1.49	41	2.6
1.50 – 1.99	33	2.1
2.00 – 2.49	15	0.9
2.50 – 2.99	5	0.3
3.00 – 3.49	0	0.0
3.50 – 3.99	0	0.0
> 4.0	0	0.0

In summary the peat depth probing has shown that:

- the peat was found to vary across the site in terms of thickness, surface slopes and apparent characteristics;
- peat thickness varies from zero to 2.7m with an average depth of 0.3m;
- the geomorphology of the peat areas varies between large, flat expanses of apparently thick peat with high moisture content and smaller areas of thinner drier deposits of blank peat on the moderate undulating slopes.

Accumulations of peat up to 0.5m thick are considered to be too thin to be classified as true peat deposits and are often classified as organic soils or peaty soils.

4.3 Peat Condition

The probing investigation identified the following profiles within the peat:

- soft to firm from surface to base of peat;
- relatively firmer, vegetative root system at surface to approximately 0.5m, underlain by slightly softer, partially waterlogged peat to base; and
- vegetation still present to base of peat and clearly identifiable.

Peat is described using the von Post⁶ classification. Peat samples were collected by SLR in March 2023, using a peat auger and used to inform interpretations of the peat condition and underlying substrate.

Based on field descriptions, most of the shallow peat would be classified as between H2 and H3 in the von Post classification, showing slight decomposition with some amorphous material. The deeper peat, in excess of 1.5m is typically more decomposed and generally H5. Peat Core logs and photographs are presented within Annex B.

4.4 Substrate

Where possible, in the SLR investigation, an assessment of the substrate was made, as described previously. From the evidence of the probing and sampling where available, the substrate falls into one of two principal categories with a photo confirming the granular substrate in :

- granular (sand and/or gravel/weathered rock), of glacial origin and occasionally interbedded with silty sands;
- rock, no rock samples were recovered from the probe locations although where exposed, the rock is seen to be strong to very strong metasedimentary rocks ranging from psammites through to gneisses and granites. The bedding dip and discontinuity spacing could not be determined at this stage but evidence from outcrops confirms the metasediments are folded and exhibit variable bedding orientations and should be subject to further investigation for the design of the turbine foundations; and
- no clay horizons were encountered and evidence from site walkovers did not encounter cohesive clay materials on-site.

Photo 4-1 Peat Haggling and Granular Substrate at NGR 133363, 847487



5.0 Slope Stability/Ground Conditions

The stability of slopes is dependent upon the shear strength of the soil to resist the disturbing forces due to the weight of the soil, the effects of the groundwater and other disturbing influencing forces.

The level of stability of a slope is normally assessed by reference to the factor of safety which is expressed, numerically, as the degree of confidence that exists, for a given set of conditions, against a particular failure mechanism occurring. It is commonly expressed as the ratio of the load or action which would cause failure against the actual load or actions likely to be applied during service. This is readily determined for some types of analysis (e.g. limit equilibrium slope stability analyses).

5.1 Shear Strength

The strength of the peat in the upper acrotelm is significantly influenced by the root and fibres that are abundant in this layer. There are many influences on the stability of the peat and observing or measuring high shear strength should not be used to assume a high degree of stability.

5.2 Stability Risk Assessment

It is apparent that the stability of peat is complex and the numerous inter-relationships that affect the stability are not fully understood.

The problem with a quantitative assessment is that it requires a numerical input and the analysis cannot account for the unquantifiable input required for a comprehensive peat stability assessment. For this reason, a purely quantitative assessment should only be considered as a guide and that a qualitative assessment of stability should be used to provide the final recommendations.

A stability risk assessment was undertaken to evaluate the risk of instability occurring associated with the construction of the turbine bases and access tracks at the site.

6.0 Peat Landslide Hazard and Risk Assessment

A peat landslide hazard risk assessment has been undertaken for the site. Following numerous phases of peat probing, a site visit by an experienced SLR geotechnical engineer, and appraisal of the data, the potential for a peat slide occurring at the site was initially assessed as low, this was based on the fact that:

- although there are significant thicknesses of peat present onsite, the wind turbines and ancillary infrastructure has generally avoided the thickest areas of peat;
- no evidence of historical or current peat slide activity at the site;
- shallow to moderate gradients (<8°) where turbines overlying peat are proposed;
- conclusions of a detailed walkover and results from probing;

Where areas of medium and high risk are identified, further assessment of risk is necessary.

To further quantify this initial assessment, analysis of the terrain at site utilising GIS has been undertaken to analyse slopes and gradients, as shown on **Figure 10.1.8**. The site specific slope data has been combined with site specific peat depth data and using Scottish Government Guidance¹ for the assessment of the risk of instability in peat, an assessment of peat slide risk has been completed.

The method of risk and hazard assessment has been developed with reference to the Scottish Government Guidance¹. Key factors which may have an effect on the stability of the peat deposits have been identified leading to an assessment of the RISK of instability. The potential impact of any instability, the HAZARD, was then considered for identified potential receptors. Scores were attributed to the key factors that have the greatest influence on peat stability. Risk scores were determined, which, when combined with an assessment of vulnerability of potential targets, were developed into an assessment of the hazard.

In order to differentiate between risk and hazard, the following nomenclature has been adopted in **Table 6-1**.

Table 6-1: Risk versus Hazard

Risk	Hazard
Negligible	Insignificant
Low	Significant
Medium	Substantial
High	Serious

This section outlines the approach taken and the scores allocated for various factors relevant to peat stability.

At this stage, the objective is to determine the peat areas that would have an effect on the Proposed Development and to set out the mitigation that could be adopted and incorporated into the development and implemented through the requirements of the CEMP to ensure that due cognisance is taken in this regard.

The level of slope is normally assessed by reference to the factor of safety which is expressed, numerically, as the degree of confidence that exists, for a given set of conditions, against a particular failure mechanism occurring. It is commonly expressed as the ratio of the load or action which would cause failure against the actual load or actions likely to be applied during service. This is readily determined for some types of analysis (e.g. limit equilibrium slope stability analyses). The following sections present a brief discussion on some of the issues relating to stability and risk assessment.

The stability of peat is a complex subject and there are numerous inter-relationships that affect the stability.

The characteristics of the peat failure phenomena have been incorporated in a stability risk assessment to evaluate the risk of instability occurring within the peat areas. The main factors controlling the stability of the peat mass are the surface gradients, the depth and condition of the peat at each location and the type of substrate.

The natural moisture content and undrained shear strength of the peat are important; however, it is generally accepted that where present, the peat would be saturated and have a very low strength. It is believed to be unrealistic to rely on specific values of shear strength to maintain stability when back analysis of failed slopes indicates that there is often a significant discrepancy between measured strength in peat and stability. Shear strength has been assumed to be constant and worst case, throughout this assessment. It has also been assumed, as a worst case, that the groundwater level is coincident with the ground surface.

The key factors identified as being critical to stability and the development of a risk rating system is:

- A – Slope gradient;
- B – Peat thickness;
- C – Substrate type or condition; and
- D – Historic instability.

The risk scores are multiplied together to generate a risk rating which is a measure of the likelihood of peat instability.

6.1 Slope Gradients

The slope gradients were assessed by reference to mapping and particularly the DTM which was used to generate a gradient map (**Figure 10.1.8**), from which the gradient at each probe location could be determined and input into the risk rating spreadsheet (**Annex A**). The gradient quoted at each location was based on the average gradient over a 5m grid. Significant effort has gone into reducing slopes along routes and at proposed wind turbine bases and positioning infrastructure on flat areas. It is evident from the slope plan that the majority of the proposed tracks close to the proposed turbines and at the proposed turbine locations are on areas with moderate gradients (<8°).

Table 6-2: Coefficients for Slope Gradients

Slope Angle (°)	Slope Angle Coefficients
Slope <2°	1
2° ≤ Slope <4°	2
4° ≤ Slope <8°	4
8° ≤ Slope <12°	6
>12° Slope	8

Coefficients for slope gradient have been assigned to ensure the potential for both peat slides (gradients of 4-15°) and bog slides (gradients of 2-10°) are addressed.

By simple inspection it is clear that steeper slopes pose a greater risk of instability than shallow gradients. Therefore, a graduated gradient scale from 0° to >12° (the practical maximum gradient on which peat is commonly observed) has been applied.

6.2 Peat Thickness and Ground Conditions

The ground conditions were assessed by using peat depths recorded during peat probing. Thin peat was classed as being 0.5m to 1.5m thick, with deposits in excess of this being classed as thick. The thickness ranges used are intended to reflect the risk of instability associated with both peat slides (in thin peat) and bog slides. Where the probing recorded peat less than 0.5m thick, this has been considered to be an organic soil rather than peat. **Table 6-3** gives the coefficients applied to the various ground conditions.

In addition to peat thickness, the presence of existing landslip debris or indicators of meta-stable conditions such as tension cracks or slumping in the peat suggest the material is likely to become even less stable should the existing ground conditions change. Where evidence of historical slips, collapses, creep or flows is seen, a separate coefficient has been applied.

Table 6-3: Coefficients for Peat Thickness and Ground Conditions

Ground Conditions	Ground Condition Coefficients
Peaty or organic soil (<0.5 m)	1
Thin Peat (0.5 – 1.5 m)	2
Thick Peat (>1.5 m)	3*
Slips /collapses / creep / flows	8

*Note that thicker peat generally occurs in areas of shallow gradients and records indicate that thick peat does not generally occur on the steeper gradients.

6.3 Substrate

As noted above, most failures in thin peat layers occur at the interface with the underlying substrate; the nature of the substrate has a very large influence on the probable level of stability.

Where sand and/or gravel (derived from glacial till) form the substrate, the effective strength of the interface can be considered to be good with comparatively high friction values. Under these conditions, failure is likely to occur in a zone within the peat, just above the interface. Further factors are necessary to cause a failure of this nature (increased pore pressures within the peat) and occurrence of such events is rare.

Where clay forms the interface, there is likely to be a significant zone of softening in the clay (due to saturation at low normal stresses, poor or non-existent vertical drainage and the effect of organic acids), resulting in either very low undrained shear strength or low effective shear strength parameters. The result is that potential shearing could occur either in the peat, on the interface or in the clay; all three possibilities have been documented in the past.

A rock substrate provides a high strength stratum, however, the rock surface can be smooth, and, depending on the dip orientation of the strata, it can provide a very weak interface. For these reasons, at this stage, a rock interface has been given the same risk rating as clay.

Table 6-4: Coefficients for Substrate

Substrate Conditions	Substrate Coefficients
Sand/gravel	1
Clay	2
Rock	2
Not proven	3
Slip material (Existing materials)	5

If the overall thickness of the peat had not been proven, the risk associated with the significant thickness and the unknown substrate would have been given a high rating to accommodate the unknown factors.

6.4 Risk Rating

The probability of a peat landslide rating coefficient (score) was derived by multiplying the coefficients for the four key factors (with historic instability as 1) identified in the above sections together to produce a risk rating which is a measure of the likelihood of peat instability, and this enables potential areas of concern to be highlighted.

For the stability risk assessment, the following Probability of a Peat Landslide classes were applied as shown in **Table 6-5**.

Table 6-5: Probability of Peat Landslide

Risk Rating Coefficient	Potential Stability Risk (Pre-Mitigation)	Action
<5	Negligible	No mitigation action required.
5 - 14	Low	As for negligible condition plus development of a site-specific construction and management plan for peat areas.
15 - 30	Medium	As for Low condition plus may require mitigation to improve site conditions.
31-50	High	Unacceptable level of risk, the area should be avoided. If unavoidable, detailed investigation and quantitative assessment required to determine stability and sensitivity to minor changes in strength and groundwater regime combined with long term monitoring.
>51	Very High	Unacceptable level of risk, the area should be avoided.

The rating system outlined above differs slightly from that proposed in the Scottish Government Guidance¹ as the system adopted here incorporates three inputs compared to two in the guidance, with the potential impact of substrate added in this section.

The table of results; included in **Annex A** shows that 1,596 probe locations were identified within the extent of the Digital Terrain Model, peat/peaty soil was present at 1,496 locations. The stability risk rating identified the following:

- negligible risk at 628 (~39%) probe locations;

- low risk at 762 (~48%) locations;
- medium risk at 102 (~6%) locations;
- high risk at 4 (<1%) locations; and
- no peat was recorded at 100 locations (~6%), hence no risk.

Figure 10.1.9 presents the interpreted risk of peat instability based on the multiplication of the risk coefficients discussed above in Table 6-2 to Table 6-4 and using the detailed mitigation in Table 6-5.

6.5 Wind Turbines

The peat stability risk rating for each proposed wind turbine is summarised in Table 6-6.

Table 6-6: Stability Risk Rating at Each Wind Turbine

Turbine No.	Average Peat Depth (m)	Slope (°)	Substrate	Stability Risk Rating	Acceptable Location
T1	0.3	6.1	Granular	Negligible	Yes
T2	0.5	5.4	Rock	Low	Yes
T3	0.3	7.0	Granular	Negligible	Yes
T4	0.7	5.3	Granular	Low	Yes
T5	1.2	2.9	Granular	Negligible	Yes
T6	0.4	4.7	Granular	Negligible	Yes
T7	1.2	2.3	Rock	Low	Yes
T8	0.5	6.4	Rock	Low	Yes
T9	1.1	7.1	Granular	Low	Yes
T10	1.1	2.1	Granular	Negligible	Yes

The table of results shows that the following potential stability risks exist at the proposed turbines:

- negligible risk at 5 locations;
- low risk at 5 locations; and
- no medium or high locations were identified.

6.6 Hardstandings

The peat stability risk rating for each proposed hardstanding is summarised in Table 6-7.

Table 6-7: Stability Risk Rating at Each Hardstanding

Hardstanding No.	Average Peat Depth (m)	Slope (°)	Substrate	Stability Risk Rating	Acceptable Location
T1	0.4	5.8	Granular	Negligible	Yes
T2	0.5	6.3	Rock	Low	Yes
T3	0.4	4.6	Granular	Negligible	Yes
T4	0.9	4.7	Granular	Low	Yes
T5	0.5	2.5	Granular	Negligible	Yes
T6	0.8	4.0	Granular	Low	Yes
T7	1.4	4.0	Rock	Low	Yes
T8	0.5	8.0	Rock	Low	Yes
T9	0.5	7.1	Granular	Low	Yes
T10	1.0	3.6	Granular	Negligible	Yes

The table of results shows that the following potential stability risks exist at the proposed hardstandings:

- negligible risk at 4 locations;
- low risk at 6 locations; and
- no medium or high locations were identified.

6.7 Access Tracks

The results show that the majority of locations along the proposed access track show a negligible or low potential stability risk, with some areas of medium and high risk, which will be assessed further in later sections.

6.8 Hazard Score Development

A further assessment of the medium and high risk locations has been undertaken. It should be noted that the impact assessment is primarily concerned with impacts that affect the environment, ecology, public or infrastructure associated with the development, both onsite and potentially offsite. These assessments do not consider the detailed ecological impact of construction induced peat instability; however, the majority of the sensitive onsite receptors are the watercourses and thus the inferred ecological and environmental issues are addressed. The proposed mitigation measures in Section 7.0 would limit the potential for any slope failures into water courses and drainage features hence limit such impacts.

The effect a slope failure may have on the construction site and infrastructure can be easily identified. However, the effect of an instability event on features impacted by an event not associated with the Development is harder to predict.

In order to address this effect, it is not considered appropriate to assess the effect at every potential receptor location close to a site; but rather to assess the effect a particular infrastructure feature (track, wind turbine, substation, etc.) would have on the structures or features surrounding it. By adopting such an approach, the assessment of infrastructure features where a risk ranking of ‘negligible’ or ‘low’ (assessed in the stability risk assessments described above) is discounted from further assessment.

6.9 Receptor Ranking

Now the infrastructure features with a ‘medium’ or higher risk rating for instability have been identified it is necessary to identify potential impact receptors. These are nearby structures or features that may be affected by peat movements caused during or following construction. Generally, only receptors immediately down gradient of the infrastructure feature could be affected by peat instability therefore the first phase of feature ranking requires topographic ridges and valleys to be identified across the site and surrounding area. From this, receptors at risk from particular infrastructure features can be identified. However, should instability occur on a steep slope, there is the risk of the back scarp of the instability migrating up-slope, there-by affecting areas previously considered not to be at risk.

Following identification of receptors at risk, these are ranked according to their size and sensitivity. **Table 6-8** presents the coefficients placed on particular receptor types.

At the site, only watercourses are deemed significant receptors potentially at risk from peat slides. Communities have been discounted due to distance from infrastructure, the impact therefore, should a slide occur is directly to water courses.

Table 6-8: Coefficients for Impact Receptor Ranking

Nature of Feature	Feature Coefficient
Non-critical infrastructure (minor/private roads, tracks)	1
Watercourses and critical infrastructure (pipelines, motorways, dwellings and business properties etc.)	3
Sub-Community (settlement 1-10 residents)	6
Community (settlement of >10 residents)	8

6.10 Receptor Proximity

The proximity of an impact receptor is also critical in assessing the likely level of disruption it may suffer following an instability event. Based on this, two further coefficients – distance from infrastructure feature and relative elevation differences between the infrastructure feature and impact receptor - are applied in deriving an impact ranking. **Table 6-9** and **Table 6-10** present the coefficients derived for distance and elevation of impact receptors.

Table 6-9: Coefficient for Impact Feature Distance

Distance from Coefficient Feature	Distance Coefficient
> 1 km	1
100 m – <1 km	2
10 – <100 m	3
0 – <10 m	4

Table 6-10: Coefficient for Impact Feature Elevation

Relative Elevation of Feature	Elevation Coefficient
0 - <10 m	1
10 - <50 m	2
50 - <100 m	3
> 100 m	4

6.11 Impact Rating

The impact rating coefficient (score) is derived by multiplying the receptor ranking coefficient (score) by the distance coefficient (score) and the elevation coefficient (score) for each impact receptor associated with a particular infrastructure feature.

Based on distance to impact receptors, in this instance we have identified watercourses (which are the most sensitive receptor near the site). The other receptors have been discounted, either they are not present or distance to receptor mitigates risk. Watercourses are the principal receptor as they are at risk of not only direct impact from a peat slide but potentially the watercourse creates a pathway to impact other receptors indirectly, either ecological or potential water users downstream. Based on **Table 6-8** the watercourses would have an impact receptor coefficient (score) of 3 and then considering the distance to the receptor and the relative elevation differences on-site of receptors, a potential impact can be derived.

6.12 Hazard Ranking

The Scottish Government Guidance¹ recommends that the hazard ranking is assessed using the following formula:

1. Hazard Ranking = Hazard x Exposure

This philosophy can be applied to the assessment carried out so far in the following approach:

2. Hazard Ranking = Risk Rating x Impact Rating

In order to achieve a meaningful and manageable result from the hazard ranking, the results of the Risk Rating and Impact Rating have been normalised to a standard numerical scale (below).

Table 6-11: Rating Normalisation

Risk Rating		Impact Rating	
Current Scale	Normalised Scale	Current Scale	Normalised Scale
Negligible <5	1	Very Low <10	1
Low 5 - <15	2	Low 11 - 20	2
Medium 15 - 30	3	High 21 - 30	3
High 31 - 50	4	Very High 31-50	4

Risk Rating		Impact Rating	
Very High >51	5	Extremely High >51	5

The method of assessing probability of landslide, adverse consequence and hazard developed by SLR Consulting incorporates additional critical elements such as the substrate interface and coefficients for the receptor position, distance and elevation and as such is considered to be more rigorous than the assessment scheme proposed by the Scottish Government¹. The ultimate Hazard Ranking scale does equate to the Scottish Government¹ scale, with hazard rankings divided over four zones.

A simple multiplication of these coefficients would result in potentially large and unwieldy risk and impact rating numbers. SLR has therefore opted to normalise these values to bring them in line with the values used in the Scottish Government Guidance¹, as illustrated in **Table 6-12**.

Table 6-12: Hazard Ranking

Hazard Ranking	Hazard Ranking Zone	Action
1-4	Insignificant/Negligible	No mitigation action required although slide management and monitoring shall be employed. Slide management shall include the development of a site specific construction plan for peat areas.
5 - 10	Significant/Low	As for Insignificant condition plus further investigation to refine the assessment combined with detailed quantitative risk assessment to determine appropriate mitigation through relocation or re-design.
11 - 16	Substantial/Medium	Consideration of avoiding project development in these areas should be made unless hazard mitigation can be put in place without significant environmental effect.
17-25	Serious/High	Unacceptable level of hazard; development within the area should be avoided.

6.13 Results

The stability risk assessment has demonstrated that the majority of the site lies within an area of negligible to low risk with regards to stability based on **Figure 10.1.9**. Those areas that have been identified as being at medium or high risk of instability but do not impact the site layout have not been considered in a hazard impact assessment.

There are 102 areas of medium risk and 4 areas of high risk of peat instability that have been identified across the site. Following review, the majority of these locations are not considered to have either a potential impact on the development infrastructure, due to locality, either well away from influencing infrastructure, in a down

gradient position or have no impact on the local watercourses (receptors). Therefore 27 medium risk and 2 high risk sites have been identified and are discussed in the following section.

The stability risk assessment results presented in **Table 6-13** shows the calculated hazard ranking associated with every location where there is a stability risk of medium or above, at or close to infrastructure. The particular mitigation measures to reduce the risk of instability occurring are dependent upon location and the type of proposed structure. Proposed mitigation measures and actions already undertaken to reduce the risk of peat instability occurring are also identified in **Table 6-13**, together with the associated, revised hazard ranking. A more detailed discussion of the possible mitigation measures is presented in Section 7.0.

6.14 Hazard Rated Locations

As noted in **Figure 10.1.9** and, where the risk assessment has identified a negligible or low risk of peat instability, no specific mitigation measures are necessary. However, in order to ensure best practise is employed, there would be a need for careful monitoring and the construction management must include careful design of both the permanent and temporary works appropriate for peat soils; these are discussed further in Section 7.0.

The areas of the infrastructure that were rated as medium risk, or above, were subjected to a hazard assessment; a number of areas were discounted as they were located off the proposed access track and do not fall within influencing distance of any of the key proposed site infrastructure. There are a significant number of medium risk sites located along tracks, this is predominantly a function of thin peat on a moderate slope overlying bedrock. The model in fact increases the risk factor where bedrock is the underlying substrate rather than a glacial material which is predominantly granular. The risk factor therefore is very conservative and will be mitigated through good construction techniques including appropriate drainage and excavation to minimise risk.

The procedure adopted was to review **Figure 10.1.9** and identify those areas with a medium risk or greater, that were in close proximity or influencing distance of any of the proposed infrastructure or watercourses. Those risk areas where there is no development would not affect the natural stability of the peat.

The assessment carried out in **Table 6-13** was completed as described in the sections above. For example, Location 1 has a risk rating of 3 (derived from **Table 6-5**) with an impact rating of 2 (derived from the process described in Section 6.11 and normalised in **Table 6-11**). These ratings are multiplied (2x3) to give a hazard ranking of 6 (significant), as detailed in **Table 6-13**.

Although the potential hazards identified in **Table 6-13** can be mitigated to ‘insignificant’ it is believed that hazards should be subject to further post consent investigation and on-going monitoring during construction. Further details of mitigation during construction are described in Section 7.0.

Table 6-13
Stability Hazard Ranking Assessment

Location	Coordinates (NGR)		Risk Rating (normalised)	Impact Rating (normalised)	Hazard Ranking (normalised)	Mitigation	Revised Hazard Ranking
1	13416 7	84760 7	Medium (3)	Low (2)	Significant (6)	The location is on site of T1 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant

Location	Coordinates (NGR)		Risk Rating (normalised)	Impact Rating (normalised)	Hazard Ranking (normalised)	Mitigation	Revised Hazard Ranking
2	13342 5	84746 7	Medium (3)	Low (2)	Significant (6)	The location is on site of the Construction Compound with only localised thin peat (<1m present), the area will be excavated prior to construction hence removing potential risk.	Insignificant
3	13345 9	84735 4	Medium (3)	Low (2)	Significant (6)	The location is on site of the access track with localised thin peat (<1 m), the area will be excavated prior to construction hence removing potential risk.	Insignificant
4	13387 3	84726 2	Medium (3)	Low (2)	Significant (6)	The location is on site of the access track with localised thin peat (<1 m), the area will be excavated prior to construction hence removing potential risk.	Insignificant
5	13413 6	84723 7	Medium (3)	Low (2)	Significant (6)	The location is on site of the BP1 with localised thin peat (<1 m), the area will be excavated prior to construction hence removing potential risk.	Insignificant
6	13431 5	84731 4	Medium (3)	Low (2)	Significant (6)	Thin area of peat (<1 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
7	13442 5	84741 6	Medium (3)	Low (2)	Significant (6)	Risk model influenced by steep slope and thick peat. Micro-siting north to an area of low risk would mitigate risk.	Insignificant
8	13460 1	84733 1	Medium (3)	Low (2)	Significant (6)	Risk model influenced by steep slope and thick peat. Micro-siting west to an area of low risk would mitigate risk.	Insignificant

Location	Coordinates (NGR)		Risk Rating (normalised)	Impact Rating (normalised)	Hazard Ranking (normalised)	Mitigation	Revised Hazard Ranking
9	13462 9	84726 4	Medium (3)	Low (2)	Significant (6)	Thin peat (<1.5 m) on moderate slope. Good construction practices required to mitigate against risk.	Insignificant
10	13466 0	84702 9	Medium (3)	Low (2)	Significant (6)	The access track is constrained to pass through this area. The peat is locally deeper and will be excavated to allow the track to be founded on a firm foundation. Good construction practices required to mitigate against risk.	Insignificant
11	13455 5	84688 5	Medium (3)	Low (2)	Significant (6)	Thin peat (<1 m) on moderate slope. Good construction practices required to mitigate against risk.	Insignificant
12	13447 2	84675 8	Medium (3)	Low (2)	Significant (6)	The location is on site of T4 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant
13	13432 4	84678 8	Medium (3)	Low (2)	Significant (6)	The access track is constrained to pass through this area. The peat is locally thick and will be excavated to allow the track to be founded on a firm foundation. Good construction practices required to mitigate against risk.	Insignificant
14	13397 1	84697 5	Medium (3)	Low (2)	Significant (6)	Thin peat (<1.5 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
15	13396 9	84687 3	High (4)	Low (2)	Significant (8)	The location is on site of T3 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant

Location	Coordinates (NGR)		Risk Rating (normalised)	Impact Rating (normalised)	Hazard Ranking (normalised)	Mitigation	Revised Hazard Ranking
16	13362 8	84673 8	Medium (3)	Low (2)	Significant (6)	Thin peat (<1.5 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
17	13346 7	84640 6	High (4)	Low (2)	Significant (8)	The access track is constrained to pass through this area. The peat is locally deep and will be excavated to allow the track to be founded on a firm foundation. Good construction practices required to mitigate against risk.	Insignificant
18	13340 0	84633 4	Medium (3)	Low (2)	Significant (6)	The access track is constrained to pass through this area. The peat is locally deep and will be excavated to allow the track to be founded on a firm foundation. Good construction practices required to mitigate against risk.	Insignificant
19	13341 4	84630 1	Medium (3)	Low (2)	Significant (6)	The location is on site of T5 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant
20	13335 8	84621 7	Medium (3)	Low (2)	Significant (6)	Thin peat (<1 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
21	13326 0	84614 1	Medium (3)	Low (2)	Significant (6)	Thin peat (<1.5 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
22	13340 7	84594 1	Medium (3)	Low (2)	Significant (6)	The location is on site of T8 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant

Location	Coordinates (NGR)		Risk Rating (normalised)	Impact Rating (normalised)	Hazard Ranking (normalised)	Mitigation	Revised Hazard Ranking
23	13356 7	84589 1	Medium (3)	Low (2)	Significant (6)	The access track is constrained to pass through this area. The peat is thin and will be excavated to allow the track to be founded on a firm foundation. Good construction practices required to mitigate against risk.	Insignificant
24	13375 3	84588 1	Medium (3)	Low (2)	Significant (6)	The location is on site of T9 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant
25	13402 2	84655 1	Medium (3)	Low (2)	Significant (6)	Thin peat (<1 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
26	13402 9	84647 7	Medium (3)	Low (2)	Significant (6)	Thin peat (<1.5 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
27	13392 6	84643 6	Medium (3)	Low (2)	Significant (6)	The location is on site of T6 hardstanding, the area will be excavated prior to construction hence removing potential risk.	Insignificant
28	13400 4	84626 8	Medium (3)	Low (2)	Significant (6)	Thin peat (<1 m) on steep slope. Good construction practices required to mitigate against risk.	Insignificant
29	13427 7	84599 3	Medium (3)	Very Low (1)	Insignificant (3)	The access track is constrained to pass through this area. The peat is locally thick and will be excavated to allow the track to be founded on a firm foundation and open up the Borrow Pit 3. Good construction practices required to mitigate against risk.	Insignificant

7.0 Construction Issues and Mitigation Measures

It has been shown that excavation, drainage and general construction activities can have a destabilising influence on peat and that design should allow for the delicate and susceptible condition of the peat. There is no extensive evidence for past peat instability onsite, however appropriate good practice measures and mitigation should be employed to minimise the risk of adverse effects on peat and hydrological receptors.

The following sections highlight the construction issues that should be considered for each general area of construction. Many of the issues raised would be incorporated into the detailed CEMP and construction method statement for the site.

The following is a list of controls that should be considered for incorporation into the development of construction methodologies for the works in all areas of peat during detailed design stage:

- appropriately experienced and qualified engineering geologist/geotechnical engineer is appointed during the, survey, design and construction phase, to provide advice during the ground investigation, (including micro-siting if required), that will feed into the detailed design for foundations and access infrastructure to then review formations of structural components and test the completed infrastructure during the construction phases of the works;
- geotechnical Risk Register is developed and maintained by the appointed geotechnical engineer;
- minimisation of “undercutting” of peat slopes has already been included in the preliminary design and will be further reviewed once the ground investigation on site is complete but where this cannot be avoided, a more detailed assessment of the area of concern by the geotechnical engineer would be required;
- careful micro-siting of wind turbine bases, crane hardstandings and access track alignments to minimise effects on the prevailing hydrology during the final design phase following the ground investigation; and
- although the risk of a peat slide is considered to be low for the majority of the development, it is recommended that methodologies detailed in **Technical Appendix 10.2 Peat Management Plan** and developed within the detailed CEMP as a contingency to minimise the effects to watercourses in the unlikely event of peat instability.

Notwithstanding any of the above comments, detailed design and construction practices would need to consider the particular ground conditions and the specific works at each location throughout the construction period.

7.1 General

The following list of mitigation measures is provided in an attempt to minimise the risk of potentially inducing peat landslides during construction of the development.

- raise Health and Safety awareness of the peat environment at the Proposed Development for construction staff by incorporating the issue into the site Induction. Include peat slide risk assessment information (e.g. peat instability indicators, best practice and emergency procedures) in toolbox talks with relevant operatives e.g. plant drivers;
- for sections of track that require track side cuttings into peat, suitable measures would need to be designed to maintain the stability of the adjacent peat terrain;
- refine/optimize the design through the pre-construction phase following completion of a detailed topographical survey, ground investigation and hydrological survey ; and

- develop methodologies to ensure that accelerated degradation and erosion of exposed peat deposits does not occur as the break-up of the peat top mat has significant implications for the morphology, and thus hydrology, of the peat (e.g. minimise off-track plant movements within areas of peat).

7.2 Drainage Measures

Drainage design for the Proposed Development is a critical mitigation measure in maintaining the hydrological conditions. In order to maintain hydrological conditions, the following requirements of the drainage measures should be met;

- development of drainage systems that would not create areas of concentrated flow or cause over-, or under-, saturation of peat habitats;
- development of robust drainage systems that would require minimal maintenance;
- a robust design of drainage systems and associated measures (i.e. silt traps, etc.) to minimise sedimentation into natural watercourses. Method statements should be prepared in advance to mitigate against a slide occurring and should include, but not be limited to, the use of check dams and erosion protection to limit flows and prevent contamination of watercourses; and
- measures shall be put in place to ensure drainage systems are well maintained, to include the identification and demarcation of zones of sensitive drainage or hydrology in areas of construction, e.g. inclusion of maintenance regimes for drainage systems into a construction management plan or similar.

7.3 Construction Recommendations

A summary of recommendations for site specific infrastructure is provided in the following sections.

The complexity of peat stability has been discussed in this report and by Lindsay and Bragg², amongst others. Following a review of published work and the observation and analysis undertaken for the development, there would be a negligible hazard from peat instability if the recommendations contained in this report are adopted.

Suitable guidance and documentation in the form of a construction method statement/CEMP would be established before work commences to ensure good construction practices. Due to the complex inter-reactions affecting peat stability it is proposed that the recommendations given below are used as a set of guidelines to generate a detailed design concept. The concept should include the range of potential risks discussed in this report and the design should be sufficiently flexible to allow for continual modification and up-dating as construction progresses.

7.4 Wind Turbine Locations and Crane Pads

It is proposed that construction of the wind turbine foundations will require excavation of peat and subsoil to create a suitable area for the foundation of the base.

It is the objective of this assessment to consider the potential risk from peat instability and to recommend solutions and mitigation measures to eliminate, or at least reduce the risk to a manageable level. Risk reduction can best be achieved by minimising the effect of any construction works and an appropriate CEMP/construction method statement is an integral element in ensuring that all parties understand and acknowledge the potential consequences of a peat slide.

In general, the bearing stresses imposed by a wind turbine are relatively low and the main requirement of the base is to resist the overturning moments generated by the wind acting on the turbine. Gravity base foundations are designed to control bearing pressures to a level appropriate to the local ground conditions and provide stability against turbine loading.

The excavations for wind turbine bases and crane pads should be kept to a minimum where possible but it is likely that the required hard stratum would be typically several metres deep, beneath soft materials (peat),

unless directly on rock. The very soft nature of peat means that unsupported cut or excavated slopes could be unstable unless shallow gradients are used. The overall width of such an excavation would be around 33m diameter at the original ground surface, depending on the thickness of the peaty soil/peat and glacial till and appropriate methods of stabilising the temporary slopes should be considered. Foundation excavation would produce large volumes of peat and this should be reused across the site in an environmentally acceptable manner for restoration. Peat would not be used to back fill the excavation void within the footprint of the foundation as it would have a very low strength. Peat could be used as backfill outside the foundation footprint and also to dress verges to tracks and around wind turbine bases, in line with current Waste Management guidance¹³. Management of the water in the peat, by maintaining existing drainage during excavation is essential to avoid creating conditions likely to increase the risk of a peat slide.

7.5 Borrow Pits

The proposed borrow pits would be required to comply with appropriate construction and quarrying regulations¹⁴. They have been deliberately sited to avoid excavating peat and no significant construction mitigation would be required. Should blasting of rock be required during excavation, it is not likely to increase the likelihood of a peat slide as the borrow pits have been proposed in locations with limited peat. For further details on proposed borrow pits, refer to **Technical Appendix 3.2: Borrow Pit Appraisal**.

7.6 Access Tracks

The general principles regarding the construction of the access tracks in peat that minimises the risk of instability and environmental effects are discussed below.

In order to maintain the current level or improve the stability of the peat mass on the slopes around the access track, it is necessary to ensure that the construction methods do not seriously disrupt the established drainage and that no areas are surcharged, either by water discharge or spoil.

Wherever possible, the following principles should be adopted:

- maintenance of existing drainage is critical therefore all existing drainage tracks must be maintained and where necessary, channelled below the proposed track construction. Upslope side drainage ditches to the track would be required on side-long ground; the ditches should be constructed with small dams and cross drains where necessary so that:
- water can pass below the track at regular intervals;
- scour and erosion is avoided in the side ditches due the limited volume and velocity, concentrated discharges to the peat on the down slope side of the track are avoided;
- the camber of the track should encourage surface water to drain to the up-slope side drainage ditch;
- track gradients to be maintained at the recommended gradients from the wind turbine suppliers, typically shallower than 14% to facilitate access by the large specialist vehicles for both construction and transport of the wind turbine components. The maximum acceptable gradients are usually defined by the appointed wind turbine manufacturer.
- identify and mark all existing drainage features within the access track corridors; these drainage features should be maintained (not enhanced) during the construction and operational phases of the Proposed Development;

¹³ Scottish Renewables and SEPA (2012). Developments on Peatland: Guidance on the Assessment of Peat Volumes, Reuse of Excavated Peat and the Minimisation of Waste.

¹⁴ Health and Safety Executive (2014)., Health and Safety at Quarries, Quarries Regulations 1999, Approved Code of Practice and Guidance (Second Edition).

- install cross drains at regular intervals to maintain interstitial groundwater flow through the peat mass below the tracks where track settlement could reduce the natural permeability;
- install additional drainage in areas up-slope to any track to prevent ponding and possible instability;
- install small dams at regular intervals along the track side drains to prevent significant water velocities in the side drains causing deep erosion in the peat; and
- cut and fill should be avoided in peat greater than 1 m deep if possible; if not, the following requirements on side long ground (across contours) should be adopted:
 - excavate to a sound stratum;
 - the majority of construction surfaces to be essentially horizontal with a slight fall to aid drainage;
 - where the depth of cut is deemed unstable, employ a stepped or benched surface with the intention of minimising the exposed surface of the up-slope cut face;
 - protect all exposed peat surfaces from erosion and desiccation, by ensuring the integrity and moisture content of the peat is maintained; and
 - the top of cut slopes should be provided with a small bund to retain the peat to prevent desiccation and maintain the local stability of the peat.

7.7 Cable Routes

The general principles regarding the construction of the cable trenches in peat that minimises the risk of instability and environmental effects are discussed below.

In order to maintain the current level or improve the stability of the peat mass on the slopes around the cable route, it is necessary to ensure that the construction methods do not seriously disrupt the established drainage and that no areas are surcharged, either by water discharge or spoil.

The construction of the cable route would minimise disturbance to drainage by taking cable route alongside existing access track and around the wind turbines adjacent to new tracks. Cable trenches would be reinstated as soon as possible to minimise the time they are left open and to avoid trenches acting as conduits for surface water, causing erosion and potential silt run off.

Mitigation may be required within the trench to maintain local hydrological conditions and hydraulic connection in sensitive habitats. This may include clay plugs/ peat bunds to prevent the trenches from becoming a preferential flow path for water flows.

7.8 Watercourses Crossing

No watercourse crossings are anticipated for the Site.

7.9 Substation

The position of the substation compound is located on areas of thin peat on relatively flat ground and will require minimal construction management.

7.10 Construction Compound

The construction compound is located on areas of thin peat on relatively flat ground and will require minimal construction management.

8.0 Conclusion

The report has highlighted the complicated inter-relationship between all the aspects that have an effect on the stability of peat. Consequently, the discussion has also addressed areas of construction and drainage in order to avoid a stability problem rather than attempt to put it right after the event. The site has been assessed for potential hazards associated with peat instability; the assessment has been based on:

- a walk-over survey by an experienced geologist;
- a thorough inspection of the digital terrain map;
- review of historical and geological maps and publications and aerial photography; and
- a detailed geotechnical probing exercise at 1,596 locations in areas of identified peaty soil/peat to determine the thickness thereof.

The overall conclusion regarding peat stability is that there is a negligible to low risk of peat instability over most of the site although some areas of medium and high risk have been identified. For these areas, a hazard impact assessment was completed which concluded that, subject to micro-siting and the employment of appropriate mitigation measures, all these areas can be considered as an insignificant risk.

Additional mitigation measures have been identified in areas where hazards are already considered insignificant to further reduce the risk of potential hazards occurring.

The entire site can be considered to be extensively covered in peat with a maximum recorded thickness of 2.7m on the flatter areas. The locally thicker areas of peat have been avoided through layout design.

The report has highlighted the complicated inter-relationship between all the aspects that have an effect on the stability of peat. Consequently, the discussion has also addressed areas of construction and drainage in order to avoid a stability problem rather than attempt to put it right after the event.

8.1 Recommendations

A summary of recommendations is provided in the following sections.

8.1.1 Stability

The complexity of peat stability has been discussed in some detail in this report and at great length by Lindsay and Bragg², amongst others. Following a review of published work and the observation and analysis undertaken for this project, it is believed that there will be a negligible hazard from peat instability if the recommendations contained in this report are adopted.

Suitable guidance and documentation in the form of a construction method statement will be established before work commences to ensure poor construction practices do not precipitate instability.

Due to the complex inter-reactions affecting peat stability it is proposed that the recommendations given below are used as a set of guidelines to generate a design concept. The concept should include the range of potential risks discussed in this report and the design should be sufficiently flexible to allow for continual modification and updating as construction progresses.

8.1.2 Turbine Foundation

It is the objective of this assessment to consider the potential risk from, or to initiate, peat instability and to recommend solutions and mitigation measures to eliminate, or at least reduce the risk to a manageable level. Risk reduction can be best achieved by minimising the effect of any construction works and an appropriate construction method statement is believed to be an integral element in ensuring that all parties understand and acknowledge the potential consequences of a peat slide.

The preferred foundation solution for areas of thick peat would be a gravity pad foundation bearing on a sound stratum. The side slopes of the excavation in the peat should be maintained in a stable condition throughout the construction process; consideration should be given to constructing a rock retaining bund (rock cofferdam) prior to excavation of the peat or alternatively micro-siting to reduce peat thickness.

8.1.3 Access Track

The main recommendations for the design and construction of typical site access tracks over peat are as follows:

- identify and mark all existing drainage features within track corridors; these drainage features should be maintained (not enhanced) during the construction and operational phases of the wind farm;
- install cross drains at regular intervals to maintain interstitial groundwater flow through the peat mass below the tracks where track settlement could reduce the natural permeability
- install additional drainage in areas up-slope to any access track to prevent ponding and possible instability;
- install small dams at regular intervals along the track side drains to prevent significant water velocities in the side drains causing deep erosion in the peat;
- longitudinal gradients to be consistent with limitations of the heavy lift and large transport vehicles, probably no steeper than 1 v : 8 h;
- crossfalls on the track surface to shed water to the up-slope drainage ditches;
- cut and fill should be avoided in peat greater than 1.0m deep if possible; if not, the following requirements on side long ground should be adopted;
 - excavate to a sound stratum;
 - construction surface to be essentially horizontal with a slight fall to aid drainage;
 - where the depth of cut is deemed unstable, employ a stepped or benched surface with the intention of minimising the exposed surface of the upslope cut face;
 - protect all exposed peat surfaces from erosion and desiccation, by ensuring the integrity and moisture content of the peat is maintained; and
 - the top of cut slopes should be provided with a small bund to retain the peat to prevent desiccation and maintain the local stability of the peat.

8.1.4 Substation Compound

This proposed location has been assessed and is in an area of low risk with no peat related issues expected. The peat thickness below the substation compound is up to 0.5m.

8.1.5 Construction Compound

This proposed location has been assessed and is in an area of low risk with no peat related issues expected. The peat thickness below the construction compound is up to 0.25 m.

8.1.6 Cabling Route

The cabling route from the site to the substation would be located partly on peaty soils over glacial soils and peat. The cable route poses negligible risk as most of the route is not impacting peat.

8.1.7 Further Work

This report should be considered as the first stage in the development of a fundamental understanding of the various inter-relationships that govern and control the peat lands at the Proposed Development site.

The commissioned assessment has purposefully kept the extent of physical intrusion into the sensitive peat areas to an absolute minimum. The results are considered appropriate for the planning application.

More detailed ground investigations will be required to facilitate the geotechnical design of the various foundations and access track, particularly the vertical and horizontal alignment. These will be incorporated into the Construction Environmental Management Plan which will be submitted to the Planning Authority for approval as part of the condition compliance prior to any site works commencing.

It is not the purpose of this report to provide a detailed scope for the investigation; however, it is believed that the strength and stiffness parameters are needed for turbine design and regular probes along access tracks to determine bearing capacity for either excavated or floated track design (where suitable).

ANNEX 10.1A: PEAT RISK DATA

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	132001.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
2	Point	132051.36	849875.36	0.30	SOIL	GRANULAR	2.69	Peaty Soil	1	2	1	2	Negligible
3	Point	132524.13	849435.55	0.20	SOIL	GRANULAR	6.39	Peaty Soil	1	4	1	4	Negligible
4	Point	132145.78	849435.88	0.20	SOIL	GRANULAR	2.91	Peaty Soil	1	2	1	2	Negligible
5	Point	132083.66	849496.37	0.40	PEAT	GRANULAR	2.23	Peaty Soil	1	2	1	2	Negligible
6	Point	132152.58	849441.58	0.30	PEAT	GRANULAR	2.89	Peaty Soil	1	2	1	2	Negligible
7	Point	132160.16	849453.17	0.40	PEAT	GRANULAR	3.26	Peaty Soil	1	2	1	2	Negligible
8	Point	132503.85	849435.21	0.20	PEAT	GRANULAR	2.77	Peaty Soil	1	2	1	2	Negligible
9	Point	132505.29	849440.32	0.20	PEAT	GRANULAR	2.79	Peaty Soil	1	2	1	2	Negligible
10	Point	132587.01	849380.42	0.30	SOIL	GRANULAR	7.38	Peaty Soil	1	4	1	4	Negligible
11	Point	132560.07	849413.08	0.10	SOIL	GRANULAR	11.10	Peaty Soil	1	6	1	6	Low
12	Point	132042.04	849377.77	0.20	SOIL	GRANULAR	1.26	Peaty Soil	1	1	1	1	Negligible
13	Point	132502.72	849427.28	0.30	SOIL	GRANULAR	2.77	Peaty Soil	1	2	1	2	Negligible
14	Point	132561.90	849384.49	0.10	SOIL	GRANULAR	14.37	Peaty Soil	1	8	1	8	Low
15	Point	132545.94	849382.75	0.20	SOIL	GRANULAR	11.48	Peaty Soil	1	6	1	6	Low
16	Point	132542.13	849414.82	0.10	SOIL	GRANULAR	16.45	Peaty Soil	1	8	1	8	Low
17	Point	132575.92	849425.26	0.20	SOIL	GRANULAR	4.07	Peaty Soil	1	4	1	4	Negligible
18	Point	132582.85	849381.25	0.20	SOIL	GRANULAR	9.44	Peaty Soil	1	6	1	6	Low
19	Point	132571.85	849389.42	0.20	PEAT	ROCK	16.64	Peaty Soil	1	8	2	16	Medium
20	Point	132571.32	849338.65	0.40	SOIL	GRANULAR	15.94	Peaty Soil	1	8	1	8	Low
21	Point	132584.96	849343.15	0.30	SOIL	ROCK	13.35	Peaty Soil	1	8	2	16	Medium
22	Point	132556.21	849354.34	0.20	SOIL	GRANULAR	10.27	Peaty Soil	1	6	1	6	Low
23	Point	132584.70	849348.37	0.10	SOIL	ROCK	13.61	Peaty Soil	1	8	2	16	Medium
24	Point	132597.52	849283.88	0.10	SOIL	GRANULAR	2.99	Peaty Soil	1	2	1	2	Negligible
25	Point	132588.29	849344.98	0.00	ROCK	ROCK	2.27	No Peat	0	2	2	0	None
26	Point	132591.53	849347.74	0.10	PEAT	ROCK	8.48	Peaty Soil	1	6	2	12	Low
27	Point	132591.61	849293.21	0.00	ROCK	ROCK	2.61	No Peat	0	2	2	0	None
28	Point	132587.94	849315.22	0.30	PEAT	ROCK	6.23	Peaty Soil	1	4	2	8	Low
29	Point	132594.36	849144.33	0.30	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
30	Point	132566.22	849119.19	0.20	SOIL	GRANULAR	5.15	Peaty Soil	1	4	1	4	Negligible
31	Point	132570.69	849144.40	0.30	SOIL	GRANULAR	4.72	Peaty Soil	1	4	1	4	Negligible
32	Point	132598.62	849119.11	0.30	PEAT	ROCK	8.64	Peaty Soil	1	6	2	12	Low
33	Point	132624.96	849065.08	0.30	SOIL	GRANULAR	12.51	Peaty Soil	1	8	1	8	Low
34	Point	132612.04	849056.25	0.10	SOIL	GRANULAR	12.06	Peaty Soil	1	8	1	8	Low
35	Point	132609.62	849042.27	0.20	PEAT	ROCK	17.79	Peaty Soil	1	8	2	16	Medium
36	Point	132600.33	849042.88	0.10	PEAT	ROCK	20.15	Peaty Soil	1	8	2	16	Medium
37	Point	132073.10	848956.79	0.20	SOIL	GRANULAR	5.38	Peaty Soil	1	4	1	4	Negligible
38	Point	132590.91	848972.78	0.30	PEAT	ROCK	8.06	Peaty Soil	1	6	2	12	Low
39	Point	132600.55	848971.40	0.40	PEAT	ROCK	6.92	Peaty Soil	1	4	2	8	Low
40	Point	132600.53	848963.36	0.30	PEAT	ROCK	6.20	Peaty Soil	1	4	2	8	Low
41	Point	132631.32	848963.42	0.20	PEAT	ROCK	9.23	Peaty Soil	1	6	2	12	Low
42	Point	132621.19	848974.14	0.20	PEAT	ROCK	7.56	Peaty Soil	1	4	2	8	Low
43	Point	132626.86	848990.14	0.20	PEAT	ROCK	14.30	Peaty Soil	1	8	2	16	Medium
44	Point	132627.12	848979.84	0.30	PEAT	ROCK	11.74	Peaty Soil	1	6	2	12	Low
45	Point	132614.44	849014.97	0.50	PEAT	ROCK	12.77	Peaty Soil	1	8	2	16	Medium
46	Point	132601.81	848952.52	0.20	PEAT	ROCK	5.97	Peaty Soil	1	4	2	8	Low
47	Point	132624.72	848899.65	0.40	PEAT	ROCK	5.40	Peaty Soil	1	4	2	8	Low
48	Point	132643.58	848887.43	0.40	PEAT	ROCK	7.61	Peaty Soil	1	4	2	8	Low
49	Point	132106.96	848838.80	0.30	SOIL	GRANULAR	5.98	Peaty Soil	1	4	1	4	Negligible
50	Point	132148.48	848744.13	0.30	SOIL	GRANULAR	3.26	Peaty Soil	1	2	1	2	Negligible
51	Point	132688.33	848766.87	0.20	SOIL	GRANULAR	4.76	Peaty Soil	1	4	1	4	Negligible
52	Point	132696.98	848773.38	0.30	SOIL	GRANULAR	6.19	Peaty Soil	1	4	1	4	Negligible
53	Point	132714.08	848748.06	0.30	SOIL	GRANULAR	4.54	Peaty Soil	1	4	1	4	Negligible
54	Point	132764.89	848683.12	0.10	SOIL	GRANULAR	4.90	Peaty Soil	1	4	1	4	Negligible
55	Point	132778.92	848666.01	0.20	SOIL	GRANULAR	4.87	Peaty Soil	1	4	1	4	Negligible
56	Point	132772.50	848675.18	0.20	SOIL	GRANULAR	6.50	Peaty Soil	1	4	1	4	Negligible
57	Point	132757.45	848676.72	0.30	SOIL	GRANULAR	2.98	Peaty Soil	1	2	1	2	Negligible
58	Point	132753.65	848684.60	0.30	SOIL	GRANULAR	2.63	Peaty Soil	1	2	1	2	Negligible
59	Point	132760.90	848689.52	0.10	SOIL	GRANULAR	5.10	Peaty Soil	1	4	1	4	Negligible
60	Point	132764.28	848702.89	0.30	PEAT	ROCK	4.22	Peaty Soil	1	4	2	8	Low
61	Point	132780.70	848711.49	0.50	PEAT	ROCK	5.02	Peaty Soil	1	4	2	8	Low
62	Point	132816.74	848611.04	0.50	SOIL	GRANULAR	2.81	Peaty Soil	1	2	1	2	Negligible
63	Point	132830.54	848588.92	0.20	SOIL	GRANULAR	3.40	Peaty Soil	1	2	1	2	Negligible
64	Point	132864.51	848580.73	0.30	PEAT	ROCK	10.50	Peaty Soil	1	6	2	12	Low
65	Point	132870.85	848528.95	0.20	SOIL	GRANULAR	6.20	Peaty Soil	1	4	1	4	Negligible
66	Point	132906.44	848478.23	0.50	PEAT	ROCK	5.15	Peaty Soil	1	4	2	8	Low
67	Point	132944.17	848471.13	0.30	SOIL	GRANULAR	6.10	Peaty Soil	1	4	1	4	Negligible
68	Point	132951.23	848399.36	0.20	SOIL	GRANULAR	1.73	Peaty Soil	1	1	1	1	Negligible
69	Point	132935.78	848474.26	0.20	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
70	Point	132958.55	848405.39	0.30	PEAT	ROCK	1.54	Peaty Soil	1	1	2	2	Negligible
71	Point	132968.36	848412.75	0.40	PEAT	ROCK	1.51	Peaty Soil	1	1	2	2	Negligible
72	Point	132976.49	848421.89	0.40	PEAT	ROCK	3.70	Peaty Soil	1	2	2	4	Negligible
73	Point	132979.69	848382.04	0.20	SOIL	GRANULAR	0.72	Peaty Soil	1	1	1	1	Negligible
74	Point	132978.29	848391.26	0.20	PEAT	ROCK	0.92	Peaty Soil	1	1	2	2	Negligible
75	Point	133003.43	848384.40	0.30	PEAT	ROCK	4.59	Peaty Soil	1	4	2	8	Low
76	Point	133081.82	848212.13	0.20	SOIL	GRANULAR	6.43	Peaty Soil	1	4	1	4	Negligible
77	Point	133088.26	848223.06	0.20	SOIL	GRANULAR	3.22	Peaty Soil	1	2	1	2	Negligible
78	Point	133124.45	848163.00	0.30	SOIL	GRANULAR	5.48	Peaty Soil	1	4	1	4	Negligible
79	Point	133098.02	848195.99	0.20	SOIL	GRANULAR	5.56	Peaty Soil	1	4	1	4	Negligible
80	Point	133092.91	848211.40	0.10	SOIL	GRANULAR	4.84	Peaty Soil	1	4	1	4	Negligible
81	Point	133091.51	848205.35	0.10	SOIL	GRANULAR	6.34	Peaty Soil	1	4	1	4	Negligible
82	Point	133093.36	848209.14	0.30	SOIL	GRANULAR	6.34	Peaty Soil	1	4	1	4	Negligible
83	Point	133174.20	848162.71	0.10	PEAT	ROCK	7.76	Peaty Soil	1	4	2	8	Low
84	Point	133162.22	848177.45	0.30	PEAT	ROCK	6.46	Peaty Soil	1	4	2	8	Low
85	Point	133160.19	848190.80	0.10	PEAT	ROCK	6.45	Peaty Soil	1	4	2	8	Low
86	Point	133142.30	848187.32	0.20	PEAT	ROCK	6.41	Peaty Soil	1	4	2	8	Low
87	Point	133132.11	848197.11	0.00	ROCK	ROCK	6.18	No Peat	0	4	2	0	None
88	Point	133134.20	848209.07	0.10	PEAT	ROCK	6.49	Peaty Soil	1	4	2	8	Low
89	Point	133126.30	848227.82	0.30	PEAT	ROCK	7.11	Peaty Soil	1	4	2	8	Low
90	Point	133165.77	848115.25	0.20	PEAT	GRANULAR	8.80	Peaty Soil	1	6	1	6	Low
91	Point	133147.47	848139.15	0.40	SOIL	GRANULAR	7.15	Peaty Soil	1	4	1	4	Negligible
92	Point	133172.42	848124.86	0.10	SOIL	GRANULAR	8.73	Peaty Soil	1	6	1	6	Low
93	Point	133163.12	848151.34	0.20	PEAT	ROCK	8.57	Peaty Soil	1	6	2	12	Low
94	Point	133197.60	848114.09	0.10	PEAT	ROCK	5.02	Peaty Soil	1	4	2	8	Low
95	Point	133188.19	848106.71	0.20	PEAT	ROCK	3.33	Peaty Soil	1	2	2	4	Negligible
96	Point	133230.76	848076.56	0.10	PEAT	ROCK	4.40	Peaty Soil	1	4	2	8	Low
97	Point	133212.33	848124.48	0.10	PEAT	ROCK	4.99	Peaty Soil	1	4	2	8	Low
98	Point	133196.01	848143.41	0.00	ROCK	ROCK	3.41	No Peat	0	2	2	0	None
99	Point	133257.60	848058.98	0.20	PEAT	GRANULAR	3.98	Peaty Soil	1	2	1	2	Negligible
100	Point	133213.58	848062.42	0.10	SOIL	ROCK	6.51	Peaty Soil	1	4	2	8	Low
101	Point	133227.73	848071.87	0.10	SOIL	GRANULAR	6.80	Peaty Soil	1	4	1	4	Negligible
102	Point	133238.09	848050.58	0.10	SOIL	GRANULAR	9.74	Peaty Soil	1	6	1	6	Low
103	Point	133243.58	848027.15	0.10	SOIL	GRANULAR	5.82	Peaty Soil</					

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
116	Point	13297.57	847999.78	0.20	PEAT	ROCK	5.45	Peaty Soil	1	4	2	8	Low
117	Point	13270.17	847998.05	0.30	PEAT	ROCK	4.44	Peaty Soil	1	4	2	8	Low
118	Point	132251.89	848022.32	0.10	PEAT	ROCK	3.93	Peaty Soil	1	2	2	4	Negligible
119	Point	132242.21	848027.79	0.20	PEAT	ROCK	5.82	Peaty Soil	1	4	2	8	Low
120	Point	132238.54	848037.53	0.10	PEAT	ROCK	9.74	Peaty Soil	1	6	2	12	Low
121	Point	132609.93	848069.93	0.20	PEAT	ROCK	3.71	Peaty Soil	1	2	2	4	Negligible
122	Point	133408.67	847943.37	0.20	PEAT	GRANULAR	5.51	Peaty Soil	1	4	1	4	Negligible
123	Point	133204.35	847974.59	0.10	SOIL	GRANULAR	3.32	Peaty Soil	1	2	1	2	Negligible
124	Point	133214.43	847955.22	0.00	ROCK	ROCK	5.47	No Peat	0	4	2	0	None
125	Point	133315.05	847952.67	0.10	SOIL	ROCK	5.46	Peaty Soil	1	4	2	8	Low
126	Point	133352.48	847918.95	0.10	SOIL	GRANULAR	7.71	Peaty Soil	1	4	1	4	Negligible
127	Point	133292.49	847920.65	0.10	SOIL	GRANULAR	2.88	Peaty Soil	1	2	1	2	Negligible
128	Point	133303.20	847940.24	0.10	SOIL	GRANULAR	4.60	Peaty Soil	1	4	1	4	Negligible
129	Point	133274.45	847948.63	0.10	SOIL	GRANULAR	4.64	Peaty Soil	1	4	1	4	Negligible
130	Point	133327.93	847963.92	0.20	PEAT	ROCK	8.21	Peaty Soil	1	6	2	12	Low
131	Point	133320.84	847958.25	0.20	PEAT	ROCK	5.63	Peaty Soil	1	4	2	8	Low
132	Point	133337.19	847936.71	0.00	ROCK	ROCK	4.13	No Peat	0	4	2	0	None
133	Point	133358.85	847927.28	0.30	PEAT	ROCK	5.62	Peaty Soil	1	4	2	8	Low
134	Point	133381.83	847915.17	0.40	PEAT	ROCK	8.63	Peaty Soil	1	6	2	12	Low
135	Point	133326.77	847992.10	0.20	PEAT	ROCK	7.08	Peaty Soil	1	4	2	8	Low
136	Point	133345.76	847912.88	0.10	SOIL	GRANULAR	7.79	Peaty Soil	1	4	1	4	Negligible
137	Point	133365.69	847904.69	0.10	SOIL	GRANULAR	12.83	Peaty Soil	1	8	1	8	Low
138	Point	133252.81	848026.52	0.30	Soil	Granular	3.88	Peaty Soil	1	2	1	2	Negligible
139	Point	133275.02	848013.19	0.10	Soil	Granular	4.24	Peaty Soil	1	4	1	4	Negligible
140	Point	133296.68	848026.73	0.30	Soil	Granular	4.91	Peaty Soil	1	4	1	4	Negligible
141	Point	133324.32	847992.02	0.20	Soil	Rock	7.71	Peaty Soil	1	4	2	8	Low
142	Point	133305.69	847969.54	0.40	Soil	Granular	3.67	Peaty Soil	1	2	1	2	Negligible
143	Point	133355.18	847955.75	0.10	Soil	Granular	3.61	Peaty Soil	1	2	1	2	Negligible
144	Point	133336.27	847920.09	0.00	Superficial	Granular	6.86	No Peat	0	4	1	0	None
145	Point	133367.17	847924.71	0.10	Soil	Granular	6.62	Peaty Soil	1	4	1	4	Negligible
146	Point	133386.30	847918.97	0.10	Soil	Granular	6.64	Peaty Soil	1	4	1	4	Negligible
147	Point	133416.09	847947.93	0.30	Soil	Granular	5.09	Peaty Soil	1	4	1	4	Negligible
148	Point	133400.89	847911.55	0.20	Soil	Granular	4.91	Peaty Soil	1	4	1	4	Negligible
149	Point	133414.24	847924.70	0.20	Soil	Granular	3.31	Peaty Soil	1	2	1	2	Negligible
150	Point	133417.41	847903.13	0.10	Soil	Granular	3.47	Peaty Soil	1	2	1	2	Negligible
151	Point	133440.59	847905.86	0.00	Superficial	Granular	3.08	No Peat	0	2	1	0	None
152	Point	133449.98	847921.86	0.10	Soil	Granular	4.58	Peaty Soil	1	4	1	4	Negligible
153	Point	133437.72	847921.48	0.10	Soil	Granular	6.85	Peaty Soil	1	4	1	4	Negligible
154	Point	133462.15	847946.77	0.10	Soil	Rock	8.95	Peaty Soil	1	6	2	12	Low
155	Point	133458.76	847916.97	0.00	Rock	Rock	4.85	No Peat	0	4	2	0	None
156	Point	133467.03	847912.03	0.00	Rock	Rock	4.97	No Peat	0	4	2	0	None
157	Point	133464.15	847919.77	0.00	Rock	Rock	4.97	No Peat	0	4	2	0	None
158	Point	133452.18	847907.43	0.10	Soil	Rock	3.72	Peaty Soil	1	2	2	4	Negligible
159	Point	133463.07	847903.43	0.00	Superficial	Granular	3.76	No Peat	0	2	1	0	None
160	Point	133477.57	847906.60	0.10	Soil	Granular	10.44	Peaty Soil	1	6	1	6	Low
161	Point	133504.93	847920.46	0.10	Soil	Granular	10.48	Peaty Soil	1	6	1	6	Low
162	Point	133252.47	848027.53	0.30	Soil	Granular	3.88	Peaty Soil	1	2	1	2	Negligible
163	Point	133283.46	847938.75	0.20	Soil	Rock	5.04	Peaty Soil	1	4	2	8	Low
164	Point	133310.08	847941.14	0.00	Rock	Rock	5.42	No Peat	0	4	2	0	None
165	Point	133312.09	847946.07	0.10	Soil	Rock	5.45	Peaty Soil	1	4	2	8	Low
166	Point	133312.50	847920.64	0.40	Peat	Granular	3.50	Peaty Soil	1	2	1	2	Negligible
167	Point	133297.54	847895.20	0.10	SOIL	GRANULAR	6.69	Peaty Soil	1	4	1	4	Negligible
168	Point	133361.34	847879.66	0.10	SOIL	ROCK	16.82	Peaty Soil	1	8	2	16	Medium
169	Point	133353.32	847845.95	0.00	ROCK	ROCK	6.71	No Peat	0	4	2	0	None
170	Point	133266.75	847898.01	0.10	SOIL	GRANULAR	9.63	Peaty Soil	1	6	1	6	Low
171	Point	133500.71	847871.84	0.10	PEAT	GRANULAR	6.83	Peaty Soil	1	4	1	4	Negligible
172	Point	133388.99	847867.09	0.20	PEAT	GRANULAR	7.56	Peaty Soil	1	4	1	4	Negligible
173	Point	133378.44	847891.01	0.00	SOIL	ROCK	11.99	No Peat	0	6	2	0	None
174	Point	133376.90	847873.62	0.10	SOIL	ROCK	2.59	Peaty Soil	1	2	2	4	Negligible
175	Point	133411.59	847836.36	0.00	SOIL	ROCK	2.53	No Peat	0	2	2	0	None
176	Point	133416.41	847845.54	0.30	SOIL	GRANULAR	6.14	Peaty Soil	1	4	1	4	Negligible
177	Point	133370.30	847840.18	0.10	SOIL	ROCK	4.24	Peaty Soil	1	4	2	8	Low
178	Point	133344.02	847848.05	0.10	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
179	Point	133335.59	847875.58	0.10	SOIL	ROCK	7.50	Peaty Soil	1	4	2	8	Low
180	Point	133314.79	847893.51	0.20	SOIL	GRANULAR	5.04	Peaty Soil	1	4	1	4	Negligible
181	Point	133394.01	847888.13	0.00	ROCK	ROCK	8.73	No Peat	0	6	2	0	None
182	Point	133385.55	847891.00	0.00	ROCK	ROCK	8.76	No Peat	0	6	2	0	None
183	Point	133385.48	847880.50	0.10	PEAT	ROCK	8.61	Peaty Soil	1	6	2	12	Low
184	Point	133403.59	847861.26	0.30	PEAT	ROCK	6.18	Peaty Soil	1	4	2	8	Low
185	Point	133429.06	847851.78	0.10	PEAT	ROCK	8.53	Peaty Soil	1	6	2	12	Low
186	Point	133445.31	847862.44	0.20	PEAT	ROCK	4.48	Peaty Soil	1	4	2	8	Low
187	Point	133423.91	847877.43	0.30	PEAT	ROCK	5.19	Peaty Soil	1	4	2	8	Low
188	Point	133404.87	847897.66	0.10	PEAT	ROCK	8.77	Peaty Soil	1	6	2	12	Low
189	Point	133428.78	847804.71	0.10	SOIL	GRANULAR	4.34	Peaty Soil	1	4	1	4	Negligible
190	Point	133711.68	847834.20	0.30	SOIL	GRANULAR	8.50	Peaty Soil	1	6	1	6	Low
191	Point	134068.37	847816.83	0.30	SOIL	GRANULAR	8.32	Peaty Soil	1	6	1	6	Low
192	Point	134122.40	847776.08	0.10	SOIL	GRANULAR	12.34	Peaty Soil	1	8	1	8	Low
193	Point	134147.31	847758.08	0.20	SOIL	GRANULAR	7.82	Peaty Soil	1	4	1	4	Negligible
194	Point	133677.66	847766.64	0.20	PEAT	GRANULAR	5.40	Peaty Soil	1	4	1	4	Negligible
195	Point	133576.69	847813.82	0.30	PEAT	GRANULAR	9.09	Peaty Soil	1	6	1	6	Low
196	Point	133298.56	847771.37	0.10	PEAT	GRANULAR	10.01	Peaty Soil	1	6	1	6	Low
197	Point	133436.14	847823.59	0.10	SOIL	ROCK	2.34	Peaty Soil	1	2	2	4	Negligible
198	Point	133475.52	847762.94	0.10	SOIL	ROCK	4.34	Peaty Soil	1	4	2	8	Low
199	Point	133475.61	847758.28	0.10	SOIL	ROCK	4.31	Peaty Soil	1	4	2	8	Low
200	Point	133465.46	847758.02	0.10	SOIL	GRANULAR	4.45	Peaty Soil	1	4	1	4	Negligible
201	Point	133474.06	847765.27	0.10	SOIL	ROCK	4.29	Peaty Soil	1	4	2	8	Low
202	Point	133483.61	847771.53	0.10	SOIL	GRANULAR	4.29	Peaty Soil	1	4	1	4	Negligible
203	Point	133472.90	847781.17	0.10	SOIL	GRANULAR	4.20	Peaty Soil	1	4	1	4	Negligible
204	Point	133466.70	847772.27	0.10	SOIL	GRANULAR	4.20	Peaty Soil	1	4	1	4	Negligible
205	Point	133456.79	847766.59	0.10	SOIL	GRANULAR	4.43	Peaty Soil	1	4	1	4	Negligible
206	Point	133450.28	847760.69	0.10	SOIL	GRANULAR	6.24	Peaty Soil	1	4	1	4	Negligible
207	Point	133443.96	847768.36	0.10	SOIL	GRANULAR	6.61	Peaty Soil	1	4	1	4	Negligible
208	Point	133452.13	847772.11	0.10	SOIL	GRANULAR	5.60	Peaty Soil	1	4	1	4	Negligible
209	Point	133460.51	847779.00	0.30	SOIL	GRANULAR	4.16	Peaty Soil	1	4	1	4	Negligible
210	Point	133468.37	847787.05	0.20	SOIL	GRANULAR	4.18	Peaty Soil	1	4	1	4	Negligible
211	Point	133458.10	847795.72	0.20	SOIL	GRANULAR	3.99	Peaty Soil	1	2	1	2	Negligible
212	Point	133443.14	847780.32	0.20	SOIL	GRANULAR	5.47	Peaty Soil	1	4	1	4	Negligible
213	Point	133437.63	847774.36	0.20	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
214	Point	133430.18	847783.22	0.20	SOIL	GRANULAR	6.31	Peaty Soil	1	4	1	4	Negligible
215	Point	133439.15	847788.40	0.10	SOIL	GRANULAR	5.56	Peaty Soil	1	4	1	4	Negligible
216	Point	133453.06	847803.12	0.10	SOIL	GRANULAR	3.84	Peaty Soil	1	2	1	2	Negligible
217													

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
230	Point	133495.49	847804.44	0.10	PEAT	ROCK	4.95	Peaty Soil	1	4	2	8	Low
231	Point	133476.82	847798.22	0.00	ROCK	ROCK	4.16	No Peat	0	4	2	0	None
232	Point	133482.98	847817.17	0.00	PEAT	ROCK	3.99	No Peat	0	2	2	0	None
233	Point	133474.59	847831.49	0.20	PEAT	ROCK	3.70	Peaty Soil	1	2	2	4	Negligible
234	Point	133468.24	847815.71	0.10	PEAT	ROCK	4.02	Peaty Soil	1	4	2	8	Low
235	Point	133508.15	847740.34	0.10	SOIL	ROCK	4.29	Peaty Soil	1	4	2	8	Low
236	Point	133588.62	847678.86	0.10	SOIL	GRANULAR	11.08	Peaty Soil	1	6	1	6	Low
237	Point	134228.14	847708.14	0.20	SOIL	GRANULAR	7.00	Peaty Soil	1	4	1	4	Negligible
238	Point	134253.14	847682.31	0.10	SOIL	ROCK	7.60	Peaty Soil	1	4	2	8	Low
239	Point	133742.29	847693.19	0.30	PEAT	GRANULAR	7.17	Peaty Soil	1	4	1	4	Negligible
240	Point	133568.59	847717.65	0.10	PEAT	GRANULAR	5.36	Peaty Soil	1	4	1	4	Negligible
241	Point	133511.12	847722.83	0.10	SOIL	ROCK	6.84	Peaty Soil	1	4	2	8	Low
242	Point	133519.95	847731.93	0.10	SOIL	ROCK	4.88	Peaty Soil	1	4	2	8	Low
243	Point	133535.43	847712.49	0.40	SOIL	GRANULAR	8.05	Peaty Soil	1	6	1	6	Low
244	Point	133541.53	847686.04	0.30	SOIL	GRANULAR	9.32	Peaty Soil	1	6	1	6	Low
245	Point	133504.54	847691.26	0.20	SOIL	GRANULAR	5.83	Peaty Soil	1	4	1	4	Negligible
246	Point	133477.04	847703.48	0.10	SOIL	GRANULAR	7.25	Peaty Soil	1	4	1	4	Negligible
247	Point	133467.30	847730.91	0.10	SOIL	GRANULAR	6.57	Peaty Soil	1	4	1	4	Negligible
248	Point	133487.64	847745.77	0.10	SOIL	ROCK	4.42	Peaty Soil	1	4	2	8	Low
249	Point	133479.23	847752.28	0.10	SOIL	ROCK	4.46	Peaty Soil	1	4	2	8	Low
250	Point	133454.31	847751.68	0.10	SOIL	GRANULAR	7.99	Peaty Soil	1	4	1	4	Negligible
251	Point	133500.13	847748.12	0.00	ROCK	ROCK	4.34	No Peat	0	4	2	0	None
252	Point	133524.81	847741.85	0.10	PEAT	ROCK	8.07	Peaty Soil	1	6	2	12	Low
253	Point	133552.45	847695.00	0.00	ROCK	ROCK	6.70	No Peat	0	4	2	0	None
254	Point	133559.29	847704.42	0.10	PEAT	ROCK	5.55	Peaty Soil	1	4	2	8	Low
255	Point	133568.39	847676.47	0.30	PEAT	ROCK	7.96	Peaty Soil	1	4	2	8	Low
256	Point	133583.99	847692.38	0.10	PEAT	ROCK	13.97	Peaty Soil	1	8	2	16	Medium
257	Point	133569.61	847713.42	0.10	PEAT	ROCK	8.83	Peaty Soil	1	6	2	12	Low
258	Point	133553.66	847731.96	0.10	PEAT	ROCK	8.19	Peaty Soil	1	6	2	12	Low
259	Point	133539.12	847748.91	0.30	PEAT	ROCK	9.10	Peaty Soil	1	6	2	12	Low
260	Point	133311.95	847635.76	0.10	SOIL	GRANULAR	4.01	Peaty Soil	1	4	1	4	Negligible
261	Point	133681.57	847628.67	0.20	SOIL	GRANULAR	13.38	Peaty Soil	1	8	1	8	Low
262	Point	134030.48	847608.65	0.20	SOIL	GRANULAR	5.56	Peaty Soil	1	4	1	4	Negligible
263	Point	133955.36	847658.41	0.10	SOIL	GRANULAR	4.34	Peaty Soil	1	4	1	4	Negligible
264	Point	134205.62	847624.78	0.20	SOIL	GRANULAR	8.25	Peaty Soil	1	6	1	6	Low
265	Point	133450.71	847666.12	0.10	PEAT	GRANULAR	7.27	Peaty Soil	1	4	1	4	Negligible
266	Point	133580.28	847651.12	0.20	SOIL	GRANULAR	10.37	Peaty Soil	1	6	1	6	Low
267	Point	133584.31	847659.05	0.10	SOIL	GRANULAR	10.29	Peaty Soil	1	6	1	6	Low
268	Point	133608.05	847640.00	0.10	SOIL	GRANULAR	9.68	Peaty Soil	1	6	1	6	Low
269	Point	133616.81	847618.96	0.10	SOIL	GRANULAR	8.01	Peaty Soil	1	6	1	6	Low
270	Point	133661.45	847595.75	0.40	SOIL	GRANULAR	13.33	Peaty Soil	1	8	1	8	Low
271	Point	133720.86	847597.26	0.20	SOIL	GRANULAR	5.61	Peaty Soil	1	4	1	4	Negligible
272	Point	133702.82	847603.83	0.20	SOIL	GRANULAR	8.11	Peaty Soil	1	6	1	6	Low
273	Point	133689.36	847615.88	0.20	SOIL	GRANULAR	10.81	Peaty Soil	1	6	1	6	Low
274	Point	133682.94	847598.99	0.20	SOIL	GRANULAR	8.04	Peaty Soil	1	6	1	6	Low
275	Point	133591.37	847598.29	0.10	SOIL	GRANULAR	6.92	Peaty Soil	1	4	1	4	Negligible
276	Point	133579.18	847620.49	0.10	SOIL	GRANULAR	11.73	Peaty Soil	1	6	1	6	Low
277	Point	133555.91	847629.83	0.10	SOIL	GRANULAR	7.45	Peaty Soil	1	4	1	4	Negligible
278	Point	133541.24	847654.05	0.10	SOIL	ROCK	8.21	Peaty Soil	1	6	2	12	Low
279	Point	133517.22	847665.86	0.10	SOIL	ROCK	4.55	Peaty Soil	1	4	2	8	Low
280	Point	133591.70	847664.52	0.20	PEAT	ROCK	10.64	Peaty Soil	1	6	2	12	Low
281	Point	133623.76	847628.55	0.10	PEAT	ROCK	9.97	Peaty Soil	1	6	2	12	Low
282	Point	133645.80	847611.10	0.20	PEAT	ROCK	5.87	Peaty Soil	1	4	2	8	Low
283	Point	133667.91	847602.40	0.10	PEAT	ROCK	12.99	Peaty Soil	1	8	2	16	Medium
284	Point	133641.89	847646.35	0.10	PEAT	ROCK	12.19	Peaty Soil	1	8	2	16	Medium
285	Point	133621.85	847663.66	0.10	PEAT	ROCK	13.31	Peaty Soil	1	8	2	16	Medium
286	Point	133406.46	847534.47	0.10	SOIL	GRANULAR	4.72	Peaty Soil	1	4	1	4	Negligible
287	Point	133390.74	847588.54	0.00	ROCK	ROCK	4.10	No Peat	0	4	2	0	None
288	Point	133750.51	847568.89	0.10	SOIL	GRANULAR	6.75	Peaty Soil	1	4	1	4	Negligible
289	Point	134109.78	847547.64	0.10	SOIL	GRANULAR	4.81	Peaty Soil	1	4	1	4	Negligible
290	Point	134387.12	847581.07	0.20	SOIL	GRANULAR	10.08	Peaty Soil	1	6	1	6	Low
291	Point	133522.89	847594.58	0.10	PEAT	GRANULAR	4.14	Peaty Soil	1	4	1	4	Negligible
292	Point	133609.20	847573.94	0.20	PEAT	GRANULAR	11.94	Peaty Soil	1	6	1	6	Low
293	Point	133899.03	847565.88	0.30	PEAT	GRANULAR	6.84	Peaty Soil	1	4	1	4	Negligible
294	Point	134252.06	847556.58	0.20	PEAT	GRANULAR	11.49	Peaty Soil	1	6	1	6	Low
295	Point	133702.17	847556.98	0.10	SOIL	GRANULAR	6.53	Peaty Soil	1	4	1	4	Negligible
296	Point	133715.43	847551.09	0.10	SOIL	GRANULAR	6.92	Peaty Soil	1	4	1	4	Negligible
297	Point	133729.75	847552.20	0.10	SOIL	GRANULAR	7.08	Peaty Soil	1	4	1	4	Negligible
298	Point	133746.52	847543.10	0.10	SOIL	GRANULAR	7.93	Peaty Soil	1	4	1	4	Negligible
299	Point	133789.84	847518.12	0.20	SOIL	GRANULAR	7.44	Peaty Soil	1	4	1	4	Negligible
300	Point	133794.40	847529.55	0.10	SOIL	GRANULAR	5.48	Peaty Soil	1	4	1	4	Negligible
301	Point	133716.70	847519.93	0.20	SOIL	GRANULAR	8.76	Peaty Soil	1	6	1	6	Low
302	Point	133729.36	847555.39	0.10	SOIL	GRANULAR	7.42	Peaty Soil	1	4	1	4	Negligible
303	Point	133731.66	847572.17	0.20	SOIL	GRANULAR	7.21	Peaty Soil	1	4	1	4	Negligible
304	Point	133736.71	847586.54	0.30	SOIL	GRANULAR	5.78	Peaty Soil	1	4	1	4	Negligible
305	Point	133718.77	847573.02	0.20	SOIL	GRANULAR	8.62	Peaty Soil	1	6	1	6	Low
306	Point	133693.88	847585.25	0.10	SOIL	GRANULAR	7.36	Peaty Soil	1	4	1	4	Negligible
307	Point	133677.02	847585.24	0.10	SOIL	GRANULAR	8.91	Peaty Soil	1	6	1	6	Low
308	Point	133642.38	847566.48	0.10	SOIL	GRANULAR	16.78	Peaty Soil	1	8	1	8	Low
309	Point	133617.49	847583.37	0.10	SOIL	GRANULAR	11.09	Peaty Soil	1	6	1	6	Low
310	Point	133706.25	847577.93	0.00	ROCK	ROCK	9.26	No Peat	0	6	2	0	None
311	Point	133703.52	847568.43	0.30	PEAT	ROCK	7.60	Peaty Soil	1	4	2	8	Low
312	Point	133730.33	847557.93	0.10	PEAT	ROCK	6.90	Peaty Soil	1	4	2	8	Low
313	Point	133751.05	847550.99	0.10	PEAT	ROCK	6.75	Peaty Soil	1	4	2	8	Low
314	Point	133757.94	847559.66	0.00	ROCK	ROCK	6.69	No Peat	0	4	2	0	None
315	Point	133775.49	847538.04	0.30	PEAT	ROCK	7.33	Peaty Soil	1	4	2	8	Low
316	Point	133801.46	847536.16	0.20	PEAT	ROCK	7.44	Peaty Soil	1	4	2	8	Low
317	Point	133832.46	847534.50	0.10	PEAT	ROCK	7.75	Peaty Soil	1	4	2	8	Low
318	Point	133813.50	847550.07	0.10	PEAT	ROCK	7.78	Peaty Soil	1	4	2	8	Low
319	Point	133789.97	847561.47	0.30	PEAT	ROCK	7.21	Peaty Soil	1	4	2	8	Low
320	Point	133765.28	847572.21	0.10	PEAT	ROCK	6.75	Peaty Soil	1	4	2	8	Low
321	Point	133740.84	847586.65	0.20	PEAT	ROCK	5.54	Peaty Soil	1	4	2	8	Low
322	Point	133715.74	847563.54	0.00	SUPERFICIAL	ROCK	7.62	No Peat	0	4	2	0	None
323	Point	133696.46	847570.94	0.10	PEAT	ROCK	7.75	Peaty Soil	1	4	2	8	Low
324	Point	133669.25	847581.47	0.20	PEAT	ROCK	11.58	Peaty Soil	1	6	2	12	Low
325	Point	133665.47	847571.29	0.10	PEAT	ROCK	9.42	Peaty Soil	1	6	2	12	Low
326	Point	133684.69	847564.45	0.30	PEAT	ROCK	6.63	Peaty Soil	1	4	2	8	Low
327	Point	133692.82	847561.31	0.10	PEAT	ROCK	6.67	Peaty Soil	1	4	2	8	Low
328	Point	133702.98	847557.11	0.00	SUPERFICIAL	ROCK	6.53	No Peat	0	4	2	0	None
329	Point	133712.09	847552.24	0.10	PEAT	ROCK	6.76	Peaty Soil	1	4	2	8	Low
330	Point	133706.92	847542.15	0.10	PEAT	ROCK	7.85	Peaty Soil	1	4	2	8	Low
331	Point	133702.											

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
344	Point	134556.27	847460.61	0.20	SOIL	GRANULAR	5.77	Peaty Soil	1	4	1	4	Negligible
345	Point	133426.21	847440.68	0.30	PEAT	GRANULAR	8.48	Peaty Soil	1	6	1	6	Low
346	Point	133334.82	847488.73	0.20	PEAT	GRANULAR	2.99	Peaty Soil	1	2	1	2	Negligible
347	Point	133689.16	847477.81	0.10	PEAT	GRANULAR	4.45	Peaty Soil	1	4	1	4	Negligible
348	Point	134070.74	847478.54	0.40	PEAT	ROCK	8.70	Peaty Soil	1	6	2	12	Low
349	Point	134413.80	847454.83	0.10	PEAT	GRANULAR	10.46	Peaty Soil	1	6	1	6	Low
350	Point	133817.86	847512.38	0.10	SOIL	GRANULAR	8.32	Peaty Soil	1	6	1	6	Low
351	Point	133849.46	847452.25	0.20	SOIL	GRANULAR	12.03	Peaty Soil	1	8	1	8	Low
352	Point	133857.97	847455.04	0.20	SOIL	GRANULAR	7.05	Peaty Soil	1	4	1	4	Negligible
353	Point	133806.32	847452.47	0.10	SOIL	GRANULAR	5.99	Peaty Soil	1	4	1	4	Negligible
354	Point	133775.97	847476.41	0.10	SOIL	GRANULAR	7.64	Peaty Soil	1	4	1	4	Negligible
355	Point	133743.59	847495.28	0.20	SOIL	GRANULAR	7.24	Peaty Soil	1	4	1	4	Negligible
356	Point	133839.56	847503.51	0.10	PEAT	ROCK	10.62	Peaty Soil	1	6	2	12	Low
357	Point	133831.46	847496.23	0.00	PEAT	ROCK	10.15	No Peat	0	6	2	0	None
358	Point	133849.38	847477.19	0.10	PEAT	ROCK	10.39	Peaty Soil	1	6	2	12	Low
359	Point	133896.07	847443.80	0.40	PEAT	ROCK	5.07	Peaty Soil	1	4	2	8	Low
360	Point	133890.43	847467.99	0.30	PEAT	ROCK	7.10	Peaty Soil	1	4	2	8	Low
361	Point	133878.14	847493.36	0.40	PEAT	ROCK	5.81	Peaty Soil	1	4	2	8	Low
362	Point	133852.48	847513.84	0.10	PEAT	ROCK	10.13	Peaty Soil	1	6	2	12	Low
363	Point	133605.68	847401.39	0.10	SOIL	GRANULAR	3.19	Peaty Soil	1	2	1	2	Negligible
364	Point	133575.64	847431.46	0.10	SOIL	GRANULAR	3.19	Peaty Soil	1	2	1	2	Negligible
365	Point	134360.55	847363.21	0.20	SOIL	GRANULAR	8.53	Peaty Soil	1	6	1	6	Low
366	Point	134350.87	847379.29	0.20	SOIL	GRANULAR	8.94	Peaty Soil	1	6	1	6	Low
367	Point	134274.36	847426.34	0.30	SOIL	GRANULAR	5.47	Peaty Soil	1	4	1	4	Negligible
368	Point	133477.95	847398.59	0.10	PEAT	GRANULAR	3.89	Peaty Soil	1	2	1	2	Negligible
369	Point	133778.29	847427.50	0.10	PEAT	GRANULAR	4.97	Peaty Soil	1	4	1	4	Negligible
370	Point	134492.90	847393.66	0.10	PEAT	GRANULAR	5.14	Peaty Soil	1	4	1	4	Negligible
371	Point	133864.80	847430.59	0.20	SOIL	GRANULAR	9.15	Peaty Soil	1	6	1	6	Low
372	Point	133859.89	847403.18	0.20	SOIL	GRANULAR	11.88	Peaty Soil	1	6	1	6	Low
373	Point	133876.33	847366.00	0.20	SOIL	GRANULAR	6.96	Peaty Soil	1	4	1	4	Negligible
374	Point	133886.56	847367.38	0.30	SOIL	GRANULAR	5.83	Peaty Soil	1	4	1	4	Negligible
375	Point	133896.24	847360.42	0.20	SOIL	GRANULAR	13.09	Peaty Soil	1	8	1	8	Low
376	Point	133886.26	847355.12	0.30	SOIL	GRANULAR	6.49	Peaty Soil	1	4	1	4	Negligible
377	Point	133876.85	847363.18	0.30	SOIL	GRANULAR	6.86	Peaty Soil	1	4	1	4	Negligible
378	Point	133839.00	847376.82	0.10	SOIL	GRANULAR	5.63	Peaty Soil	1	4	1	4	Negligible
379	Point	133816.68	847414.57	0.10	SOIL	GRANULAR	8.11	Peaty Soil	1	6	1	6	Low
380	Point	133902.05	847368.04	0.40	PEAT	ROCK	13.52	Peaty Soil	1	8	2	16	Medium
381	Point	133900.41	847388.99	0.30	PEAT	ROCK	9.84	Peaty Soil	1	6	2	12	Low
382	Point	133432.82	847305.70	0.10	SOIL	GRANULAR	9.23	Peaty Soil	1	6	1	6	Low
383	Point	133793.75	847289.52	0.10	SOIL	GRANULAR	10.72	Peaty Soil	1	6	1	6	Low
384	Point	133734.97	847325.19	0.10	SUPERFICIAL	GRANULAR	5.27	Peaty Soil	1	4	1	4	Negligible
385	Point	134052.76	847333.81	0.10	SOIL	GRANULAR	6.13	Peaty Soil	1	4	1	4	Negligible
386	Point	134069.60	847316.71	0.20	SOIL	GRANULAR	4.99	Peaty Soil	1	4	1	4	Negligible
387	Point	134709.03	847342.53	0.40	SOIL	GRANULAR	5.33	Peaty Soil	1	4	1	4	Negligible
388	Point	133573.92	847340.94	0.00	PEAT	ROCK	2.05	No Peat	0	2	2	0	None
389	Point	134583.00	847331.95	0.30	PEAT	GRANULAR	8.07	Peaty Soil	1	6	1	6	Low
390	Point	133899.95	847351.25	0.10	SOIL	GRANULAR	11.52	Peaty Soil	1	6	1	6	Low
391	Point	133906.97	847346.51	0.10	SOIL	GRANULAR	10.24	Peaty Soil	1	6	1	6	Low
392	Point	133914.58	847341.73	0.20	SOIL	GRANULAR	9.81	Peaty Soil	1	6	1	6	Low
393	Point	133922.14	847333.05	0.20	SOIL	GRANULAR	9.54	Peaty Soil	1	6	1	6	Low
394	Point	133915.04	847325.69	0.40	SOIL	GRANULAR	7.03	Peaty Soil	1	4	1	4	Negligible
395	Point	133905.74	847333.93	0.20	SOIL	GRANULAR	5.83	Peaty Soil	1	4	1	4	Negligible
396	Point	133868.22	847354.06	0.30	SOIL	GRANULAR	6.48	Peaty Soil	1	4	1	4	Negligible
397	Point	133877.25	847347.89	0.20	SOIL	GRANULAR	6.74	Peaty Soil	1	4	1	4	Negligible
398	Point	133885.85	847339.70	0.20	SOIL	GRANULAR	7.73	Peaty Soil	1	4	1	4	Negligible
399	Point	133893.22	847332.70	0.30	SOIL	ROCK	8.71	Peaty Soil	1	6	2	12	Low
400	Point	133905.57	847319.05	0.30	SOIL	GRANULAR	4.69	Peaty Soil	1	4	1	4	Negligible
401	Point	133891.50	847320.16	0.20	SOIL	GRANULAR	12.25	Peaty Soil	1	8	1	8	Low
402	Point	133878.65	847334.03	0.20	SOIL	GRANULAR	6.02	Peaty Soil	1	4	1	4	Negligible
403	Point	133869.89	847341.11	0.20	SOIL	GRANULAR	4.05	Peaty Soil	1	4	1	4	Negligible
404	Point	133862.38	847347.56	0.20	SOIL	GRANULAR	3.42	Peaty Soil	1	2	1	2	Negligible
405	Point	133922.30	847349.23	0.10	PEAT	ROCK	10.00	Peaty Soil	1	6	2	12	Low
406	Point	133931.00	847339.54	0.10	PEAT	ROCK	8.47	Peaty Soil	1	6	2	12	Low
407	Point	134655.66	847271.94	0.10	PEAT	GRANULAR	6.02	Peaty Soil	1	4	1	4	Negligible
408	Point	133364.66	847898.03	0.20	Soil	Granular	12.86	Peaty Soil	1	8	1	8	Low
409	Point	133889.12	847892.75	0.10	Soil	Rock	8.76	Peaty Soil	1	6	2	12	Low
410	Point	133368.44	847871.84	0.00	Rock	Rock	7.55	No Peat	0	4	2	0	None
411	Point	133375.25	847869.05	0.00	Rock	Rock	2.15	No Peat	0	2	2	0	None
412	Point	133392.35	847872.47	0.00	Rock	Rock	4.42	No Peat	0	4	2	0	None
413	Point	133413.21	847870.77	0.10	Soil	Granular	5.21	Peaty Soil	1	4	1	4	Negligible
414	Point	133415.01	847879.99	0.10	Soil	Granular	5.24	Peaty Soil	1	4	1	4	Negligible
415	Point	133410.71	847895.28	0.10	Soil	Granular	7.79	Peaty Soil	1	4	1	4	Negligible
416	Point	133424.50	847897.01	0.10	Soil	Granular	4.50	Peaty Soil	1	4	1	4	Negligible
417	Point	133449.03	847900.00	0.10	Soil	Rock	2.99	Peaty Soil	1	2	2	4	Negligible
418	Point	133438.39	847896.63	0.20	Soil	Granular	2.49	Peaty Soil	1	2	1	2	Negligible
419	Point	133446.20	847886.87	0.00	Superficial	Granular	2.97	No Peat	0	2	1	0	None
420	Point	133436.18	847867.40	0.10	Soil	Granular	4.33	Peaty Soil	1	4	1	4	Negligible
421	Point	133457.77	847894.80	0.00	Superficial	Granular	2.92	No Peat	0	2	1	0	None
422	Point	133471.93	847897.69	0.00	Superficial	Granular	5.51	No Peat	0	4	1	0	None
423	Point	133462.57	847894.72	0.00	Superficial	Granular	2.86	No Peat	0	2	1	0	None
424	Point	133463.77	847888.19	0.00	Superficial	Granular	2.82	No Peat	0	2	1	0	None
425	Point	133466.20	847889.93	0.00	Superficial	Granular	2.57	No Peat	0	2	1	0	None
426	Point	133488.28	847896.30	0.00	Superficial	Granular	7.54	No Peat	0	4	1	0	None
427	Point	133499.38	847883.67	0.00	Superficial	Granular	7.48	No Peat	0	4	1	0	None
428	Point	133487.17	847872.10	0.10	Soil	Granular	6.67	Peaty Soil	1	4	1	4	Negligible
429	Point	133464.09	847870.62	0.10	Soil	Granular	3.14	Peaty Soil	1	2	1	2	Negligible
430	Point	133460.47	847843.33	0.40	Soil	Granular	1.95	Peaty Soil	1	1	1	1	Negligible
431	Point	133485.56	847821.81	0.20	Soil	Granular	4.45	Peaty Soil	1	4	1	4	Negligible
432	Point	133490.52	847845.36	0.20	Soil	Rock	6.66	Peaty Soil	1	4	2	8	Low
433	Point	133510.22	847869.74	0.10	Soil	Rock	6.83	Peaty Soil	1	4	2	8	Low
434	Point	133531.54	847882.63	0.10	Superficial	Rock	15.71	Peaty Soil	1	8	2	16	Medium
435	Point	133559.22	847838.01	0.30	Soil	Rock	16.62	Peaty Soil	1	8	2	16	Medium
436	Point	133589.63	847798.41	0.40	Soil	Granular	8.16	Peaty Soil	1	6	1	6	Low
437	Point	133544.59	847812.75	0.30	Soil	Granular	12.01	Peaty Soil	1	8	1	8	Low
438	Point	133620.07	847759.36	0.30	Soil	Granular	4.12	Peaty Soil	1	4	1	4	Negligible
439	Point	133591.22	847764.64	0.10	Soil	Granular	12.84	Peaty Soil	1	8	1	8	Low
440	Point	133560.27	847796.71	0.10	Soil	Granular	10.18	Peaty Soil	1	6	1	6	Low
441	Point	133538.19	847820.80	0.10	Superficial	Granular	7.85	Peaty Soil	1	4	1	4	Negligible
442	Point	133530.68	847844.68	0.10	Soil	Granular	6.54	Peaty Soil	1	4	1	4	Negligible
443	Point	133506.72	847842.07	0.10	Soil	Granular	6.59	Peaty Soil	1	4	1	4	Negligible
444	Point	133510.31	847817.54	0.10	Soil	Granular	10.69	Peaty Soil	1	6			

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
458	Point	133882.82	847598.24	0.10	Soil	Rock	9.77	Peaty Soil	1	6	2	12	Low
459	Point	133926.42	847628.05	0.20	Soil	Granular	9.79	Peaty Soil	1	6	1	6	Low
460	Point	133978.55	847634.60	0.10	Soil	Granular	5.85	Peaty Soil	1	4	1	4	Negligible
461	Point	134052.96	847613.47	0.10	Soil	Granular	7.50	Peaty Soil	1	4	1	4	Negligible
462	Point	134083.16	847609.53	0.30	Soil	Granular	6.15	Peaty Soil	1	6	1	6	Low
463	Point	134083.16	847623.15	0.30	Soil	Rock	8.13	Peaty Soil	1	6	2	12	Low
464	Point	134086.47	847634.62	0.40	Soil	Rock	4.55	Peaty Soil	1	4	2	8	Low
465	Point	134086.08	847650.13	0.30	Soil	Rock	4.20	Peaty Soil	1	4	2	8	Low
466	Point	134110.02	847644.99	0.20	Soil	Rock	3.24	Peaty Soil	1	2	2	4	Negligible
467	Point	134107.16	847620.04	0.10	Soil	Rock	4.61	Peaty Soil	1	4	2	8	Low
468	Point	134103.32	847602.87	0.30	Soil	Rock	7.82	Peaty Soil	1	4	2	8	Low
469	Point	134138.97	847616.39	0.20	Soil	Rock	2.98	Peaty Soil	1	2	2	4	Negligible
470	Point	134130.41	847616.35	0.10	Soil	Rock	2.99	Peaty Soil	1	2	2	4	Negligible
471	Point	134136.60	847626.71	0.10	Soil	Granular	2.95	Peaty Soil	1	2	1	2	Negligible
472	Point	134132.00	847623.13	0.10	Soil	Granular	2.99	Peaty Soil	1	2	1	2	Negligible
473	Point	134135.95	847637.44	0.20	Soil	Granular	3.14	Peaty Soil	1	2	1	2	Negligible
474	Point	134148.38	847635.99	0.20	Soil	Granular	3.55	Peaty Soil	1	2	1	2	Negligible
475	Point	134146.92	847624.31	0.10	Soil	Rock	2.96	Peaty Soil	1	2	2	4	Negligible
476	Point	134146.96	847616.14	0.10	Soil	Granular	2.96	Peaty Soil	1	2	1	2	Negligible
477	Point	134146.59	847605.16	0.20	Soil	Rock	6.19	Peaty Soil	1	4	2	8	Low
478	Point	134157.87	847606.99	0.40	Soil	Rock	5.72	Peaty Soil	1	4	2	8	Low
479	Point	134156.37	847611.28	0.10	Soil	Rock	4.52	Peaty Soil	1	4	2	8	Low
480	Point	134156.34	847617.31	0.10	Soil	Granular	3.50	Peaty Soil	1	2	1	2	Negligible
481	Point	134157.66	847627.07	0.20	Soil	Rock	5.30	Peaty Soil	1	4	2	8	Low
482	Point	134158.24	847635.87	0.20	Soil	Granular	6.78	Peaty Soil	1	4	1	4	Negligible
483	Point	134167.02	847635.87	0.10	Soil	Granular	7.03	Peaty Soil	1	4	1	4	Negligible
484	Point	134167.15	847624.81	0.20	Soil	Granular	9.64	Peaty Soil	1	6	1	6	Low
485	Point	134166.87	847614.93	0.20	Soil	Rock	9.59	Peaty Soil	1	6	2	12	Low
486	Point	134178.26	847595.22	0.10	Soil	Granular	9.40	Peaty Soil	1	6	1	6	Low
487	Point	134179.71	847605.53	0.10	Soil	Granular	10.76	Peaty Soil	1	6	1	6	Low
488	Point	134178.86	847611.35	0.10	Soil	Granular	10.86	Peaty Soil	1	6	1	6	Low
489	Point	134176.78	847626.83	0.00	Peat	Rock	12.17	No Peat	0	8	2	0	None
490	Point	134177.32	847637.80	0.40	Soil	Rock	13.44	No Peat	1	8	2	16	Medium
491	Point	134188.55	847636.25	0.20	Soil	Rock	10.16	Peaty Soil	1	6	2	12	Low
492	Point	134187.26	847627.06	0.10	Soil	Granular	9.66	Peaty Soil	1	6	1	6	Low
493	Point	134187.00	847614.91	0.10	Soil	Granular	9.66	Peaty Soil	1	6	1	6	Low
494	Point	134189.40	847605.62	0.20	Soil	Granular	9.65	Peaty Soil	1	6	1	6	Low
495	Point	134198.74	847597.04	0.10	Soil	Rock	6.95	Peaty Soil	1	4	2	8	Low
496	Point	134198.69	847584.86	0.40	Soil	Granular	6.41	Peaty Soil	1	4	1	4	Negligible
497	Point	134195.37	847626.84	0.20	Soil	Rock	8.07	Peaty Soil	1	6	2	12	Low
498	Point	134209.75	847624.84	0.10	Soil	Granular	6.94	Peaty Soil	1	4	1	4	Negligible
499	Point	134203.84	847600.42	0.40	Soil	Granular	6.96	Peaty Soil	1	4	1	4	Negligible
500	Point	134234.84	847620.42	0.20	Soil	Rock	7.13	Peaty Soil	1	4	2	8	Low
501	Point	134254.45	847590.43	0.10	Soil	Rock	12.32	Peaty Soil	1	8	2	16	Medium
502	Point	134275.80	847595.81	0.10	Soil	Granular	7.30	Peaty Soil	1	4	1	4	Negligible
503	Point	134282.88	847570.39	0.10	Soil	Granular	7.14	Peaty Soil	1	4	1	4	Negligible
504	Point	134321.32	847583.05	0.40	Soil	Granular	5.76	Peaty Soil	1	4	1	4	Negligible
505	Point	134370.41	847562.16	0.10	Soil	Rock	7.76	Peaty Soil	1	4	2	8	Low
506	Point	134375.88	847532.21	0.10	Soil	Granular	8.59	Peaty Soil	1	6	1	6	Low
507	Point	134409.76	847538.43	0.20	Soil	Granular	9.23	Peaty Soil	1	6	1	6	Low
508	Point	134489.14	847456.84	0.20	Soil	Rock	3.77	Peaty Soil	1	2	2	4	Negligible
509	Point	134515.06	847459.43	0.20	Soil	Granular	7.52	Peaty Soil	1	4	1	4	Negligible
510	Point	134532.28	847457.56	0.20	Soil	Granular	9.21	Peaty Soil	1	6	1	6	Low
511	Point	134574.76	847446.23	0.10	Soil	Granular	5.64	Peaty Soil	1	4	1	4	Negligible
512	Point	134572.25	847436.79	0.00	Superficial	Granular	5.66	No Peat	0	4	1	0	None
513	Point	134571.21	847426.48	0.20	Soil	Rock	7.28	Peaty Soil	1	4	2	8	Low
514	Point	134571.45	847396.09	0.20	Soil	Granular	8.65	Peaty Soil	1	6	1	6	Low
515	Point	134573.28	847386.72	0.30	Soil	Granular	6.27	Peaty Soil	1	4	1	4	Negligible
516	Point	134560.71	847387.06	0.20	Soil	Rock	8.69	Peaty Soil	1	6	2	12	Low
517	Point	134562.07	847397.74	0.20	Soil	Granular	8.56	Peaty Soil	1	6	1	6	Low
518	Point	134562.80	847417.18	0.10	Soil	Granular	7.12	Peaty Soil	1	4	1	4	Negligible
519	Point	134561.32	847427.12	0.40	Soil	Granular	9.11	Peaty Soil	1	6	1	6	Low
520	Point	134550.90	847427.54	0.20	Soil	Granular	6.27	Peaty Soil	1	4	1	4	Negligible
521	Point	134540.88	847426.93	0.20	Soil	Granular	4.42	Peaty Soil	1	4	1	4	Negligible
522	Point	134541.03	847416.94	0.20	Soil	Rock	4.35	Peaty Soil	1	4	2	8	Low
523	Point	134552.79	847416.83	0.20	Soil	Rock	4.34	Peaty Soil	1	4	2	8	Low
524	Point	134552.00	847406.18	0.20	Soil	Rock	4.36	Peaty Soil	1	4	2	8	Low
525	Point	134543.62	847374.74	0.30	Soil	Granular	5.88	Peaty Soil	1	4	1	4	Negligible
526	Point	134581.49	847372.86	0.10	Soil	Granular	9.63	Peaty Soil	1	6	1	6	Low
527	Point	134575.51	847336.85	0.10	Soil	Granular	8.71	Peaty Soil	1	6	1	6	Low
528	Point	133312.78	847891.33	0.30	Soil	Granular	5.04	Peaty Soil	1	4	1	4	Negligible
529	Point	133289.65	847889.23	0.10	Soil	Rock	6.60	Peaty Soil	1	4	2	8	Low
530	Point	133296.77	847839.52	0.20	Soil	Granular	4.50	Peaty Soil	1	4	1	4	Negligible
531	Point	133316.43	847793.36	0.30	Soil	Rock	6.74	Peaty Soil	1	4	2	8	Low
532	Point	133337.20	847819.29	0.30	Soil	Rock	6.88	Peaty Soil	1	4	2	8	Low
533	Point	133337.39	847845.65	0.40	Peat	Rock	6.55	Peaty Soil	1	4	2	8	Low
534	Point	133335.96	847870.19	0.20	Soil	Granular	8.78	Peaty Soil	1	6	1	6	Low
535	Point	133338.97	847890.73	0.30	Soil	Rock	6.83	Peaty Soil	1	4	2	8	Low
536	Point	133361.94	847870.85	0.00	Rock	Rock	12.21	No Peat	0	8	2	0	None
537	Point	133376.89	847867.57	0.00	Rock	Rock	2.15	No Peat	0	2	2	0	None
538	Point	133360.92	847820.37	0.20	Soil	Rock	5.46	Peaty Soil	1	4	2	8	Low
539	Point	133362.76	847795.95	0.30	Soil	Granular	7.56	Peaty Soil	1	4	1	4	Negligible
540	Point	133400.93	847743.80	0.30	Soil	Rock	6.96	Peaty Soil	1	4	2	8	Low
541	Point	133390.86	847772.74	0.00	Rock	Rock	5.58	No Peat	0	4	2	0	None
542	Point	133380.35	847804.44	0.30	Soil	Granular	7.35	Peaty Soil	1	4	1	4	Negligible
543	Point	133387.14	847819.94	0.40	Peat	Rock	6.02	Peaty Soil	1	4	2	8	Low
544	Point	133388.37	847834.71	0.20	Soil	Rock	6.07	Peaty Soil	1	1	2	2	Negligible
545	Point	133287.53	847845.47	0.10	Soil	Rock	0.89	Peaty Soil	1	1	2	2	Negligible
546	Point	133400.17	847855.82	0.00	Rock	Rock	3.07	No Peat	0	2	2	0	None
547	Point	133412.46	847846.02	0.00	Rock	Rock	2.33	No Peat	0	2	2	0	None
548	Point	133421.49	847844.45	0.20	Soil	Rock	4.34	Peaty Soil	1	4	2	8	Low
549	Point	133408.82	847821.79	0.20	Soil	Rock	2.64	Peaty Soil	1	2	2	4	Negligible
550	Point	133411.76	847795.27	0.30	Soil	Rock	5.95	Peaty Soil	1	4	2	8	Low
551	Point	133411.78	847771.09	0.30	Soil	Rock	5.78	Peaty Soil	1	4	2	8	Low
552	Point	133436.79	847759.72	0.40	Peat	Rock	6.76	Peaty Soil	1	4	2	8	Low
553	Point	133436.93	847769.78	0.10	Soil	Granular	6.39	Peaty Soil	1	4	1	4	Negligible
554	Point	133428.19	847788.07	0.30	Soil	Rock	6.14	Peaty Soil	1	4	2	8	Low
555	Point	133437.65	847795.51	0.30	Soil	Granular	2.44	Peaty Soil	1	2	1	2	Negligible
556	Point	133438.05	847820.58	0.20	Soil	Granular	2.34	Peaty Soil	1	2	1	2	Negligible
557	Point	133462.35	847795.92	0.30	Soil	Rock	4.02	Peaty Soil	1	4	2	8	Low
558	Point	133486.83	847796.81	0.20	Soil	Rock	4.28	Peaty Soil	1	4	2	8	Low
559	Point	133476.84	847778.06	0.00	Rock	Rock	4.32	No Peat	0	4			

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
572	Point	133583.04	847724.61	0.10	Superficial	Rock	7.75	Peaty Soil	1	4	2	8	Low
573	Point	133588.40	847720.63	0.30	Soil	Rock	13.28	Peaty Soil	1	8	2	16	Medium
574	Point	133654.12	847689.75	0.10	Soil	Rock	5.53	Peaty Soil	1	4	2	8	Low
575	Point	133737.26	847633.39	0.10	Soil	Rock	4.93	Peaty Soil	1	4	2	8	Low
576	Point	133743.69	847606.42	0.10	Soil	Rock	5.87	Peaty Soil	1	4	2	8	Low
577	Point	133824.63	847580.52	0.20	Soil	Rock	7.02	Peaty Soil	1	4	2	8	Low
578	Point	133832.64	847604.34	0.10	Soil	Rock	10.01	Peaty Soil	1	6	2	12	Low
579	Point	133875.10	847572.27	0.10	Soil	Rock	7.11	Peaty Soil	1	4	2	8	Low
580	Point	133925.29	847573.12	0.20	Soil	Rock	6.59	Peaty Soil	1	4	2	8	Low
581	Point	133935.18	847600.31	0.30	Soil	Rock	7.97	Peaty Soil	1	4	2	8	Low
582	Point	134034.58	847609.18	0.20	Soil	Rock	5.56	Peaty Soil	1	4	2	8	Low
583	Point	134097.81	847577.53	0.10	Soil	Rock	4.95	Peaty Soil	1	4	2	8	Low
584	Point	134097.81	847570.14	0.20	Soil	Rock	4.95	Peaty Soil	1	4	2	8	Low
585	Point	134122.69	847567.16	0.30	Soil	Rock	4.95	Peaty Soil	1	4	2	8	Low
586	Point	134125.47	847591.84	0.20	Soil	Rock	7.04	Peaty Soil	1	4	2	8	Low
587	Point	134139.16	847596.17	0.30	Soil	Rock	6.30	Peaty Soil	1	4	2	8	Low
588	Point	134142.84	847592.88	0.20	Soil	Rock	5.85	Peaty Soil	1	4	2	8	Low
589	Point	134137.60	847585.70	0.30	Soil	Rock	5.85	Peaty Soil	1	4	2	8	Low
590	Point	134148.10	847575.21	0.40	Peat	Granular	5.69	Peaty Soil	1	4	1	4	Negligible
591	Point	134150.94	847585.59	0.30	Soil	Rock	5.67	Peaty Soil	1	4	2	8	Low
592	Point	134158.30	847576.45	0.20	Soil	Rock	7.51	Peaty Soil	1	4	2	8	Low
593	Point	134177.56	847586.35	0.20	Soil	Granular	8.54	Peaty Soil	1	6	1	6	Low
594	Point	134187.02	847585.51	0.10	Soil	Rock	7.24	Peaty Soil	1	4	2	8	Low
595	Point	134175.98	847581.42	0.10	Soil	Rock	8.46	Peaty Soil	1	6	2	12	Low
596	Point	134177.87	847575.91	0.20	Soil	Rock	7.75	Peaty Soil	1	4	2	8	Low
597	Point	134197.08	847576.12	0.10	Soil	Rock	5.76	Peaty Soil	1	4	2	8	Low
598	Point	134199.64	847575.96	0.10	Soil	Rock	5.76	Peaty Soil	1	4	2	8	Low
599	Point	134170.96	847556.84	0.40	Peat	Rock	6.67	Peaty Soil	1	4	2	8	Low
600	Point	134193.82	847550.55	0.20	Soil	Granular	5.25	Peaty Soil	1	4	1	4	Negligible
601	Point	134195.64	847559.58	0.20	Soil	Rock	5.62	Peaty Soil	1	4	2	8	Low
602	Point	134220.04	847545.31	0.30	Soil	Rock	4.72	Peaty Soil	1	4	2	8	Low
603	Point	134224.15	847571.32	0.20	Soil	Rock	7.01	Peaty Soil	1	4	2	8	Low
604	Point	134237.45	847576.93	0.30	Soil	Rock	7.59	Peaty Soil	1	4	2	8	Low
605	Point	134229.06	847594.65	0.30	Soil	Rock	6.93	Peaty Soil	1	4	2	8	Low
606	Point	134228.31	847604.03	0.10	Soil	Rock	6.95	Peaty Soil	1	4	2	8	Low
607	Point	134248.87	847566.46	0.30	Soil	Rock	11.36	Peaty Soil	1	6	2	12	Low
608	Point	134244.91	847549.76	0.30	Peat	Granular	8.72	Peaty Soil	1	6	1	6	Low
609	Point	134243.72	847540.95	0.30	Soil	Granular	8.11	Peaty Soil	1	6	1	6	Low
610	Point	134293.85	847539.54	0.10	Soil	Rock	10.21	Peaty Soil	1	6	2	12	Low
611	Point	134334.27	847552.42	0.10	Soil	Rock	3.72	Peaty Soil	1	2	2	4	Negligible
612	Point	134381.76	847500.81	0.10	Soil	Rock	16.98	Peaty Soil	1	8	2	16	Medium
613	Point	134419.47	847503.73	0.40	Peat	Granular	15.54	Peaty Soil	1	8	1	8	Low
614	Point	134511.64	847447.28	0.20	Soil	Rock	5.04	Peaty Soil	1	4	2	8	Low
615	Point	134521.97	847446.98	0.30	Soil	Rock	9.33	Peaty Soil	1	6	2	12	Low
616	Point	134531.78	847426.96	0.30	Soil	Rock	4.68	Peaty Soil	1	4	2	8	Low
617	Point	134521.16	847407.52	0.20	Soil	Rock	5.45	Peaty Soil	1	4	2	8	Low
618	Point	134526.34	847411.32	0.20	Soil	Rock	5.08	Peaty Soil	1	4	2	8	Low
619	Point	134521.41	847417.54	0.40	Peat	Rock	6.22	Peaty Soil	1	4	2	8	Low
620	Point	134521.98	847427.62	0.20	Soil	Rock	6.99	Peaty Soil	1	4	2	8	Low
621	Point	134521.32	847437.03	0.20	Soil	Rock	8.10	Peaty Soil	1	6	2	12	Low
622	Point	134511.46	847437.11	0.10	Soil	Rock	5.50	Peaty Soil	1	4	2	8	Low
623	Point	134510.99	847428.63	0.30	Soil	Rock	6.62	Peaty Soil	1	4	2	8	Low
624	Point	134511.98	847417.16	0.20	Soil	Rock	7.28	Peaty Soil	1	4	2	8	Low
625	Point	134511.66	847412.27	0.20	Soil	Rock	7.58	Peaty Soil	1	4	2	8	Low
626	Point	134511.73	847407.31	0.30	Soil	Rock	8.16	Peaty Soil	1	6	2	12	Low
627	Point	134512.03	847387.78	0.30	Soil	Rock	11.48	Peaty Soil	1	6	2	12	Low
628	Point	134506.46	847381.61	0.30	Soil	Rock	13.49	Peaty Soil	1	8	2	16	Medium
629	Point	134501.70	847404.36	0.20	Soil	Rock	9.46	Peaty Soil	1	6	2	12	Low
630	Point	134470.61	847417.22	0.40	Peat	Rock	3.08	Peaty Soil	1	2	2	4	Negligible
631	Point	134482.67	847377.74	0.30	Soil	Rock	6.88	Peaty Soil	1	4	2	8	Low
632	Point	134514.15	847362.83	0.40	Peat	Rock	12.96	Peaty Soil	1	8	2	16	Medium
633	Point	134597.42	847308.90	0.40	Peat	Granular	11.86	Peaty Soil	1	6	1	6	Low
634	Point	133510.65	847702.63	0.10	Soil	Granular	5.83	Peaty Soil	1	4	1	4	Negligible
635	Point	133525.15	847669.63	0.10	Soil	Granular	8.30	Peaty Soil	1	6	1	6	Low
636	Point	133587.77	847634.10	0.20	Soil	Granular	13.25	Peaty Soil	1	8	1	8	Low
637	Point	133620.66	847597.19	0.00	Superficial	Granular	8.64	No Peat	0	6	1	0	None
638	Point	133642.65	847548.48	0.00	Superficial	Granular	18.17	No Peat	0	8	1	0	None
639	Point	133646.62	847506.88	0.30	Soil	Rock	17.74	Peaty Soil	1	8	2	16	Medium
640	Point	133646.22	847456.08	0.10	Soil	Granular	18.28	Peaty Soil	1	8	1	8	Low
641	Point	133643.65	847406.57	0.10	Soil	Granular	7.05	Peaty Soil	1	4	1	4	Negligible
642	Point	133665.52	847363.68	0.10	Soil	Granular	7.69	Peaty Soil	1	4	1	4	Negligible
643	Point	133697.52	847321.74	0.10	Soil	Granular	6.09	Peaty Soil	1	4	1	4	Negligible
644	Point	133440.11	847708.87	0.10	Peat	Rock	7.18	Peaty Soil	1	4	2	8	Low
645	Point	133473.61	847678.77	0.10	Peat	Granular	5.98	Peaty Soil	1	4	1	4	Negligible
646	Point	133512.04	847643.86	0.10	Peat	Granular	6.98	Peaty Soil	1	4	1	4	Negligible
647	Point	133580.78	847570.07	0.10	Peat	Rock	11.28	Peaty Soil	1	6	2	12	Low
648	Point	133594.16	847523.63	0.10	Peat	Rock	5.61	Peaty Soil	1	4	2	8	Low
649	Point	133599.23	847474.44	0.10	Peat	Granular	5.13	Peaty Soil	1	4	1	4	Negligible
650	Point	133594.58	847424.69	0.30	Peat	Rock	5.35	Peaty Soil	1	4	2	8	Low
651	Point	133602.16	847373.67	0.20	Peat	Rock	5.55	Peaty Soil	1	4	2	8	Low
652	Point	133631.56	847334.56	0.30	Peat	Rock	7.21	Peaty Soil	1	4	2	8	Low
653	Point	133656.33	847292.07	0.20	Peat	Granular	13.25	Peaty Soil	1	8	1	8	Low
654	Point	133468.61	847719.00	0.30	Soil	Granular	6.62	Peaty Soil	1	4	1	4	Negligible
655	Point	133506.66	847681.67	0.10	Soil	Rock	5.83	Peaty Soil	1	4	2	8	Low
656	Point	133542.55	847646.85	0.40	Peat	Rock	8.36	Peaty Soil	1	6	2	12	Low
657	Point	133621.51	847526.24	0.20	Peat	Granular	12.07	Peaty Soil	1	8	1	8	Low
658	Point	133620.91	847474.71	0.30	Soil	Granular	11.66	Peaty Soil	1	6	1	6	Low
659	Point	133617.73	847424.48	0.10	Soil	Rock	3.46	Peaty Soil	1	2	2	4	Negligible
660	Point	133626.69	847377.22	0.10	Soil	Rock	6.82	Peaty Soil	1	4	2	8	Low
661	Point	133655.71	847337.73	0.10	Soil	Rock	7.20	Peaty Soil	1	4	2	8	Low
662	Point	133679.58	847292.23	0.40	Peat	Rock	7.02	Peaty Soil	1	4	2	8	Low
663	Point	133845.56	847263.73	0.10	Soil	Rock	9.26	Peaty Soil	1	6	2	12	Low
664	Point	133830.73	847315.82	0.10	Soil	Granular	6.21	Peaty Soil	1	4	1	4	Negligible
665	Point	133824.62	847363.68	0.00	Superficial	Granular	5.95	No Peat	0	4	1	0	None
666	Point	133854.59	847336.09	0.10	Soil	Granular	3.69	Peaty Soil	1	2	1	2	Negligible
667	Point	133897.83	847286.01	0.10	Soil	Granular	12.34	Peaty Soil	1	8	1	8	Low
668	Point	134191.20	847277.41	0.30	Soil	Granular	6.00	Peaty Soil	1	4	1	4	Negligible
669	Point	134360.79	847387.80	0.20	Soil	Rock	10.58	Peaty Soil	1	6	2	12	Low
670	Point	134400.62	847418.30	0.20	Soil	Rock	11.12	Peaty Soil	1	6	2	12	Low
671	Point	133719.23	847276.62	0.10	Soil	Rock	6.98	Peaty Soil	1	4	2	8	Low
672	Point	133682.04	847303.99	0.10	Soil	Rock	6.87	Peaty Soil	1	4	2	8	Low
673	Point	133395.41	847262.30	0.20	Soil	Rock	9.60	Peaty Soil	1	6	2	12	Low

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
686	Point	133271.33	847381.87	0.10	SOIL	Rock	9.94	Peaty Soil	1	6	2	12	Low
687	Point	133205.06	846642.42	0.40	PEAT	GRANULAR	1.92	Peaty Soil	1	1	1	1	Negligible
688	Point	133241.74	846682.28	0.10	SOIL	GRANULAR	0.71	Peaty Soil	1	1	1	1	Negligible
689	Point	133622.50	847082.79	0.10	SOIL	GRANULAR	2.74	Peaty Soil	1	2	1	2	Negligible
690	Point	133868.17	847007.55	0.10	SOIL	ROCK	12.92	Peaty Soil	1	8	2	16	Medium
691	Point	133953.95	846967.55	0.30	SOIL	GRANULAR	2.86	Peaty Soil	1	2	1	2	Negligible
692	Point	134475.88	846763.70	0.20	SOIL	GRANULAR	7.07	Peaty Soil	1	4	1	4	Negligible
693	Point	134176.56	846660.67	0.40	PEAT	GRANULAR	1.39	Peaty Soil	1	1	1	1	Negligible
694	Point	133992.69	846731.66	0.10	SOIL	GRANULAR	6.52	Peaty Soil	1	4	1	4	Negligible
695	Point	133882.74	846769.57	0.20	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
696	Point	133863.26	846775.68	0.10	SOIL	ROCK	2.04	Peaty Soil	1	2	2	4	Negligible
697	Point	133793.81	846809.03	0.20	SOIL	GRANULAR	8.01	Peaty Soil	1	6	1	6	Low
698	Point	133708.86	846853.15	0.10	SOIL	GRANULAR	7.90	Peaty Soil	1	4	1	4	Negligible
699	Point	133627.65	846899.42	0.10	SOIL	GRANULAR	11.98	Peaty Soil	1	6	1	6	Low
700	Point	133541.89	846939.01	0.30	SOIL	GRANULAR	6.26	Peaty Soil	1	4	1	4	Negligible
701	Point	133567.53	846830.99	0.20	PEAT	GRANULAR	5.81	Peaty Soil	1	4	1	4	Negligible
702	Point	133605.06	847010.01	0.10	SOIL	GRANULAR	4.54	Peaty Soil	1	4	1	4	Negligible
703	Point	133646.19	846989.19	0.00	SUPERFICIAL	GRANULAR	5.71	No Peat	0	4	1	0	None
704	Point	133705.37	846965.68	0.30	PEAT	GRANULAR	5.19	Peaty Soil	1	4	1	4	Negligible
705	Point	133721.95	846963.61	0.00	SUPERFICIAL	GRANULAR	4.51	No Peat	0	4	1	0	None
706	Point	133780.15	846933.59	0.40	PEAT	GRANULAR	5.23	Peaty Soil	1	4	1	4	Negligible
707	Point	133887.87	846886.73	0.20	PEAT	GRANULAR	9.05	Peaty Soil	1	6	1	6	Low
708	Point	133932.21	846872.86	0.30	PEAT	GRANULAR	3.15	Peaty Soil	1	2	1	2	Negligible
709	Point	134021.73	846836.95	0.20	PEAT	GRANULAR	2.23	Peaty Soil	1	2	1	2	Negligible
710	Point	134205.58	846760.46	0.10	PEAT	GRANULAR	10.89	Peaty Soil	1	6	1	6	Low
711	Point	134299.39	846722.08	0.30	PEAT	GRANULAR	5.82	Peaty Soil	1	4	1	4	Negligible
712	Point	133993.89	846629.19	0.00	ROCK	ROCK	9.36	No Peat	0	6	2	0	None
713	Point	133848.81	846691.00	0.10	PEAT	GRANULAR	5.88	Peaty Soil	1	4	1	4	Negligible
714	Point	133572.07	846815.50	0.10	PEAT	GRANULAR	2.52	Peaty Soil	1	2	1	2	Negligible
715	Point	133478.52	846848.53	0.10	PEAT	GRANULAR	3.35	Peaty Soil	1	2	1	2	Negligible
716	Point	133492.09	847243.76	0.10	SOIL	GRANULAR	9.40	Peaty Soil	1	6	1	6	Low
717	Point	133528.36	847230.59	0.10	SOIL	GRANULAR	11.32	Peaty Soil	1	6	1	6	Low
718	Point	133592.29	847207.61	0.10	SOIL	GRANULAR	9.01	Peaty Soil	1	6	1	6	Low
719	Point	133868.50	847207.96	0.10	SOIL	GRANULAR	2.36	Peaty Soil	1	2	1	2	Negligible
720	Point	133839.43	847252.85	0.10	SOIL	GRANULAR	6.22	Peaty Soil	1	4	1	4	Negligible
721	Point	134150.02	847258.79	0.20	SOIL	GRANULAR	11.16	Peaty Soil	1	6	1	6	Low
722	Point	134229.67	847196.83	0.10	SOIL	GRANULAR	6.64	Peaty Soil	1	4	1	4	Negligible
723	Point	133722.12	847216.23	0.10	SOIL	GRANULAR	8.22	Peaty Soil	1	6	1	6	Low
724	Point	133647.48	847248.84	0.10	SOIL	GRANULAR	7.09	Peaty Soil	1	4	1	4	Negligible
725	Point	134021.01	847230.37	0.10	PEAT	GRANULAR	5.69	Peaty Soil	1	4	1	4	Negligible
726	Point	133708.98	847190.29	0.10	SOIL	GRANULAR	4.09	Peaty Soil	1	4	1	4	Negligible
727	Point	133837.12	847176.14	0.10	SOIL	GRANULAR	11.83	Peaty Soil	1	6	1	6	Low
728	Point	133911.52	847178.16	0.10	SOIL	GRANULAR	11.10	Peaty Soil	1	6	1	6	Low
729	Point	134637.89	847187.13	0.20	SOIL	GRANULAR	4.90	Peaty Soil	1	4	1	4	Negligible
730	Point	134100.66	847185.34	0.10	PEAT	GRANULAR	4.88	Peaty Soil	1	4	1	4	Negligible
731	Point	134635.60	847230.02	0.20	Soil	Granular	3.50	Peaty Soil	1	2	1	2	Negligible
732	Point	134658.81	847213.06	0.10	Soil	Granular	2.41	Peaty Soil	1	2	1	2	Negligible
733	Point	134582.51	846980.57	0.20	Soil	Rock	7.17	Peaty Soil	1	4	2	8	Low
734	Point	134582.56	846923.34	0.20	Soil	Rock	6.13	Peaty Soil	1	4	2	8	Low
735	Point	134562.97	846929.80	0.40	Soil	Granular	5.79	Peaty Soil	1	4	1	4	Negligible
736	Point	134510.22	846787.17	0.40	Soil	Granular	5.51	Peaty Soil	1	4	1	4	Negligible
737	Point	134491.31	846789.91	0.20	Soil	Granular	11.02	Peaty Soil	1	6	1	6	Low
738	Point	134498.62	846694.16	0.20	Soil	Granular	5.56	Peaty Soil	1	4	1	4	Negligible
739	Point	134487.64	846692.95	0.40	Soil	Rock	6.22	Peaty Soil	1	4	2	8	Low
740	Point	134489.37	846702.14	0.30	Soil	Granular	6.01	Peaty Soil	1	4	1	4	Negligible
741	Point	134458.71	846703.21	0.30	Soil	Granular	6.76	Peaty Soil	1	4	1	4	Negligible
742	Point	134498.73	846721.85	0.30	Soil	Granular	4.64	Peaty Soil	1	4	1	4	Negligible
743	Point	134390.57	846746.50	0.30	Soil	Granular	5.88	Peaty Soil	1	4	1	4	Negligible
744	Point	134416.14	846724.30	0.30	Soil	Granular	5.74	Peaty Soil	1	4	1	4	Negligible
745	Point	134300.01	846756.61	0.30	Soil	Rock	5.35	Peaty Soil	1	4	2	8	Low
746	Point	134298.46	846786.50	0.20	Soil	Rock	9.92	Peaty Soil	1	6	2	12	Low
747	Point	134600.70	847239.61	0.30	Soil	Rock	8.93	Peaty Soil	1	6	2	12	Low
748	Point	134589.33	847093.39	0.30	Soil	Rock	15.50	Peaty Soil	1	8	2	16	Medium
749	Point	134590.49	847094.11	0.30	Soil	Rock	12.14	Peaty Soil	1	8	2	16	Medium
750	Point	134572.54	847046.80	0.40	Peat	Rock	6.98	Peaty Soil	1	4	2	8	Low
751	Point	134553.90	846999.80	0.20	Soil	Rock	7.74	Peaty Soil	1	4	2	8	Low
752	Point	134568.84	846976.27	0.40	Peat	Rock	6.03	Peaty Soil	1	4	2	8	Low
753	Point	134533.46	846954.55	0.30	Soil	Rock	5.63	Peaty Soil	1	4	2	8	Low
754	Point	134531.92	846881.16	0.40	Peat	Rock	4.62	Peaty Soil	1	4	2	8	Low
755	Point	134522.20	846840.56	0.30	Soil	Rock	9.82	Peaty Soil	1	6	2	12	Low
756	Point	134521.82	846840.40	0.30	Soil	Rock	9.82	Peaty Soil	1	6	2	12	Low
757	Point	134478.43	846810.23	0.20	Soil	Rock	5.92	Peaty Soil	1	4	2	8	Low
758	Point	134456.45	846806.27	0.40	Peat	Rock	5.98	Peaty Soil	1	4	2	8	Low
759	Point	134433.73	846776.93	0.40	Peat	Rock	6.82	Peaty Soil	1	4	2	8	Low
760	Point	134447.22	846733.30	0.40	Peat	Granular	5.78	Peaty Soil	1	4	1	4	Negligible
761	Point	134457.17	846731.50	0.20	Soil	Granular	5.53	Peaty Soil	1	4	1	4	Negligible
762	Point	134314.96	846808.91	0.30	Soil	Rock	10.09	Peaty Soil	1	6	2	12	Low
763	Point	134235.76	846869.30	0.40	Peat	Rock	4.39	Peaty Soil	1	4	2	8	Low
764	Point	134195.12	846898.44	0.40	Peat	Rock	7.71	Peaty Soil	1	4	2	8	Low
765	Point	133711.72	847252.08	0.10	Soil	Granular	7.24	Peaty Soil	1	4	1	4	Negligible
766	Point	133691.52	847209.23	0.10	Soil	Granular	3.38	Peaty Soil	1	2	1	2	Negligible
767	Point	133663.96	847125.81	0.10	Soil	Granular	2.35	Peaty Soil	1	2	1	2	Negligible
768	Point	133681.74	847082.33	0.30	Soil	Rock	2.74	Peaty Soil	1	2	2	4	Negligible
769	Point	133695.24	847034.16	0.00	Superficial	Granular	5.42	No Peat	0	4	1	0	None
770	Point	133696.12	846984.17	0.20	SOIL	Granular	7.51	Peaty Soil	1	4	1	4	Negligible
771	Point	133694.36	846935.08	0.00	Superficial	Granular	6.98	No Peat	0	4	1	0	None
772	Point	133696.62	846880.08	0.30	Soil	Granular	10.42	Peaty Soil	1	6	1	6	Low
773	Point	133684.48	846864.17	0.10	Soil	Granular	6.48	Peaty Soil	1	4	1	4	Negligible
774	Point	133660.32	846808.50	0.10	Soil	Granular	7.18	Peaty Soil	1	4	1	4	Negligible
775	Point	133642.78	846763.85	0.10	Soil	Granular	16.60	Peaty Soil	1	8	1	8	Low
776	Point	133653.95	847245.81	0.10	Peat	Granular	5.71	Peaty Soil	1	4	1	4	Negligible
777	Point	133625.64	847201.29	0.10	Peat	Granular	2.47	Peaty Soil	1	2	1	2	Negligible
778	Point	133637.65	847057.74	0.40	Peat	Granular	4.39	Peaty Soil	1	4	1	4	Negligible
779	Point	133646.00	847009.80	0.30	Peat	Rock	4.74	Peaty Soil	1	4	2	8	Low
780	Point	133650.86	846957.95	0.10	Peat	Granular	5.17	Peaty Soil	1	4	1	4	Negligible
781	Point	133641.62	846915.21	0.20	Peat	Granular	12.06	Peaty Soil	1	8	1	8	Low
782	Point	133614.95	846868.42	0.20	Peat	Granular	11.11	Peaty Soil	1	6	1	6	Low
783	Point	133586.42	846775.75	0.40	Peat	Rock	6.14	Peaty Soil	1	4	2	8	Low
784	Point	133560.80	846733.74	0.30	Peat	Granular	4.03	Peaty Soil	1	4	1	4	Negligible
785	Point	133678.23	847242.21	0.10	Soil	Rock	2.09	Peaty Soil	1	2	2	4	Negligible
786	Point	133654.55	847198.65	0.20	Soil	Rock	4.59	Peaty Soil	1	4	2	8</	

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
800	Point	133917.93	846775.31	0.20	Soil	Rock	3.54	Peaty Soil	1	2	2	4	Negligible
801	Point	133909.01	846816.60	0.40	Soil	Granular	4.84	Peaty Soil	1	4	1	4	Negligible
802	Point	133897.35	846831.84	0.20	Soil	Granular	1.96	Peaty Soil	1	1	1	1	Negligible
803	Point	133953.33	846817.22	0.10	Soil	Granular	10.40	Peaty Soil	1	6	1	6	Low
804	Point	133965.39	846793.91	0.40	Soil	Rock	8.26	Peaty Soil	1	6	2	12	Low
805	Point	133971.41	846801.20	0.20	Soil	Rock	10.18	Peaty Soil	1	6	2	12	Low
806	Point	133989.64	846818.75	0.10	Soil	Rock	10.14	Peaty Soil	1	6	2	12	Low
807	Point	134080.60	846938.10	0.30	Soil	Granular	4.56	Peaty Soil	1	4	1	4	Negligible
808	Point	133971.88	846826.51	0.20	Soil	Rock	8.23	Peaty Soil	1	6	2	12	Low
809	Point	133976.89	846833.39	0.30	Soil	Rock	7.84	Peaty Soil	1	4	2	8	Low
810	Point	133887.51	846896.09	0.10	Soil	Granular	10.07	Peaty Soil	1	6	1	6	Low
811	Point	133884.90	846950.14	0.00	Superficial	Granular	10.40	No Peat	0	6	1	0	None
812	Point	133880.43	846999.15	0.30	Soil	Granular	9.78	Peaty Soil	1	6	1	6	Low
813	Point	133875.01	847101.86	0.00	Superficial	Granular	7.91	No Peat	0	4	1	0	None
814	Point	133872.66	847151.95	0.20	Soil	Rock	6.65	Peaty Soil	1	4	2	8	Low
815	Point	133896.55	847151.33	0.10	Soil	Granular	8.57	Peaty Soil	1	6	1	6	Low
816	Point	133929.08	847244.02	0.00	Soil	Rock	5.84	No Peat	0	4	2	0	None
817	Point	133964.33	847210.09	0.10	Soil	Rock	3.13	Peaty Soil	1	2	2	4	Negligible
818	Point	134011.22	847195.13	0.10	Soil	Granular	7.69	Peaty Soil	1	4	1	4	Negligible
819	Point	134057.89	847208.92	0.10	Soil	Granular	7.64	Peaty Soil	1	4	1	4	Negligible
820	Point	134103.06	847229.68	0.20	Soil	Rock	7.62	Peaty Soil	1	4	2	8	Low
821	Point	133808.54	847229.52	0.10	Soil	Rock	8.85	Peaty Soil	1	6	2	12	Low
822	Point	133755.59	847226.58	0.10	Soil	Rock	5.34	Peaty Soil	1	4	2	8	Low
823	Point	133463.61	847223.94	0.10	Soil	Granular	7.74	Peaty Soil	1	4	1	4	Negligible
824	Point	133464.90	847217.88	0.10	Soil	Rock	6.25	Peaty Soil	1	4	2	8	Low
825	Point	133460.85	847211.02	0.10	Soil	Rock	3.97	Peaty Soil	1	2	2	4	Negligible
826	Point	133463.46	847206.51	0.20	Soil	Granular	4.46	Peaty Soil	1	4	1	4	Negligible
827	Point	133461.11	847198.83	0.10	Soil	Rock	7.37	Peaty Soil	1	4	2	8	Low
828	Point	133459.87	847181.49	0.00	Soil	Rock	8.35	No Peat	0	6	2	0	None
829	Point	133454.45	847200.63	0.40	Soil	Rock	7.57	Peaty Soil	1	4	2	8	Low
830	Point	133455.15	847207.87	0.10	Soil	Granular	7.22	Peaty Soil	1	4	1	4	Negligible
831	Point	133456.86	847218.02	0.10	Soil	Granular	4.56	Peaty Soil	1	4	1	4	Negligible
832	Point	133456.25	847227.63	0.20	Soil	Rock	5.45	Peaty Soil	1	4	2	8	Low
833	Point	133440.54	847247.47	0.20	Soil	Rock	6.43	Peaty Soil	1	4	2	8	Low
834	Point	133450.57	847250.97	0.30	Soil	Rock	5.75	Peaty Soil	1	4	2	8	Low
835	Point	133447.58	847223.20	0.00	Superficial	Granular	7.52	No Peat	0	4	1	0	None
836	Point	133448.97	847214.53	0.00	Superficial	Granular	7.37	No Peat	0	4	1	0	None
837	Point	133441.78	847183.81	0.10	Soil	Granular	7.95	Peaty Soil	1	4	1	4	Negligible
838	Point	133447.32	847204.20	0.10	Soil	Granular	7.58	Peaty Soil	1	4	1	4	Negligible
839	Point	133442.74	847192.03	0.00	Superficial	Granular	7.56	No Peat	0	4	1	0	None
840	Point	133427.30	847188.00	0.40	Soil	Rock	6.33	Peaty Soil	1	4	2	8	Low
841	Point	133421.79	847250.43	0.10	Soil	Rock	3.50	Peaty Soil	1	2	2	4	Negligible
842	Point	133388.49	847209.67	0.00	Peat	Granular	7.84	No Peat	0	4	1	0	None
843	Point	133357.65	847187.31	0.10	Soil	Rock	6.20	Peaty Soil	1	4	2	8	Low
844	Point	133350.60	847237.37	0.30	Soil	Rock	1.76	Peaty Soil	1	1	2	2	Negligible
845	Point	133684.72	846791.24	0.20	Soil	Rock	12.98	Peaty Soil	1	8	2	16	Medium
846	Point	133726.61	846816.43	0.20	Soil	Rock	6.10	Peaty Soil	1	4	2	8	Low
847	Point	133776.64	846840.74	0.00	Soil	Cohesive	6.35	No Peat	0	4	2	0	None
848	Point	133777.56	846815.44	0.10	Soil	Rock	8.61	Peaty Soil	1	6	2	12	Low
849	Point	133826.12	846820.79	0.40	Peat	Rock	1.37	Peaty Soil	1	1	2	2	Negligible
850	Point	133828.31	846844.41	0.10	Soil	Rock	1.50	Peaty Soil	1	1	2	2	Negligible
851	Point	133864.06	846858.77	0.30	Soil	Rock	5.90	Peaty Soil	1	4	2	8	Low
852	Point	133903.27	846873.86	0.30	Soil	Rock	1.80	Peaty Soil	1	1	2	2	Negligible
853	Point	133920.07	846856.97	0.40	Peat	Rock	3.00	Peaty Soil	1	2	2	4	Negligible
854	Point	133919.22	846845.54	0.20	Soil	Rock	1.72	Peaty Soil	1	1	2	2	Negligible
855	Point	133934.00	846836.55	0.10	Soil	Rock	4.46	Peaty Soil	1	4	2	8	Low
856	Point	133928.43	846825.53	0.20	Soil	Rock	9.52	Peaty Soil	1	6	2	12	Low
857	Point	133954.31	846855.77	0.20	Soil	Rock	4.42	Peaty Soil	1	4	2	8	Low
858	Point	133955.66	846888.27	0.10	Soil	Rock	3.82	Peaty Soil	1	2	2	4	Negligible
859	Point	133944.45	846872.75	0.30	Soil	Rock	4.12	Peaty Soil	1	4	2	8	Low
860	Point	133926.25	846894.27	0.20	Soil	Rock	3.01	Peaty Soil	1	2	2	4	Negligible
861	Point	133940.50	846907.57	0.10	Soil	Rock	4.07	Peaty Soil	1	4	2	8	Low
862	Point	133924.16	846927.27	0.40	Peat	Rock	2.60	Peaty Soil	1	2	2	4	Negligible
863	Point	133927.62	846959.75	0.40	Peat	Rock	4.59	Peaty Soil	1	4	2	8	Low
864	Point	134007.13	846960.63	0.40	Peat	Rock	4.87	Peaty Soil	1	4	2	8	Low
865	Point	134017.16	846921.71	0.00	Peat	Rock	2.69	No Peat	0	2	2	0	None
866	Point	133985.84	846751.24	0.10	Soil	Rock	6.43	Peaty Soil	1	4	2	8	Low
867	Point	134006.92	846705.68	0.40	Peat	Rock	6.31	Peaty Soil	1	4	2	8	Low
868	Point	133977.02	846650.58	0.20	Soil	Rock	9.99	Peaty Soil	1	6	2	12	Low
869	Point	134322.01	846623.60	0.30	Soil	Rock	2.62	Peaty Soil	1	2	2	4	Negligible
870	Point	134031.16	846639.09	0.30	Soil	Rock	9.75	Peaty Soil	1	6	2	12	Low
871	Point	133960.20	846751.32	0.10	Soil	Rock	3.36	Peaty Soil	1	2	2	4	Negligible
872	Point	133916.22	846981.05	0.10	Peat	Rock	8.34	Peaty Soil	1	6	2	12	Low
873	Point	133923.94	847048.27	0.10	Soil	Rock	4.99	Peaty Soil	1	4	2	8	Low
874	Point	133924.25	847098.83	0.10	Soil	Rock	1.00	Peaty Soil	1	1	2	2	Negligible
875	Point	133899.03	847099.31	0.10	Soil	Rock	2.99	Peaty Soil	1	2	2	4	Negligible
876	Point	133922.32	847150.06	0.10	Soil	Rock	8.76	Peaty Soil	1	6	2	12	Low
877	Point	133901.84	847194.07	0.10	Soil	Rock	6.01	Peaty Soil	1	4	2	8	Low
878	Point	133906.06	847236.36	0.10	Soil	Rock	3.25	Peaty Soil	1	2	2	4	Negligible
879	Point	133951.33	847181.29	0.10	Superficial	Rock	1.43	Peaty Soil	1	1	2	2	Negligible
880	Point	133954.92	847155.17	0.20	Soil	Rock	3.78	Peaty Soil	1	2	2	4	Negligible
881	Point	134007.08	847145.24	0.20	Soil	Rock	6.38	Peaty Soil	1	4	2	8	Low
882	Point	134054.04	847151.89	0.10	Soil	Rock	2.77	Peaty Soil	1	2	2	4	Negligible
883	Point	134101.56	847171.16	0.10	Soil	Rock	5.47	Peaty Soil	1	4	2	8	Low
884	Point	134148.41	847197.00	0.10	Soil	Rock	9.55	Peaty Soil	1	6	2	12	Low
885	Point	134191.31	847221.90	0.40	Soil	Rock	5.62	Peaty Soil	1	4	2	8	Low
886	Point	134236.23	847246.10	0.30	Soil	Rock	4.79	Peaty Soil	1	4	2	8	Low
887	Point	134166.27	847236.62	0.10	Superficial	Rock	5.17	Peaty Soil	1	4	2	8	Low
888	Point	134123.95	847212.53	0.10	Soil	Rock	7.73	Peaty Soil	1	4	2	8	Low
889	Point	134079.21	847190.33	0.20	Soil	Rock	3.22	Peaty Soil	1	2	2	4	Negligible
890	Point	133983.51	847171.98	0.10	Soil	Rock	5.38	Peaty Soil	1	4	2	8	Low
891	Point	133826.39	847247.02	0.30	Soil	Rock	6.33	Peaty Soil	1	4	2	8	Low
892	Point	133765.37	847248.22	0.10	Soil	Granular	0.85	Peaty Soil	1	1	1	1	Negligible
893	Point	133346.66	847197.00	0.30	Soil	Granular	7.93	Peaty Soil	1	4	1	4	Negligible
894	Point	133288.25	847229.29	0.30	Soil	Granular	8.17	Peaty Soil	1	6	1	6	Low
895	Point	133275.03	847201.31	0.10	Soil	Rock	11.03	Peaty Soil	1	6	2	12	Low
896	Point	133275.75	847213.99	0.10	Soil	Rock	12.07	Peaty Soil	1	8	2	16	Medium
897	Point	132802.09	846290.76	0.10	SOIL	GRANULAR	17.26	Peaty Soil	1	8	1	8	Low
898	Point	132977.76	846446.26	0.40	PEAT	GRANULAR	6.81	Peaty Soil	1	4	1	4	Negligible
899	Point	134547.49	846529.68	0.30	SOIL	GRANULAR	2.32	Peaty Soil	1	2	1	2	Negligible
900	Point	134463.65	846563.90	0.20	SOIL	GRANULAR	7.19	Peaty Soil	1	4	1	4	Negligible
901	Point	132761.86	846187.44	0.30	SOIL	GRANULAR	6.36	Peaty Soil	1				

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
914	Point	133780.81	846400.65	0.30	SOIL	GRANULAR	8.66	Peaty Soil	1	6	1	6	Low
915	Point	133828.64	846379.92	0.30	SOIL	GRANULAR	7.31	Peaty Soil	1	4	1	4	Negligible
916	Point	133897.97	846264.43	0.10	SOIL	ROCK	11.27	Peaty Soil	1	6	2	12	Low
917	Point	133938.73	846231.19	0.10	SOIL	GRANULAR	11.17	Peaty Soil	1	6	1	6	Low
918	Point	133976.30	846313.52	0.10	SOIL	GRANULAR	16.68	Peaty Soil	1	8	1	8	Low
919	Point	134015.81	846298.79	0.30	SOIL	GRANULAR	11.38	Peaty Soil	1	6	1	6	Low
920	Point	134020.63	846218.10	0.30	SOIL	GRANULAR	6.88	Peaty Soil	1	4	1	4	Negligible
921	Point	134053.99	846173.12	0.10	SOIL	GRANULAR	11.12	Peaty Soil	1	6	1	6	Low
922	Point	134156.10	846231.71	0.40	PEAT	GRANULAR	6.78	Peaty Soil	1	4	1	4	Negligible
923	Point	134191.25	846224.67	0.20	SOIL	GRANULAR	2.58	Peaty Soil	1	2	1	2	Negligible
924	Point	134420.47	846228.49	0.40	PEAT	GRANULAR	2.97	Peaty Soil	1	2	1	2	Negligible
925	Point	134096.64	846370.96	0.20	SOIL	GRANULAR	6.78	Peaty Soil	1	4	1	4	Negligible
926	Point	134002.00	846394.77	0.30	SOIL	GRANULAR	9.75	Peaty Soil	1	6	1	6	Low
927	Point	133913.43	846443.71	0.10	SOIL	GRANULAR	4.84	Peaty Soil	1	4	1	4	Negligible
928	Point	133871.94	846461.78	0.40	PEAT	GRANULAR	5.08	Peaty Soil	1	4	1	4	Negligible
929	Point	133831.81	846477.67	0.20	SOIL	GRANULAR	6.33	Peaty Soil	1	4	1	4	Negligible
930	Point	133543.38	846596.92	0.30	SOIL	GRANULAR	4.51	Peaty Soil	1	4	1	4	Negligible
931	Point	134031.67	846614.88	0.10	PEAT	GRANULAR	5.24	Peaty Soil	1	4	1	4	Negligible
932	Point	132895.26	846221.43	0.30	PEAT	ROCK	7.86	Peaty Soil	1	4	2	8	Low
933	Point	132840.08	846086.46	0.30	PEAT	GRANULAR	9.14	Peaty Soil	1	6	1	6	Low
934	Point	132796.16	845991.83	0.30	PEAT	GRANULAR	14.72	Peaty Soil	1	8	1	8	Low
935	Point	133714.36	845983.78	0.10	SOIL	GRANULAR	4.25	Peaty Soil	1	4	1	4	Negligible
936	Point	133484.62	846087.34	0.20	PEAT	GRANULAR	7.62	Peaty Soil	1	4	1	4	Negligible
937	Point	133436.05	846106.39	0.40	PEAT	GRANULAR	4.25	Peaty Soil	1	4	1	4	Negligible
938	Point	133337.85	846139.16	0.30	PEAT	GRANULAR	3.73	Peaty Soil	1	2	1	2	Negligible
939	Point	132931.41	846315.39	0.20	PEAT	GRANULAR	14.02	Peaty Soil	1	8	1	8	Low
940	Point	132979.13	846073.41	0.00	ROCK	ROCK	7.61	No Peat	0	4	2	0	None
941	Point	133001.91	846070.67	0.00	ROCK	ROCK	13.38	No Peat	0	8	2	0	None
942	Point	133071.30	846049.41	0.00	ROCK	ROCK	7.26	No Peat	0	4	2	0	None
943	Point	133113.08	846029.53	0.20	PEAT	ROCK	4.26	Peaty Soil	1	4	2	8	Low
944	Point	133135.52	846014.64	0.30	PEAT	ROCK	14.67	Peaty Soil	1	8	2	16	Medium
945	Point	132973.18	846400.88	0.40	PEAT	GRANULAR	8.26	Peaty Soil	1	6	1	6	Low
946	Point	133194.99	846424.69	0.40	PEAT	GRANULAR	11.54	Peaty Soil	1	6	1	6	Low
947	Point	133190.70	846309.96	0.00	ROCK	ROCK	11.47	No Peat	0	6	2	0	None
948	Point	133212.88	846302.50	0.00	ROCK	ROCK	13.32	No Peat	0	8	2	0	None
949	Point	133291.57	846327.73	0.20	PEAT	GRANULAR	4.34	Peaty Soil	1	4	1	4	Negligible
950	Point	133523.86	846181.39	0.10	PEAT	GRANULAR	3.72	Peaty Soil	1	2	1	2	Negligible
951	Point	133618.30	846139.48	0.00	ROCK	ROCK	4.32	No Peat	0	4	2	0	None
952	Point	133642.28	846195.14	0.10	PEAT	ROCK	7.21	Peaty Soil	1	4	2	8	Low
953	Point	133704.28	846212.13	0.40	PEAT	GRANULAR	6.38	Peaty Soil	1	4	1	4	Negligible
954	Point	133748.29	846196.10	0.20	PEAT	GRANULAR	4.05	Peaty Soil	1	4	1	4	Negligible
955	Point	133822.87	846111.44	0.20	PEAT	GRANULAR	5.60	Peaty Soil	1	4	1	4	Negligible
956	Point	133840.37	846156.45	0.20	PEAT	GRANULAR	6.44	Peaty Soil	1	4	1	4	Negligible
957	Point	133893.57	846137.75	0.40	PEAT	GRANULAR	8.42	Peaty Soil	1	6	1	6	Low
958	Point	133950.53	845995.12	0.40	PEAT	GRANULAR	7.85	Peaty Soil	1	4	1	4	Negligible
959	Point	134015.96	846031.25	0.20	PEAT	GRANULAR	22.39	Peaty Soil	1	8	1	8	Low
960	Point	134024.40	846080.66	0.30	PEAT	GRANULAR	13.15	Peaty Soil	1	8	1	8	Low
961	Point	134434.92	846018.66	0.40	PEAT	GRANULAR	3.12	Peaty Soil	1	2	1	2	Negligible
962	Point	134087.90	846488.40	0.10	PEAT	GRANULAR	11.57	Peaty Soil	1	6	1	6	Low
963	Point	133943.74	846543.45	0.40	PEAT	ROCK	7.72	Peaty Soil	1	4	2	8	Low
964	Point	133903.67	846563.94	0.10	PEAT	ROCK	8.72	Peaty Soil	1	6	2	12	Low
965	Point	133517.14	846405.21	0.30	Soil	Granular	0.87	Peaty Soil	1	1	1	1	Negligible
966	Point	133519.86	846396.90	0.20	Soil	Granular	4.59	Peaty Soil	1	4	1	4	Negligible
967	Point	133519.32	846384.58	0.20	Soil	Granular	4.87	Peaty Soil	1	4	1	4	Negligible
968	Point	133516.68	846377.71	0.40	Soil	Granular	4.87	Peaty Soil	1	4	1	4	Negligible
969	Point	133434.52	846265.01	0.40	Soil	Granular	3.90	Peaty Soil	1	2	1	2	Negligible
970	Point	133411.26	846218.80	0.20	Soil	Granular	6.90	Peaty Soil	1	4	1	4	Negligible
971	Point	133444.49	846033.08	0.40	Soil	Rock	5.45	Peaty Soil	1	4	2	8	Low
972	Point	133667.68	845990.47	0.40	Soil	Rock	6.21	Peaty Soil	1	4	2	8	Low
973	Point	134058.61	846262.18	0.40	Soil	Rock	6.41	Peaty Soil	1	4	2	8	Low
974	Point	133962.97	846293.10	0.30	Soil	Rock	11.60	Peaty Soil	1	6	2	12	Low
975	Point	133917.17	846311.75	0.20	Soil	Rock	8.87	Peaty Soil	1	6	2	12	Low
976	Point	133883.38	846347.47	0.10	Soil	Granular	4.79	Peaty Soil	1	4	1	4	Negligible
977	Point	133870.37	846376.43	0.20	Soil	Rock	4.19	Peaty Soil	1	4	2	8	Low
978	Point	133868.14	846405.34	0.40	Soil	Rock	6.94	Peaty Soil	1	4	2	8	Low
979	Point	133870.99	846430.71	0.40	Soil	Rock	2.94	Peaty Soil	1	2	2	4	Negligible
980	Point	133866.16	846481.10	0.20	Soil	Rock	2.47	Peaty Soil	1	2	2	4	Negligible
981	Point	133835.21	846436.04	0.10	Soil	Rock	6.66	Peaty Soil	1	4	2	8	Low
982	Point	133719.02	846232.49	0.20	Soil	Granular	5.67	Peaty Soil	1	4	1	4	Negligible
983	Point	133706.04	846082.88	0.30	Soil	Granular	13.92	Peaty Soil	1	8	1	8	Low
984	Point	133595.61	846378.63	0.40	Soil	Rock	5.04	Peaty Soil	1	4	2	8	Low
985	Point	133504.41	846593.34	0.30	Peat	Granular	7.18	Peaty Soil	1	4	1	4	Negligible
986	Point	133497.39	846541.13	0.40	Peat	Granular	11.09	Peaty Soil	1	6	1	6	Low
987	Point	133499.88	846473.56	0.30	Peat	Rock	12.53	Peaty Soil	1	8	2	16	Medium
988	Point	133473.62	846447.06	0.10	Peat	Granular	10.41	Peaty Soil	1	6	1	6	Low
989	Point	133433.42	846396.04	0.30	Peat	Rock	6.59	Peaty Soil	1	4	2	8	Low
990	Point	133449.60	846307.07	0.10	Peat	Rock	1.28	Peaty Soil	1	1	2	2	Negligible
991	Point	133332.25	846181.99	0.30	Peat	Rock	1.23	Peaty Soil	1	1	2	2	Negligible
992	Point	133298.46	846091.58	0.10	Peat	Granular	4.96	Peaty Soil	1	4	1	4	Negligible
993	Point	133303.90	845996.27	0.30	Peat	Rock	10.93	Peaty Soil	1	6	2	12	Low
994	Point	134182.22	846253.21	0.20	Peat	Granular	8.41	Peaty Soil	1	6	1	6	Low
995	Point	134002.74	846334.70	0.10	Peat	Rock	10.10	Peaty Soil	1	6	2	12	Low
996	Point	133921.53	846355.81	0.20	Peat	Rock	5.20	Peaty Soil	1	4	2	8	Low
997	Point	133688.94	846283.74	0.30	Peat	Granular	6.51	Peaty Soil	1	4	1	4	Negligible
998	Point	133650.38	846141.04	0.40	Peat	Rock	1.99	Peaty Soil	1	1	2	2	Negligible
999	Point	133674.77	846442.76	0.40	Peat	Rock	8.77	Peaty Soil	1	6	2	12	Low
1000	Point	133624.15	846435.85	0.30	Peat	Rock	5.44	Peaty Soil	1	4	2	8	Low
1001	Point	133531.86	846580.74	0.40	Peat	Granular	3.81	Peaty Soil	1	2	1	2	Negligible
1002	Point	133478.14	846355.93	0.30	Soil	Rock	3.70	Peaty Soil	1	2	2	4	Negligible
1003	Point	133467.41	846416.78	0.40	Peat	Rock	11.05	Peaty Soil	1	6	2	12	Low
1004	Point	133459.30	846417.46	0.40	Peat	Rock	10.78	Peaty Soil	1	6	2	12	Low
1005	Point	133404.00	846262.86	0.40	Peat	Rock	3.92	Peaty Soil	1	2	2	4	Negligible
1006	Point	133384.55	846215.82	0.40	Peat	Rock	5.44	Peaty Soil	1	4	2	8	Low
1007	Point	133317.74	846032.44	0.30	Soil	Rock	13.98	Peaty Soil	1	8	2	16	Medium
1008	Point	133339.50	845991.31	0.20	Soil	Rock	11.11	Peaty Soil	1	6	2	12	Low
1009	Point	134069.81	846285.19	0.10	Soil	Rock	5.96	Peaty Soil	1	4	2	8	Low
1010	Point	134023.25	846302.86	0.20	Soil	Rock	12.16	Peaty Soil	1	8	2	16	Medium
1011	Point	133974.36	846315.94	0.20	Soil	Rock	16.52	Peaty Soil	1	8	2	16	Medium
1012	Point	133897.71	846406.46	0.40	Peat	Rock	5.29	Peaty Soil	1	4	2	8	Low
1013	Point	133896.02	846429.70	0.40	Peat	Rock	5.62	Peaty Soil	1	4	2	8	Low
1014	Point	133889.20	846477.51	0.20	Soil	Rock	10.62	Peaty Soil	1	6	2	12	Low
101													

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	132001.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1028	Point	133917.03	846457.20	0.10	Soil	Granular	4.77	Peaty Soil	1	4	1	4	Negligible
1029	Point	133916.57	846477.03	0.30	Soil	Rock	5.72	Peaty Soil	1	4	2	8	Low
1030	Point	133916.98	846483.60	0.10	Soil	Rock	6.30	Peaty Soil	1	4	2	8	Low
1031	Point	133917.67	846486.76	0.10	Soil	Rock	6.59	Peaty Soil	1	4	2	8	Low
1032	Point	133925.78	846438.05	0.20	Soil	Rock	4.41	Peaty Soil	1	4	2	8	Low
1033	Point	133925.85	846426.47	0.10	Soil	Rock	5.17	Peaty Soil	1	4	2	8	Low
1034	Point	133927.27	846415.86	0.00	Superficial	Granular	6.73	No Peat	0	4	1	0	None
1035	Point	133936.89	846416.59	0.10	Soil	Granular	3.80	Peaty Soil	1	2	1	2	Negligible
1036	Point	133936.14	846427.66	0.10	Soil	Granular	4.41	Peaty Soil	1	4	1	4	Negligible
1037	Point	133936.24	846437.96	0.40	Soil	Granular	4.59	Peaty Soil	1	4	1	4	Negligible
1038	Point	134015.99	846619.30	0.30	Soil	Granular	8.37	Peaty Soil	1	6	1	6	Low
1039	Point	134055.74	846588.45	0.20	Soil	Granular	8.25	Peaty Soil	1	6	1	6	Low
1040	Point	134104.52	846571.77	0.20	Soil	Granular	5.06	Peaty Soil	1	4	1	4	Negligible
1041	Point	134153.99	846563.50	0.30	Soil	Granular	10.49	Peaty Soil	1	6	1	6	Low
1042	Point	133985.69	846618.75	0.20	Soil	Rock	8.15	Peaty Soil	1	6	2	12	Low
1043	Point	133957.80	846578.73	0.20	Soil	Rock	10.53	Peaty Soil	1	6	2	12	Low
1044	Point	133914.24	846507.92	0.30	Soil	Rock	5.07	Peaty Soil	1	4	2	8	Low
1045	Point	133966.80	846477.63	0.30	Soil	Rock	4.12	Peaty Soil	1	4	2	8	Low
1046	Point	133966.29	846467.02	0.40	Peat	Rock	3.81	Peaty Soil	1	2	2	4	Negligible
1047	Point	133966.14	846436.64	0.40	Peat	Rock	4.24	Peaty Soil	1	4	2	8	Low
1048	Point	133956.00	846477.61	0.40	Soil	Rock	4.19	Peaty Soil	1	4	2	8	Low
1049	Point	133945.99	846416.74	0.40	Peat	Rock	2.96	Peaty Soil	1	2	2	4	Negligible
1050	Point	133922.40	846408.70	0.10	Soil	Rock	6.61	Peaty Soil	1	4	2	8	Low
1051	Point	133900.43	846524.32	0.40	Soil	Rock	5.61	Peaty Soil	1	4	2	8	Low
1052	Point	133920.21	846570.65	0.40	Soil	Granular	7.68	Peaty Soil	1	4	1	4	Negligible
1053	Point	134220.24	846589.21	0.20	Soil	Rock	7.86	Peaty Soil	1	4	2	8	Low
1054	Point	134072.72	846612.35	0.10	Soil	Rock	10.28	Peaty Soil	1	6	2	12	Low
1055	Point	132635.91	845912.46	0.10	SOIL	GRANULAR	10.16	Peaty Soil	1	6	1	6	Low
1056	Point	133803.05	845503.10	0.30	SOIL	GRANULAR	7.19	Peaty Soil	1	4	1	4	Negligible
1057	Point	133732.43	845884.75	0.20	SOIL	GRANULAR	6.22	Peaty Soil	1	4	1	4	Negligible
1058	Point	132972.19	845940.86	0.10	SOIL	ROCK	9.08	Peaty Soil	1	6	2	12	Low
1059	Point	133171.25	845888.82	0.10	SOIL	ROCK	9.69	Peaty Soil	1	6	2	12	Low
1060	Point	133273.98	845829.69	0.30	SOIL	GRANULAR	1.27	Peaty Soil	1	1	1	1	Negligible
1061	Point	133590.54	845517.61	0.40	PEAT	GRANULAR	6.96	Peaty Soil	1	4	1	4	Negligible
1062	Point	133296.04	845602.82	0.40	PEAT	GRANULAR	4.36	Peaty Soil	1	4	1	4	Negligible
1063	Point	133299.75	845605.07	0.00	ROCK	ROCK	9.29	No Peat	0	6	2	0	None
1064	Point	133066.40	845708.76	0.20	SOIL	GRANULAR	7.64	Peaty Soil	1	4	1	4	Negligible
1065	Point	132977.39	845732.76	0.40	PEAT	GRANULAR	8.01	Peaty Soil	1	6	1	6	Low
1066	Point	132849.03	845812.34	0.10	SOIL	GRANULAR	8.98	Peaty Soil	1	6	1	6	Low
1067	Point	132860.13	845858.47	0.30	SOIL	GRANULAR	12.69	Peaty Soil	1	8	1	8	Low
1068	Point	132874.28	845903.92	0.20	SOIL	GRANULAR	13.90	Peaty Soil	1	8	1	8	Low
1069	Point	134385.70	845887.84	0.30	SOIL	GRANULAR	4.16	Peaty Soil	1	4	1	4	Negligible
1070	Point	134441.99	845792.54	0.10	SOIL	GRANULAR	2.46	Peaty Soil	1	2	1	2	Negligible
1071	Point	132779.86	845949.63	0.30	PEAT	GRANULAR	11.11	Peaty Soil	1	6	1	6	Low
1072	Point	133664.43	845468.65	0.10	SOIL	GRANULAR	4.25	Peaty Soil	1	4	1	4	Negligible
1073	Point	133838.68	845891.67	0.40	PEAT	GRANULAR	5.07	Peaty Soil	1	4	1	4	Negligible
1074	Point	133943.87	845893.17	0.40	PEAT	GRANULAR	7.22	Peaty Soil	1	4	1	4	Negligible
1075	Point	133304.26	845945.47	0.00	ROCK	ROCK	8.11	No Peat	0	6	2	0	None
1076	Point	133325.78	845939.89	0.00	ROCK	ROCK	6.99	No Peat	0	4	2	0	None
1077	Point	133414.27	845902.35	0.20	PEAT	ROCK	7.25	Peaty Soil	1	4	2	8	Low
1078	Point	133555.22	845845.22	0.40	PEAT	ROCK	7.86	Peaty Soil	1	4	2	8	Low
1079	Point	133318.43	845723.12	0.00	ROCK	ROCK	0.88	No Peat	0	1	2	0	None
1080	Point	133140.01	845796.87	0.20	PEAT	GRANULAR	1.92	Peaty Soil	1	1	1	1	Negligible
1081	Point	133091.92	845813.80	0.20	PEAT	GRANULAR	8.68	Peaty Soil	1	6	1	6	Low
1082	Point	132972.12	845743.73	0.00	ROCK	ROCK	7.70	No Peat	0	4	2	0	None
1083	Point	133161.41	845570.92	0.20	PEAT	ROCK	10.88	Peaty Soil	1	6	2	12	Low
1084	Point	133303.29	845501.80	0.00	ROCK	ROCK	0.70	No Peat	0	1	2	0	None
1085	Point	133351.21	845491.01	0.10	PEAT	ROCK	3.15	Peaty Soil	1	2	2	4	Negligible
1086	Point	133443.15	845454.69	0.20	PEAT	GRANULAR	7.33	Peaty Soil	1	4	1	4	Negligible
1087	Point	132911.30	845737.82	0.00	ROCK	ROCK	5.68	No Peat	0	4	2	0	None
1088	Point	132945.27	845823.84	0.00	ROCK	ROCK	8.53	No Peat	0	6	2	0	None
1089	Point	132949.62	845908.83	0.00	ROCK	ROCK	8.41	No Peat	0	6	2	0	None
1090	Point	134077.73	845943.49	0.30	PEAT	ROCK	9.40	Peaty Soil	1	6	2	12	Low
1091	Point	134223.33	845766.72	0.10	PEAT	GRANULAR	3.56	Peaty Soil	1	2	1	2	Negligible
1092	Point	134253.60	845702.59	0.20	PEAT	GRANULAR	3.61	Peaty Soil	1	2	1	2	Negligible
1093	Point	134262.89	845493.44	0.20	PEAT	GRANULAR	9.05	Peaty Soil	1	6	1	6	Low
1094	Point	134132.97	845815.25	0.20	PEAT	GRANULAR	18.72	Peaty Soil	1	8	1	8	Low
1095	Point	134188.85	845864.16	0.30	PEAT	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1096	Point	133478.83	845934.42	0.20	Soil	Granular	13.30	Peaty Soil	1	8	1	8	Low
1097	Point	133501.12	845929.80	0.40	Soil	Granular	13.04	Peaty Soil	1	8	1	8	Low
1098	Point	133515.74	845894.57	0.30	Soil	Granular	10.11	Peaty Soil	1	6	1	6	Low
1099	Point	133475.36	845880.42	0.20	Soil	Granular	7.03	Peaty Soil	1	4	1	4	Negligible
1100	Point	133453.85	845879.65	0.20	Soil	Granular	7.75	Peaty Soil	1	4	1	4	Negligible
1101	Point	133442.56	845879.36	0.20	Soil	Granular	8.12	Peaty Soil	1	6	1	6	Low
1102	Point	133413.38	845879.90	0.10	Soil	Granular	9.18	Peaty Soil	1	6	1	6	Low
1103	Point	133414.28	845891.49	0.40	Soil	Granular	8.73	Peaty Soil	1	6	1	6	Low
1104	Point	133649.94	845946.93	0.40	Soil	Rock	5.76	Peaty Soil	1	4	2	8	Low
1105	Point	133689.65	845962.93	0.30	Soil	Granular	3.01	Peaty Soil	1	2	1	2	Negligible
1106	Point	133927.09	845916.64	0.40	Soil	Rock	8.35	Peaty Soil	1	6	2	12	Low
1107	Point	133949.82	845918.71	0.10	Soil	Rock	8.35	Peaty Soil	1	6	2	12	Low
1108	Point	133954.16	845893.32	0.10	Soil	Granular	7.70	Peaty Soil	1	4	1	4	Negligible
1109	Point	133926.64	845892.38	0.40	Soil	Granular	9.05	Peaty Soil	1	6	1	6	Low
1110	Point	133902.34	845875.66	0.40	Soil	Granular	6.48	Peaty Soil	1	4	1	4	Negligible
1111	Point	134251.62	845718.26	0.30	Soil	Rock	3.11	Peaty Soil	1	2	2	4	Negligible
1112	Point	134199.93	845833.13	0.40	Soil	Rock	3.36	Peaty Soil	1	2	2	4	Negligible
1113	Point	133332.16	845953.40	0.30	Peat	Rock	11.27	Peaty Soil	1	6	2	12	Low
1114	Point	133386.92	845916.95	0.20	Peat	Rock	6.68	Peaty Soil	1	4	2	8	Low
1115	Point	133381.70	845891.46	0.30	Peat	Rock	6.49	Peaty Soil	1	4	2	8	Low
1116	Point	133402.02	845882.16	0.20	Peat	Rock	8.67	Peaty Soil	1	6	2	12	Low
1117	Point	133414.35	845861.67	0.30	Peat	Rock	4.86	Peaty Soil	1	4	2	8	Low
1118	Point	133425.29	845858.83	0.40	Peat	Rock	6.95	Peaty Soil	1	4	2	8	Low
1119	Point	133474.82	845868.30	0.40	Peat	Granular	7.42	Peaty Soil	1	4	1	4	Negligible
1120	Point	133462.48	845868.32	0.40	Peat	Granular	7.53	Peaty Soil	1	4	1	4	Negligible
1121	Point	133452.40	845868.85	0.20	Peat	Granular	6.90	Peaty Soil	1	4	1	4	Negligible
1122	Point	133444.09	845871.78	0.30	Peat	Rock	7.42	Peaty Soil	1	4	2	8	Low
1123	Point	133435.01	845870.33	0.30	Peat	Rock	7.31	Peaty Soil	1	4	2	8	Low
1124	Point	133425.93	845873.23	0.30	Peat	Rock	8.12	Peaty Soil	1	6	2	12	Low
1125	Point	133413.56	845869.74	0.30	Peat	Rock	8.54	Peaty Soil	1	6	2	12	Low
1126	Point	133558.46	845863.38	0.10	Peat	Rock	8.99	Peaty Soil	1	6	2	12	Low
1127	Point	133605.60	845856.93	0.20	Peat	Rock	7.64	Peaty Soil	1	4	2	8	Low
1128	Point	133651.70	845851.72	0.20	Peat	Granular	10.14						

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1142	Point	133420.61	845928.27	0.40	Peat	Rock	9.20	Peaty Soil	1	6	2	12	Low
1143	Point	133435.10	845919.21	0.40	Peat	Rock	9.68	Peaty Soil	1	6	2	12	Low
1144	Point	133444.48	845920.79	0.40	Peat	Rock	8.88	Peaty Soil	1	6	2	12	Low
1145	Point	133464.87	845920.15	0.20	Soil	Rock	9.66	Peaty Soil	1	6	2	12	Low
1146	Point	133473.49	845919.60	0.30	Soil	Granular	9.52	Peaty Soil	1	6	1	6	Low
1147	Point	133463.15	845908.24	0.10	Soil	Rock	9.26	Peaty Soil	1	6	2	12	Low
1148	Point	133467.56	845912.75	0.30	Soil	Rock	9.46	Peaty Soil	1	6	2	12	Low
1149	Point	133453.59	845908.71	0.40	Peat	Rock	10.91	Peaty Soil	1	6	2	12	Low
1150	Point	133443.21	845909.32	0.30	Soil	Rock	9.79	Peaty Soil	1	6	2	12	Low
1151	Point	133432.84	845909.89	0.30	Soil	Rock	9.02	Peaty Soil	1	6	2	12	Low
1152	Point	133423.13	845909.55	0.40	Peat	Rock	8.18	Peaty Soil	1	6	2	12	Low
1153	Point	133412.95	845909.46	0.30	Soil	Rock	6.92	Peaty Soil	1	4	2	8	Low
1154	Point	133414.60	845899.43	0.20	Soil	Rock	7.99	Peaty Soil	1	4	2	8	Low
1155	Point	133424.34	845900.60	0.30	Soil	Rock	8.79	Peaty Soil	1	6	2	12	Low
1156	Point	133463.11	845888.70	0.40	Peat	Granular	7.74	Peaty Soil	1	4	1	4	Negligible
1157	Point	133458.74	845889.01	0.40	Peat	Rock	8.08	Peaty Soil	1	6	2	12	Low
1158	Point	133535.73	845887.35	0.40	Peat	Rock	8.47	Peaty Soil	1	6	2	12	Low
1159	Point	133608.92	845880.46	0.30	Soil	Rock	10.79	Peaty Soil	1	6	2	12	Low
1160	Point	133689.05	845884.89	0.30	Soil	Rock	6.90	Peaty Soil	1	4	2	8	Low
1161	Point	133689.75	845893.39	0.40	Peat	Rock	6.68	Peaty Soil	1	4	2	8	Low
1162	Point	133700.48	845904.32	0.10	Soil	Rock	7.04	Peaty Soil	1	4	2	8	Low
1163	Point	133701.03	845883.61	0.20	Soil	Rock	6.03	Peaty Soil	1	4	2	8	Low
1164	Point	133781.90	845880.42	0.40	Peat	Rock	5.56	Peaty Soil	1	4	2	8	Low
1165	Point	133904.36	845897.73	0.00	Soil	Rock	6.45	No Peat	0	4	2	0	None
1166	Point	133904.88	845887.94	0.30	Soil	Rock	6.47	Peaty Soil	1	4	2	8	Low
1167	Point	134228.39	845801.25	0.40	Peat	Rock	3.57	Peaty Soil	1	2	2	4	Negligible
1168	Point	133377.31	847687.50	0.50	Peat	Rock	10.38	Peaty Soil	1	6	2	12	Low
1169	Point	133366.17	847638.43	0.10	Peat	Rock	9.56	Peaty Soil	1	6	2	12	Low
1170	Point	133352.34	847588.99	0.40	Peat	Rock	3.81	Peaty Soil	1	2	2	4	Negligible
1171	Point	133500.72	847608.72	0.10	Peat	Rock	5.42	Peaty Soil	1	4	2	8	Low
1172	Point	133530.04	847554.22	0.20	Peat	Rock	6.37	Peaty Soil	1	4	2	8	Low
1173	Point	133531.00	847501.36	0.80	Peat	Granular	3.97	Thin Peat	2	2	1	4	Negligible
1174	Point	133515.08	847439.39	0.10	Peat	Rock	1.67	Peaty Soil	1	1	2	2	Negligible
1175	Point	133538.91	847439.97	0.10	Peat	Rock	1.93	Peaty Soil	1	1	2	2	Negligible
1176	Point	133513.51	847414.28	0.60	Peat	Rock	1.47	Thin Peat	2	1	2	4	Negligible
1177	Point	133540.53	847412.93	0.30	Peat	Granular	1.91	Peaty Soil	1	1	1	1	Negligible
1178	Point	133565.39	847389.87	0.10	Peat	Rock	4.95	Peaty Soil	1	4	2	8	Low
1179	Point	133475.26	847312.34	0.20	Peat	Rock	10.70	Peaty Soil	1	6	2	12	Low
1180	Point	133513.06	847282.02	0.50	Peat	Granular	4.52	Peaty Soil	1	4	1	4	Negligible
1181	Point	133979.36	847306.38	0.30	Peat	Rock	5.37	Peaty Soil	1	4	2	8	Low
1182	Point	133969.26	847284.37	0.20	Peat	Rock	4.49	Peaty Soil	1	4	2	8	Low
1183	Point	133953.91	847261.07	0.10	Peat	Rock	5.69	Peaty Soil	1	4	2	8	Low
1184	Point	134014.84	847264.27	2.00	Peat	Rock	3.77	Thick Peat	3	2	2	12	Low
1185	Point	134020.81	847280.24	1.10	Peat	Rock	8.35	Thin Peat	2	6	2	24	Medium
1186	Point	134064.61	847262.84	0.50	Peat	Rock	6.14	Peaty Soil	1	4	2	8	Low
1187	Point	133337.76	847705.21	0.10	Soil	Rock	7.39	Peaty Soil	1	4	2	8	Low
1188	Point	133318.10	847661.92	0.30	Soil	Granular	7.60	Peaty Soil	1	4	1	4	Negligible
1189	Point	133303.02	847611.12	0.20	Soil	Granular	4.06	Peaty Soil	1	4	1	4	Negligible
1190	Point	133303.71	847564.97	0.10	Soil	Granular	8.32	Peaty Soil	1	6	1	6	Low
1191	Point	133319.52	847516.85	0.10	Soil	Granular	5.46	Peaty Soil	1	4	1	4	Negligible
1192	Point	133332.42	847484.59	0.10	Soil	Granular	3.01	Peaty Soil	1	2	1	2	Negligible
1193	Point	133344.48	847483.30	0.60	Peat	Granular	7.31	Thin Peat	2	4	1	8	Low
1194	Point	133343.11	847494.71	0.50	Peat	Granular	7.77	Peaty Soil	1	4	1	4	Negligible
1195	Point	133353.08	847494.85	0.70	Peat	Rock	3.69	Thin Peat	2	2	2	8	Low
1196	Point	133351.34	847484.43	1.40	Peat	Granular	9.32	Thin Peat	2	6	1	12	Low
1197	Point	133345.05	847474.76	0.10	Peat	Granular	4.67	Peaty Soil	1	4	1	4	Negligible
1198	Point	133353.15	847473.97	0.30	Peat	Granular	3.98	Peaty Soil	1	2	1	2	Negligible
1199	Point	133363.15	847478.16	0.00	Rock	Rock	1.88	No Peat	0	1	2	0	None
1200	Point	133362.23	847474.97	0.20	Peat	Granular	2.83	Peaty Soil	1	2	1	2	Negligible
1201	Point	133354.87	847465.05	0.80	Peat	Granular	4.94	Thin Peat	2	4	1	8	Low
1202	Point	133361.66	847454.24	0.90	Peat	Granular	3.03	Thin Peat	2	2	1	4	Negligible
1203	Point	133372.09	847453.04	0.90	Peat	Granular	4.89	Thin Peat	2	4	1	8	Low
1204	Point	133372.57	847464.95	0.90	Peat	Granular	8.31	Thin Peat	2	6	1	12	Low
1205	Point	133383.17	847464.62	2.30	Peat	Granular	8.63	Thick Peat	3	6	1	18	Medium
1206	Point	133382.97	847455.02	2.20	Peat	Granular	9.48	Thick Peat	3	6	1	18	Medium
1207	Point	133394.53	847452.94	2.30	Peat	Granular	5.25	Thick Peat	3	4	1	12	Low
1208	Point	133394.02	847445.90	2.10	Peat	Granular	4.70	Thick Peat	3	4	1	12	Low
1209	Point	133382.54	847442.15	2.20	Peat	Granular	4.05	Thick Peat	3	4	1	12	Low
1210	Point	133373.30	847445.12	1.20	Peat	Granular	1.96	Thin Peat	2	1	1	2	Negligible
1211	Point	133383.88	847436.63	0.90	Peat	Granular	5.49	Thin Peat	2	4	1	8	Low
1212	Point	133406.06	847461.34	0.10	Soil	Granular	8.31	Peaty Soil	1	6	1	6	Low
1213	Point	133380.18	847488.20	1.40	Peat	Rock	5.24	Thin Peat	2	4	2	16	Medium
1214	Point	133356.35	847512.88	0.10	Peat	Rock	6.07	Peaty Soil	1	4	2	8	Low
1215	Point	133380.70	847513.98	0.60	Peat	Granular	3.57	Thin Peat	2	2	1	4	Negligible
1216	Point	133390.00	847502.32	0.90	Peat	Granular	6.38	Thin Peat	2	4	1	8	Low
1217	Point	133406.25	847489.84	0.00	Rock	Rock	9.30	No Peat	0	6	2	0	None
1218	Point	133429.11	847474.02	0.60	Peat	Rock	8.89	Thin Peat	2	6	2	24	Medium
1219	Point	133432.38	847488.30	0.10	Peat	Granular	2.21	Peaty Soil	1	2	1	2	Negligible
1220	Point	133405.57	847514.06	0.10	Peat	Granular	7.69	Peaty Soil	1	4	1	4	Negligible
1221	Point	133380.03	847537.64	0.60	Peat	Granular	2.88	Thin Peat	2	2	1	4	Negligible
1222	Point	133405.47	847538.56	0.10	Soil	Rock	2.03	Peaty Soil	1	2	2	4	Negligible
1223	Point	133406.75	847562.76	0.00	Rock	Rock	3.56	No Peat	0	2	2	0	None
1224	Point	133431.20	847538.31	0.40	Peat	Rock	3.27	Peaty Soil	1	2	2	4	Negligible
1225	Point	133432.71	847511.07	0.20	Peat	Granular	1.17	Peaty Soil	1	1	1	1	Negligible
1226	Point	133456.23	847512.40	0.10	Soil	Rock	1.83	Peaty Soil	1	1	2	2	Negligible
1227	Point	133683.32	847728.45	0.80	Peat	Rock	9.60	Thin Peat	2	6	2	24	Medium
1228	Point	133993.11	847653.68	0.20	Soil	Granular	4.08	Peaty Soil	1	4	1	4	Negligible
1229	Point	134074.91	847614.36	0.50	Peat	Granular	8.15	Peaty Soil	1	6	1	6	Low
1230	Point	134098.03	847615.20	0.30	Peat	Granular	7.96	Peaty Soil	1	4	1	4	Negligible
1231	Point	134120.80	847590.75	0.50	Peat	Granular	7.69	Peaty Soil	1	4	1	4	Negligible
1232	Point	134125.71	847612.81	0.20	Peat	Granular	4.46	Peaty Soil	1	4	1	4	Negligible
1233	Point	134124.57	847636.32	0.80	Peat	Granular	3.21	Thin Peat	2	2	1	4	Negligible
1234	Point	134148.03	847616.57	0.40	Peat	Granular	2.96	Peaty Soil	1	2	1	2	Negligible
1235	Point	134159.17	847606.57	0.50	Peat	Granular	5.72	Peaty Soil	1	4	1	4	Negligible
1236	Point	134172.76	847615.10	0.80	Peat	Granular	11.27	Thin Peat	2	6	1	12	Low
1237	Point	134502.86	847459.04	0.10	Peat	Granular	3.67	Peaty Soil	1	2	1	2	Negligible
1238	Point	134545.24	847456.07	0.40	Peat	Granular	5.55	Peaty Soil	1	4	1	4	Negligible
1239	Point	134532.04	847481.33	0.30	Peat	Granular	7.89	Peaty Soil	1	4	1	4	Negligible
1240	Point	134528.00	847431.19	0.80	Peat	Granular	7.47	Thin Peat	2	4	1	8	Low
1241	Point	134533.15	847427.66	0.60	Peat	Rock	4.68	Thin Peat	2	4	2	16	Medium
1242	Point	134527.77	847408.39	0.80	Peat	Granular	5.17	Thin					

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1256	Point	133516.44	847465.34	0.20	Soil	Granular	4.30	Peaty Soil	1	4	1	4	Negligible
1257	Point	133496.42	847441.49	0.60	Peat	Rock	3.19	Thin Peat	2	2	2	8	Low
1258	Point	133490.14	847440.38	0.50	Peat	Granular	3.49	Peaty Soil	1	2	1	2	Negligible
1259	Point	133465.49	847440.09	0.10	Soil	Granular	3.48	Peaty Soil	1	2	1	2	Negligible
1260	Point	133489.44	847415.67	0.10	Soil	Granular	1.98	Peaty Soil	1	1	1	1	Negligible
1261	Point	133489.27	847388.71	0.20	Soil	Granular	1.47	Peaty Soil	1	1	1	1	Negligible
1262	Point	133515.81	847416.04	0.20	Peat	Granular	1.47	Peaty Soil	1	1	1	1	Negligible
1263	Point	133515.19	847388.46	0.20	Soil	Granular	1.20	Peaty Soil	1	1	1	1	Negligible
1264	Point	133515.79	847362.85	0.40	Soil	Granular	5.37	Peaty Soil	1	4	1	4	Negligible
1265	Point	133474.34	847614.13	0.20	Soil	Granular	5.99	Peaty Soil	1	4	1	4	Negligible
1266	Point	133496.82	847331.64	0.20	Soil	Granular	13.45	Peaty Soil	1	8	1	8	Low
1267	Point	133459.05	847360.24	0.50	Peat	Granular	13.12	Peaty Soil	1	8	1	8	Low
1268	Point	133452.55	847421.38	0.20	Soil	Granular	8.04	Peaty Soil	1	6	1	6	Low
1269	Point	133434.82	847403.58	0.30	Soil	Granular	8.14	Peaty Soil	1	6	1	6	Low
1270	Point	133412.28	847397.51	0.30	Soil	Granular	10.01	Peaty Soil	1	6	1	6	Low
1271	Point	133541.45	847390.23	0.10	Soil	Rock	1.44	Peaty Soil	1	1	2	2	Negligible
1272	Point	133394.53	847463.08	0.10	Soil	Granular	7.35	Peaty Soil	1	4	1	4	Negligible
1273	Point	133391.14	847466.69	0.10	Soil	Granular	4.42	Peaty Soil	1	4	1	4	Negligible
1274	Point	134057.97	847242.06	0.30	Peat	Rock	3.63	Peaty Soil	1	2	2	4	Negligible
1275	Point	134112.88	847257.40	0.30	Peat	Rock	9.52	Peaty Soil	1	6	2	12	Low
1276	Point	134074.38	847139.13	0.20	Peat	Rock	4.28	Peaty Soil	1	2	2	4	Negligible
1277	Point	134076.42	847113.91	0.20	Peat	Granular	6.21	Peaty Soil	1	4	1	4	Negligible
1278	Point	134101.83	847086.91	0.30	Peat	Rock	6.16	Peaty Soil	1	4	2	8	Low
1279	Point	134102.28	847109.30	0.20	Peat	Rock	9.12	Peaty Soil	1	6	2	12	Low
1280	Point	134103.49	847132.99	0.20	Peat	Granular	9.56	Peaty Soil	1	6	1	6	Low
1281	Point	134125.73	847109.54	0.20	Peat	Granular	4.13	Peaty Soil	1	4	1	4	Negligible
1282	Point	134132.82	847129.64	0.20	Peat	Rock	7.03	Peaty Soil	1	4	2	8	Low
1283	Point	134134.57	847155.67	0.50	Peat	Rock	5.13	Peaty Soil	1	4	2	8	Low
1284	Point	134151.70	847159.84	0.50	Peat	Rock	5.40	Peaty Soil	1	4	2	8	Low
1285	Point	134176.13	847135.32	1.00	Peat	Rock	3.78	Thin Peat	2	2	2	8	Low
1286	Point	134181.31	847157.53	0.20	Peat	Rock	5.30	Peaty Soil	1	4	2	8	Low
1287	Point	134181.56	847180.80	0.10	Peat	Rock	7.29	Peaty Soil	1	4	2	8	Low
1288	Point	134204.47	847184.33	0.20	Peat	Rock	6.41	Peaty Soil	1	4	2	8	Low
1289	Point	134207.07	847164.39	0.80	Peat	Rock	4.59	Thin Peat	2	4	2	16	Medium
1290	Point	134229.53	847155.44	0.10	Peat	Rock	4.56	Peaty Soil	1	4	2	8	Low
1291	Point	133979.13	847013.86	0.10	Peat	Rock	4.72	Peaty Soil	1	4	2	8	Low
1292	Point	134014.98	846984.14	0.50	Peat	Granular	8.42	Peaty Soil	1	6	1	6	Low
1293	Point	133926.61	846791.92	0.20	Peat	Granular	9.43	Peaty Soil	1	6	1	6	Low
1294	Point	133926.19	846802.24	0.80	Peat	Rock	11.51	Thin Peat	2	6	2	24	Medium
1295	Point	133935.49	846813.64	0.90	Peat	Rock	9.64	Thin Peat	2	6	2	24	Medium
1296	Point	133920.68	846735.07	0.50	Peat	Granular	3.35	Peaty Soil	1	2	1	2	Negligible
1297	Point	133896.02	846733.24	0.40	Peat	Granular	7.58	Peaty Soil	1	4	1	4	Negligible
1298	Point	133894.37	846708.72	0.90	Peat	Rock	1.51	Thin Peat	2	1	2	4	Negligible
1299	Point	133919.60	846709.03	0.90	Peat	Rock	1.68	Thin Peat	2	1	2	4	Negligible
1300	Point	133920.74	846682.60	0.50	Peat	Rock	1.69	Peaty Soil	1	1	2	2	Negligible
1301	Point	133896.80	846682.64	0.60	Peat	Granular	2.63	Thin Peat	2	2	1	4	Negligible
1302	Point	133889.17	846680.33	0.70	Peat	Granular	2.51	Thin Peat	2	2	1	4	Negligible
1303	Point	133894.76	846659.96	0.20	Peat	Granular	4.34	Peaty Soil	1	4	1	4	Negligible
1304	Point	133895.60	846634.15	0.20	Peat	Rock	15.46	Peaty Soil	1	8	2	16	Medium
1305	Point	133686.11	846704.96	2.60	Peat	Rock	5.95	Thick Peat	3	4	2	24	Medium
1306	Point	134697.72	847245.66	0.40	Peat	Granular	6.44	Peaty Soil	1	4	1	4	Negligible
1307	Point	134697.84	847196.89	0.50	Peat	Granular	8.84	Peaty Soil	1	6	1	6	Low
1308	Point	134675.07	847177.07	1.80	Peat	Granular	4.83	Thick Peat	3	4	1	12	Low
1309	Point	134700.86	847151.73	0.70	Peat	Granular	3.60	Thin Peat	2	2	1	4	Negligible
1310	Point	134676.76	847125.97	0.20	Peat	Granular	11.53	Peaty Soil	1	6	1	6	Low
1311	Point	134696.95	847099.19	1.90	Peat	Granular	5.72	Thick Peat	3	4	1	12	Low
1312	Point	134672.98	847077.77	0.90	Peat	Granular	6.75	Thin Peat	2	4	1	8	Low
1313	Point	134695.79	847048.76	0.40	Peat	Granular	4.42	Peaty Soil	1	4	1	4	Negligible
1314	Point	134664.78	847026.79	1.50	Peat	Granular	9.37	Thin Peat	2	6	1	12	Low
1315	Point	134679.17	846999.30	0.10	Peat	Granular	7.32	Peaty Soil	1	4	1	4	Negligible
1316	Point	134642.99	846984.50	0.60	Peat	Granular	6.74	Thin Peat	2	4	1	8	Low
1317	Point	134655.80	846953.55	0.70	Peat	Granular	6.12	Thin Peat	2	4	1	8	Low
1318	Point	134617.59	846938.48	0.50	Peat	Granular	5.35	Peaty Soil	1	4	1	4	Negligible
1319	Point	134629.02	846911.92	0.10	Peat	Granular	5.98	Peaty Soil	1	4	1	4	Negligible
1320	Point	134509.98	846735.52	1.30	Peat	Granular	4.41	Thin Peat	2	4	1	8	Low
1321	Point	134485.11	846736.04	0.50	Peat	Granular	4.78	Peaty Soil	1	4	1	4	Negligible
1322	Point	134470.26	846717.04	0.70	Peat	Granular	5.08	Thin Peat	2	4	1	8	Low
1323	Point	134461.46	846711.61	0.50	Peat	Granular	5.64	Peaty Soil	1	4	1	4	Negligible
1324	Point	133852.36	846748.89	1.30	Peat	Granular	4.02	Thin Peat	2	4	1	8	Low
1325	Point	133845.76	846735.50	0.20	Peat	Granular	5.86	Peaty Soil	1	4	1	4	Negligible
1326	Point	133823.07	846707.60	0.10	Peat	Granular	10.19	Peaty Soil	1	6	1	6	Low
1327	Point	133834.51	846661.38	1.80	Peat	Granular	11.90	Thick Peat	3	6	1	18	Medium
1328	Point	133843.79	846658.97	0.50	Peat	Granular	13.63	Thin Peat	1	8	1	8	Low
1329	Point	133844.35	846634.22	0.90	Peat	Granular	5.35	Thin Peat	2	4	1	8	Low
1330	Point	133637.04	846639.35	2.30	Peat	Granular	5.09	Thick Peat	3	4	1	12	Low
1331	Point	133566.06	847201.00	1.00	Peat	Granular	8.62	Thin Peat	2	6	1	12	Low
1332	Point	133539.50	847189.35	0.80	Peat	Granular	2.01	Thin Peat	2	2	1	4	Negligible
1333	Point	133580.26	847160.24	0.70	Peat	Granular	7.37	Thin Peat	2	4	1	8	Low
1334	Point	133716.44	847075.50	0.20	Soil	Granular	4.35	Peaty Soil	1	4	1	4	Negligible
1335	Point	133697.17	847055.95	0.20	Soil	Granular	7.08	Peaty Soil	1	4	1	4	Negligible
1336	Point	133744.33	847032.32	1.00	Peat	Granular	5.39	Thin Peat	2	4	1	8	Low
1337	Point	133756.25	846993.78	0.20	Soil	Granular	2.20	Peaty Soil	1	2	1	2	Negligible
1338	Point	133786.21	847015.06	0.20	Soil	Granular	7.57	Peaty Soil	1	4	1	4	Negligible
1339	Point	133809.34	847037.79	0.30	Soil	Granular	7.77	Peaty Soil	1	4	1	4	Negligible
1340	Point	133804.12	847011.88	0.20	Soil	Granular	4.77	Peaty Soil	1	4	1	4	Negligible
1341	Point	133804.91	846986.57	0.20	Soil	Granular	2.17	Peaty Soil	1	2	1	2	Negligible
1342	Point	133833.18	847005.31	0.50	Peat	Granular	4.91	Peaty Soil	1	4	1	4	Negligible
1343	Point	133857.53	847028.98	0.10	Soil	Granular	3.68	Peaty Soil	1	2	1	2	Negligible
1344	Point	133850.83	846970.90	0.20	Soil	Granular	5.97	Peaty Soil	1	4	1	4	Negligible
1345	Point	133733.84	846891.78	1.60	Peat	Rock	4.34	Thick Peat	3	4	2	24	Medium
1346	Point	133769.01	846861.71	0.30	Peat	Granular	0.66	Peaty Soil	1	1	1	1	Negligible
1347	Point	133783.02	846884.95	0.20	Peat	Granular	1.04	Peaty Soil	1	1	1	1	Negligible
1348	Point	133833.84	846882.39	0.20	Soil	Granular	1.97	Peaty Soil	1	1	1	1	Negligible
1349	Point	133884.69	846919.43	1.00	Peat	Granular	3.30	Thin Peat	2	2	1	4	Negligible
1350	Point	133911.53	846892.64	0.20	Soil	Granular	2.89	Thin Peat	1	2	1	2	Negligible
1351	Point	133912.00	846869.68	0.80	Peat	Granular	2.83	Thin Peat	2	2	1	4	Negligible
1352	Point	133912.00	846844.68	0.30	Soil	Granular	1.43	Peaty Soil	1	1	1	1	Negligible
1353	Point	133936.46	846853.60	0.80	Peat	Granular	4.17	Thin Peat	2	4	1	8	Low
1354	Point	133936.96	846844.65	0.40	Soil	Granular	4.60	Peaty Soil	1	4	1	4	Negligible
1355	Point	133936.50	846843.19	0.30	Soil	Granular	4.60	Peaty Soil	1	4	1	4	Negligible
1356	Point	133946.2											

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1370	Point	133956.67	846802.78	1.10	Peat	Rock	9.47	Thin Peat	2	6	2	24	Medium
1371	Point	133946.46	846803.38	0.90	Peat	Rock	7.31	Thin Peat	2	4	2	16	Medium
1372	Point	133936.19	846802.95	0.30	Soil	Rock	10.74	Peaty Soil	1	6	2	12	Low
1373	Point	133870.36	846734.32	0.30	Soil	Granular	5.20	Peaty Soil	1	4	1	4	Negligible
1374	Point	133870.15	846722.48	0.30	Soil	Granular	5.59	Peaty Soil	1	4	1	4	Negligible
1375	Point	133869.54	846708.34	1.00	Peat	Granular	2.93	Thin Peat	2	2	1	4	Negligible
1376	Point	133871.22	846658.48	0.20	Soil	Granular	6.86	Peaty Soil	1	4	1	4	Negligible
1377	Point	133876.23	846658.06	0.20	Soil	Granular	6.25	Peaty Soil	1	4	1	4	Negligible
1378	Point	133870.49	846624.18	0.00	Rock	Rock	14.04	No Peat	0	8	2	0	None
1379	Point	133875.08	846630.76	0.10	Soil	Rock	14.94	Peaty Soil	1	8	2	16	Medium
1380	Point	133661.30	846689.14	2.20	Peat	Rock	16.55	Thick Peat	3	8	2	48	High
1381	Point	133659.50	846739.52	1.30	Peat	Rock	16.58	Thin Peat	2	8	2	32	High
1382	Point	133677.95	846836.00	0.50	Peat	Rock	6.95	Peaty Soil	1	4	2	8	Low
1383	Point	134135.08	846867.93	2.30	Peat	Granular	5.63	Thick Peat	3	4	1	12	Low
1384	Point	133998.43	846592.70	0.40	Peat	Granular	11.03	Peaty Soil	1	6	1	6	Low
1385	Point	134002.13	846579.71	0.60	Peat	Rock	9.24	Thin Peat	2	6	2	24	Medium
1386	Point	134033.44	846568.80	0.60	Peat	Rock	7.48	Thin Peat	2	4	2	16	Medium
1387	Point	133980.17	846552.19	0.40	Peat	Granular	9.77	Peaty Soil	1	6	1	6	Low
1388	Point	133946.33	846371.44	0.60	Peat	Rock	3.55	Thin Peat	2	2	2	8	Low
1389	Point	134025.19	846532.33	0.60	Peat	Rock	4.39	Thin Peat	2	4	2	16	Medium
1390	Point	134054.15	846472.63	0.90	Peat	Rock	11.18	Thin Peat	2	6	2	24	Medium
1391	Point	134001.77	846466.66	0.80	Peat	Granular	7.41	Thin Peat	2	4	1	8	Low
1392	Point	134043.74	846423.60	1.70	Peat	Rock	7.71	Thick Peat	3	4	2	24	Medium
1393	Point	134023.25	846431.61	0.30	Peat	Rock	8.08	Peaty Soil	1	6	2	12	Low
1394	Point	133999.90	846421.11	0.90	Peat	Rock	2.11	Thin Peat	2	2	2	8	Low
1395	Point	134215.70	846130.77	2.60	Peat	Granular	2.55	Thick Peat	3	2	1	6	Low
1396	Point	134233.16	846155.05	2.70	Peat	Granular	6.36	Thick Peat	3	4	1	12	Low
1397	Point	134257.52	846154.45	2.60	Peat	Granular	4.45	Thick Peat	3	4	1	12	Low
1398	Point	134258.72	846129.59	2.60	Peat	Granular	3.21	Thick Peat	3	2	1	6	Low
1399	Point	134283.41	846132.27	1.00	Peat	Rock	4.12	Thin Peat	2	4	2	16	Medium
1400	Point	134284.49	846156.00	1.20	Peat	Rock	2.97	Thin Peat	2	2	2	8	Low
1401	Point	134282.62	846183.09	0.90	Peat	Granular	5.09	Thin Peat	2	4	1	8	Low
1402	Point	134300.82	846171.83	0.80	Peat	Rock	4.86	Thin Peat	2	4	2	16	Medium
1403	Point	134301.78	846162.74	0.70	Peat	Rock	3.19	Thin Peat	2	2	2	8	Low
1404	Point	134300.94	846151.28	0.90	Peat	Rock	2.05	Thin Peat	2	2	2	8	Low
1405	Point	134301.51	846142.33	0.90	Peat	Granular	2.04	Thin Peat	2	2	1	4	Negligible
1406	Point	134300.63	846131.85	1.60	Peat	Granular	2.04	Thick Peat	3	2	1	6	Low
1407	Point	134300.81	846122.55	1.60	Peat	Rock	2.22	Thick Peat	3	2	2	12	Medium
1408	Point	133466.82	846229.34	0.60	Peat	Rock	6.44	Thin Peat	2	4	2	16	Medium
1409	Point	133467.56	846285.89	0.80	Peat	Rock	3.74	Thin Peat	2	2	2	8	Low
1410	Point	133457.48	846292.60	0.20	Peat	Rock	2.49	Peaty Soil	1	2	2	4	Negligible
1411	Point	133464.03	846315.34	0.80	Peat	Rock	2.51	Thin Peat	2	2	2	8	Low
1412	Point	133466.87	846314.33	0.30	Peat	Granular	1.26	Peaty Soil	1	1	1	1	Negligible
1413	Point	133441.85	846313.16	0.30	Peat	Rock	1.28	Peaty Soil	1	1	2	2	Negligible
1414	Point	133445.32	846326.33	1.70	Peat	Granular	2.77	Thick Peat	3	2	1	6	Low
1415	Point	133465.08	846332.72	0.80	Peat	Granular	3.08	Thin Peat	2	2	1	4	Negligible
1416	Point	133457.12	846336.95	1.70	Peat	Granular	2.44	Thick Peat	3	2	1	6	Low
1417	Point	133447.84	846335.12	1.30	Peat	Granular	3.28	Thin Peat	2	2	1	4	Negligible
1418	Point	133443.99	846340.13	1.70	Peat	Rock	3.27	Thick Peat	3	2	2	12	Low
1419	Point	133430.07	846355.13	0.90	Peat	Rock	5.61	Thin Peat	2	4	2	16	Medium
1420	Point	133427.40	846347.36	1.70	Peat	Rock	6.60	Thick Peat	3	4	2	24	Medium
1421	Point	133666.63	846564.76	0.70	Peat	Granular	16.09	Thin Peat	2	8	1	16	Medium
1422	Point	133844.03	846610.14	1.20	Peat	Granular	1.18	Thin Peat	2	1	1	2	Negligible
1423	Point	133904.88	846391.23	0.50	Peat	Granular	5.12	Peaty Soil	1	4	1	4	Negligible
1424	Point	133897.08	846392.75	0.30	Peat	Granular	4.34	Peaty Soil	1	4	1	4	Negligible
1425	Point	133905.80	846382.11	0.90	Peat	Granular	0.91	Thin Peat	2	1	1	2	Negligible
1426	Point	133915.32	846372.37	0.10	Peat	Granular	1.45	Peaty Soil	1	1	1	1	Negligible
1427	Point	133927.91	846370.75	0.70	Peat	Granular	2.16	Thin Peat	2	2	1	4	Negligible
1428	Point	133936.39	846371.90	0.50	Peat	Granular	3.17	Peaty Soil	1	2	1	2	Negligible
1429	Point	133945.62	846371.23	0.70	Peat	Granular	3.55	Thin Peat	2	2	1	4	Negligible
1430	Point	133937.71	846380.99	0.70	Peat	Granular	3.82	Thin Peat	2	2	1	4	Negligible
1431	Point	133954.17	846371.99	0.70	Peat	Granular	2	Thin Peat	2	2	1	4	Negligible
1432	Point	133955.90	846391.44	0.10	Peat	Rock	4.81	Peaty Soil	1	4	2	8	Low
1433	Point	133957.18	846401.44	0.40	Peat	Rock	6.63	Thin Peat	1	4	2	8	Low
1434	Point	133936.10	846401.42	0.70	Peat	Rock	2.12	Thin Peat	2	2	2	8	Low
1435	Point	133936.33	846391.44	0.70	Peat	Granular	3.45	Thin Peat	2	2	1	4	Negligible
1436	Point	133925.05	846393.08	0.70	Peat	Rock	0.60	Thin Peat	2	1	2	4	Negligible
1437	Point	133279.24	846014.75	1.80	Peat	Granular	6.88	Thick Peat	3	4	1	12	Low
1438	Point	133248.85	846052.77	0.30	Peat	Rock	6.00	Peaty Soil	1	4	2	8	Low
1439	Point	133264.35	846084.67	0.60	Peat	Granular	6.25	Thin Peat	2	4	1	8	Low
1440	Point	133242.91	846104.21	0.70	Peat	Granular	6.72	Thin Peat	2	4	1	8	Low
1441	Point	133275.77	846129.69	0.50	Peat	Rock	5.14	Peaty Soil	1	4	2	8	Low
1442	Point	133264.11	846152.06	1.20	Peat	Rock	6.24	Thin Peat	2	4	2	16	Medium
1443	Point	133297.51	846187.26	1.50	Peat	Rock	4.15	Thin Peat	2	4	2	16	Medium
1444	Point	133427.65	846293.79	0.40	Peat	Rock	3.60	Peaty Soil	1	2	2	4	Negligible
1445	Point	133417.30	846288.31	0.70	Peat	Rock	4.32	Thin Peat	2	4	2	16	Medium
1446	Point	133416.87	846295.57	0.80	Peat	Rock	4.38	Thin Peat	2	4	2	16	Medium
1447	Point	133405.62	846294.13	1.00	Peat	Rock	4.30	Thin Peat	2	4	2	16	Medium
1448	Point	133406.45	846305.17	0.50	Peat	Rock	3.68	Peaty Soil	1	2	2	4	Negligible
1449	Point	133417.92	846324.07	0.60	Peat	Granular	5.10	Thin Peat	2	4	1	8	Low
1450	Point	133425.14	846325.25	0.80	Peat	Granular	4.21	Thin Peat	2	4	1	8	Low
1451	Point	133418.40	846334.66	0.50	Peat	Granular	1.96	Peaty Soil	1	1	1	1	Negligible
1452	Point	133418.01	846354.21	0.50	Peat	Granular	5.80	Peaty Soil	1	4	1	4	Negligible
1453	Point	133408.72	846355.79	0.90	Peat	Granular	7.15	Thin Peat	2	4	1	8	Low
1454	Point	133410.08	846396.40	1.50	Peat	Rock	2.41	Thin Peat	2	2	2	8	Low
1455	Point	133587.80	846518.18	1.70	Peat	Rock	6.79	Thick Peat	3	4	2	24	Medium
1456	Point	133630.70	846588.96	0.70	Peat	Rock	9.15	Thin Peat	2	6	2	24	Medium
1457	Point	133652.81	846589.15	1.60	Peat	Rock	9.13	Thick Peat	3	6	2	36	High
1458	Point	133870.49	846609.18	1.70	Peat	Rock	4.95	Thick Peat	3	4	2	24	Medium
1459	Point	133887.08	846493.47	0.70	Peat	Granular	3.53	Thin Peat	2	2	1	4	Negligible
1460	Point	133972.30	846470.52	0.90	Soil	Rock	4.15	Thin Peat	2	4	2	16	Medium
1461	Point	133971.62	846445.18	1.10	Peat	Rock	4.01	Thin Peat	2	4	2	16	Medium
1462	Point	133971.38	846421.15	0.90	Peat	Granular	3.94	Thin Peat	2	2	1	4	Negligible
1463	Point	133946.04	846419.66	0.80	Peat	Granular	2.96	Thin Peat	2	2	1	4	Negligible
1464	Point	133946.78	846445.37	0.90	Peat	Granular	3.68	Thin Peat	2	2	1	4	Negligible
1465	Point	133919.92	846445.10	0.20	Soil	Granular	4.76	Peaty Soil	1	4	1	4	Negligible
1466	Point	133920.58	846419.52	0.30	Soil	Granular	6.91	Peaty Soil	1	4	1	4	Negligible
1467	Point	133926.25	846401.44	0.20	Soil	Granular	4.15	Peaty Soil	1	4	1	4	Negligible
1468	Point	133921.45	846396.27	0.70	Soil	Rock	2.16	Thin Peat	2	2	2	8	Low
1469	Point	133988.54	846365.04	0.40	Soil	Granular	9.13	Peaty Soil	1	6	1	6	Low
1470	Point	134132.34	846180.30	0.80	Peat	Gran							

ID	SOURCE	X	Y	Depth	Surface	Substrate	Slope	Peat Coefficient	Peat Coefficient	Slope Coefficient	Substrate Coefficient	Risk Coefficient	Potential Instability
1	Point	13201.29	849981.58	0.10	SOIL	GRANULAR	0.73	Peaty Soil	1	1	1	1	Negligible
1484	Point	134331.27	846172.35	0.90	Peat	Rock	4.23	Thin Peat	2	4	2	16	Medium
1485	Point	134332.67	846182.15	0.70	Peat	Rock	4.92	Thin Peat	2	4	2	16	Medium
1486	Point	134320.05	846181.80	1.20	Peat	Granular	4.88	Thin Peat	2	4	1	8	Low
1487	Point	134320.88	846171.34	0.60	Peat	Rock	4.75	Thin Peat	2	4	2	16	Medium
1488	Point	134321.39	846160.01	0.90	Peat	Rock	2.13	Thin Peat	2	2	2	8	Low
1489	Point	134311.11	846162.21	0.50	Peat	Rock	2.62	Peaty Soil	1	2	2	4	Negligible
1490	Point	134308.10	846155.78	0.50	Peat	Rock	2.05	Peaty Soil	1	2	2	4	Negligible
1491	Point	134321.63	846151.88	1.20	Peat	Rock	2.05	Thin Peat	2	2	2	8	Low
1492	Point	134321.48	846141.94	1.10	Peat	Granular	2.03	Thin Peat	2	2	1	4	Negligible
1493	Point	133443.27	846239.16	0.20	Soil	Rock	2.09	Peaty Soil	1	2	2	4	Negligible
1494	Point	133442.36	846264.35	0.90	Peat	Granular	2.66	Thin Peat	2	2	1	4	Negligible
1495	Point	133417.75	846263.78	0.50	Peat	Rock	3.93	Peaty Soil	1	2	2	4	Negligible
1496	Point	133443.07	846289.03	0.20	Soil	Granular	0.73	Peaty Soil	1	1	1	1	Negligible
1497	Point	133435.46	846296.14	0.20	Soil	Rock	0.93	Peaty Soil	1	1	2	2	Negligible
1498	Point	133435.98	846305.13	0.20	Soil	Granular	1.24	Peaty Soil	1	1	1	1	Negligible
1499	Point	133436.36	846315.42	0.50	Peat	Rock	1.99	Peaty Soil	1	1	2	2	Negligible
1500	Point	133436.30	846325.24	1.60	Peat	Rock	2.55	Thick Peat	3	2	2	12	Low
1501	Point	133426.32	846345.08	1.90	Peat	Rock	6.60	Thick Peat	3	4	2	24	Medium
1502	Point	133427.22	846355.36	0.90	Peat	Rock	6.02	Thin Peat	2	4	2	16	Medium
1503	Point	133598.49	846496.47	2.20	Peat	Granular	0.66	Thick Peat	3	1	1	3	Negligible
1504	Point	133644.12	846520.73	0.60	Peat	Rock	6.18	Thin Peat	2	4	2	16	Medium
1505	Point	133686.02	846610.02	0.90	Peat	Rock	15.21	Thin Peat	2	8	2	32	High
1506	Point	133916.47	846391.68	0.60	Peat	Granular	0.74	Thin Peat	2	1	1	2	Negligible
1507	Point	133326.70	846275.57	2.20	Peat	Granular	4.80	Thick Peat	3	4	1	12	Low
1508	Point	133810.69	845893.17	1.50	Peat	Rock	5.54	Thin Peat	2	4	2	16	Medium
1509	Point	133800.09	845894.42	1.30	Peat	Granular	5.57	Thin Peat	2	4	1	8	Low
1510	Point	133789.70	845892.44	1.00	Peat	Rock	5.57	Thin Peat	2	4	2	16	Medium
1511	Point	133770.20	845893.08	1.00	Peat	Granular	5.58	Thin Peat	2	4	1	8	Low
1512	Point	133758.96	845893.42	1.10	Peat	Granular	5.58	Thin Peat	2	4	1	8	Low
1513	Point	133750.11	845895.45	0.60	Peat	Rock	5.58	Thin Peat	2	4	2	16	Medium
1514	Point	133748.98	845884.59	0.90	Peat	Rock	6.03	Thin Peat	2	4	2	16	Medium
1515	Point	133743.74	845888.82	0.30	Peat	Rock	5.59	Peaty Soil	1	4	2	8	Low
1516	Point	133690.41	845864.97	0.70	Peat	Rock	7.42	Thin Peat	2	4	2	16	Medium
1517	Point	133390.15	845944.58	0.80	Peat	Rock	8.70	Thin Peat	2	6	2	24	Medium
1518	Point	133390.64	845942.09	0.70	Peat	Rock	8.70	Thin Peat	2	6	2	24	Medium
1519	Point	133387.12	845941.33	0.80	Peat	Rock	7.88	Thin Peat	2	4	2	16	Medium
1520	Point	133358.27	845940.17	0.40	Peat	Rock	5.54	Peaty Soil	1	4	2	8	Low
1521	Point	133345.49	845939.97	0.40	Peat	Rock	5.53	Peaty Soil	1	4	2	8	Low
1522	Point	133337.78	845939.86	0.50	Peat	Rock	5.45	Peaty Soil	1	4	2	8	Low
1523	Point	133337.43	845933.46	0.50	Peat	Rock	5.42	Peaty Soil	1	4	2	8	Low
1524	Point	133345.95	845931.02	0.90	Peat	Rock	5.56	Thin Peat	2	4	2	16	Medium
1525	Point	133356.97	845929.48	0.90	Peat	Rock	5.56	Thin Peat	2	4	2	16	Medium
1526	Point	133365.81	845931.06	1.40	Peat	Granular	5.79	Thin Peat	2	4	1	8	Low
1527	Point	133375.21	845930.35	0.70	Peat	Rock	6.49	Thin Peat	2	4	2	16	Medium
1528	Point	133382.89	845931.28	0.80	Peat	Granular	6.62	Thin Peat	2	4	1	8	Low
1529	Point	134283.85	845823.98	1.80	Peat	Granular	3.70	Thick Peat	3	2	1	6	Low
1530	Point	134266.42	845812.26	1.00	Peat	Granular	3.57	Thin Peat	2	2	1	4	Negligible
1531	Point	134263.52	845788.48	0.70	Peat	Granular	3.57	Thin Peat	2	2	1	4	Negligible
1532	Point	134237.85	845769.96	0.90	Peat	Granular	3.57	Thin Peat	2	2	1	4	Negligible
1533	Point	134239.55	845761.98	0.40	Peat	Granular	3.57	Peaty Soil	1	2	1	2	Negligible
1534	Point	134247.48	845758.39	0.60	Peat	Granular	4.41	Thin Peat	2	4	1	8	Low
1535	Point	134266.07	845761.23	0.80	Peat	Granular	5.81	Thin Peat	2	4	1	8	Low
1536	Point	134267.04	845770.91	0.40	Peat	Granular	3.63	Peaty Soil	1	2	1	2	Negligible
1537	Point	134276.55	845761.80	1.00	Peat	Granular	3.74	Thin Peat	2	2	1	4	Negligible
1538	Point	134288.50	845770.36	1.50	Peat	Granular	4.88	Thin Peat	2	4	1	8	Low
1539	Point	134297.39	845768.91	2.00	Peat	Granular	1.79	Thick Peat	3	1	1	3	Negligible
1540	Point	134296.65	845750.31	1.80	Peat	Granular	1.79	Thick Peat	3	1	1	3	Negligible
1541	Point	134287.93	845738.18	2.30	Peat	Granular	1.79	Thick Peat	3	1	1	3	Negligible
1542	Point	134286.96	845730.08	2.20	Peat	Granular	1.77	Thick Peat	3	1	1	3	Negligible
1543	Point	134278.07	845750.66	1.40	Peat	Granular	2.22	Thin Peat	2	1	1	2	Negligible
1544	Point	134266.96	845740.99	1.20	Peat	Granular	1.79	Thin Peat	2	1	1	2	Negligible
1545	Point	134264.03	845737.36	1.80	Peat	Granular	1.77	Thick Peat	3	1	1	3	Negligible
1546	Point	134256.98	845729.74	1.80	Peat	Granular	1.79	Thick Peat	3	1	1	3	Negligible
1547	Point	134247.90	845730.45	0.90	Peat	Granular	1.79	Thin Peat	2	1	1	2	Negligible
1548	Point	134237.44	845728.38	0.20	Peat	Granular	2.62	Peaty Soil	1	2	1	2	Negligible
1549	Point	134237.91	845720.49	0.80	Peat	Granular	3.49	Thin Peat	2	2	1	4	Negligible
1550	Point	134237.22	845711.15	0.70	Peat	Granular	3.61	Thin Peat	2	2	1	4	Negligible
1551	Point	133787.35	845852.43	1.60	Peat	Granular	7.82	Thick Peat	3	4	1	12	Low
1552	Point	133787.04	845842.27	1.00	Peat	Granular	6.98	Thin Peat	2	4	1	8	Low
1553	Point	133780.19	845843.48	0.80	Peat	Granular	7.50	Thin Peat	2	4	1	8	Low
1554	Point	133769.80	845844.40	0.70	Peat	Granular	8.18	Thin Peat	2	6	1	12	Low
1555	Point	133766.72	845838.41	0.80	Peat	Granular	7.12	Thin Peat	2	4	1	8	Low
1556	Point	133768.27	845832.46	0.50	Peat	Granular	5.77	Peaty Soil	1	4	1	4	Negligible
1557	Point	133759.77	845833.15	0.50	Peat	Granular	7.61	Peaty Soil	1	4	1	4	Negligible
1558	Point	133749.67	845832.00	0.40	Peat	Granular	8.16	Peaty Soil	1	6	1	6	Low
1559	Point	133749.90	845841.39	0.50	Peat	Granular	8.25	Peaty Soil	1	6	1	6	Low
1560	Point	133740.77	845838.97	0.30	Peat	Granular	7.89	Peaty Soil	1	4	1	4	Negligible
1561	Point	133743.44	845863.38	0.20	Peat	Granular	8.27	Peaty Soil	1	6	1	6	Low
1562	Point	133397.56	845901.00	0.30	Peat	Granular	6.83	Peaty Soil	1	4	1	4	Negligible
1563	Point	133398.51	845891.14	0.40	Peat	Rock	6.82	Peaty Soil	1	4	2	8	Low
1564	Point	133391.39	845892.74	0.60	Peat	Rock	6.74	Thin Peat	2	4	2	16	Medium
1565	Point	133387.71	845899.74	0.20	Peat	Rock	6.63	Peaty Soil	1	4	2	8	Low
1566	Point	133377.68	845902.33	0.60	Peat	Rock	6.48	Thin Peat	2	4	2	16	Medium
1567	Point	133367.14	845891.04	0.60	Peat	Rock	6.83	Thin Peat	2	4	2	16	Medium
1568	Point	133367.73	845882.18	0.70	Peat	Rock	8.95	Thin Peat	2	6	2	24	Medium
1569	Point	133357.54	845881.23	0.90	Peat	Rock	9.26	Thin Peat	2	6	2	24	Medium
1570	Point	133347.76	845880.92	0.20	Peat	Rock	9.81	Peaty Soil	1	6	2	12	Low
1571	Point	133338.96	845881.55	0.40	Peat	Rock	9.88	Peaty Soil	1	6	2	12	Low
1572	Point	133338.01	845890.26	0.50	Peat	Rock	11.62	Peaty Soil	1	6	2	12	Low
1573	Point	133347.86	845891.63	0.00	Rock	Rock	9.76	No Peat	0	6	2	0	None
1574	Point	133347.63	845900.54	0.50	Peat	Granular	6.73	Peaty Soil	1	4	1	4	Negligible
1575	Point	133338.20	845901.44	0.70	Peat	Granular	10.08	Thin Peat	2	6	1	12	Low
1576	Point	133308.98	845872.19	1.20	Peat	Granular	5.57	Thin Peat	2	4	1	8	Low
1577	Point	133791.77	845863.60	1.20	Peat	Granular	7.78	Thin Peat	2	4	1	8	Low
1578	Point	133789.03	845862.61	1.30	Peat	Granular	7.82	Thin Peat	2	4	1	8	Low
1579	Point	133779.21	845862.89	1.60	Peat	Granular	7.83	Thick Peat	3	4	1	12	Low
1580	Point	133769.28	845862.82	0.80	Peat	Granular	7.84	Thin Peat	2	4	1	8	Low
1581	Point	133766.45	845863.16	0.90	Peat	Granular	7.84	Thin Peat	2	4	1	8	Low
1582	Point	133757.96	845862.28	0.90	Peat	Granular	7.47	Thin Peat	2	4	1	8	Low
1583	Point	133748.64	845863.04	0.80	Peat	Granular	8.37	Thin Peat	2	6	1	12	Low
1584	Point	133769.35	845872.45	0.70	Peat								

ANNEX 10.1B: PEAT CORE LOGS & PHOTOGRAPHS



Peat Core Log

Hole No.
Auger 1
Sheet 1 of 1

Project: Balmeanach Wind Farm Client: Wind 2 Project Limited Date: 01/03/2023

Project No: 428.11223.00001 Logger: FS Coordinates: E: 134125.00 N: 846859.00

Location: Balmeanach, Isle of Skye Hole Type: HA Method: Peat Core Vertical Scale: 1:20

Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (m) / Discontinuity Detail	Level (mAOD)	Legend	Stratum Description
	0.00 - 0.50	C	0.00 - 0.50	Recovery = 100%	0.50	0.50		Brown fibrous PEAT. Peat is very slightly amorphous with easily identifiable plant structure, very slight decomposition (H3).
	0.50 - 1.00							Brown fibrous PEAT. Very slight amorphous material with easily identifiable plant structure, slight decomposition. (H3).
	1.00 - 1.50	C	0.50 - 1.00	Recovery = 100%	1.50	1.50		Brown fibrous PEAT. Very slight amorphous material with easily identifiable plant structure, moderate decomposition. (H3).
	1.50 - 2.00	C	1.00 - 1.50	Recovery = 100%				
	2.00 - 2.50	C	1.50 - 2.00	Recovery = 100%	2.45	2.50		Dark brown dry fibrous PEAT. Amorphous material present with recognizable but vague plant structure, moderately strong decomposition. (H5). <small>Peat Core Complete at 2.50m</small>
		C	2.00 - 2.50	Recovery = 100%				

Remarks:
1. Peat auger refused on gravel. 2. Strength descriptions based on field descriptions. 3. The von Post Classification for Peat Humification designates peat from H1 (No decomposition) to H10 (decomposed) based on the degree of humification.



Peat Core Log

Hole No.
Auger 2
Sheet 1 of 1

Project: Balmeanach Wind Farm Client: Wind 2 Project Limited Date: 01/03/2023

Project No: 428.11223.00001 Logger: FS Coordinates: E: 131044.00 N: 846279.00

Location: Balmeanach, Isle of Skye Hole Type: HA Method: Peat Core Vertical Scale: 1:20

Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (m) / Discontinuity Detail	Level (mAOD)	Legend	Stratum Description
	0.00 - 0.50	C	0.00 - 0.50	Recovery = 100%		0.50		Dark brown fibrous PEAT. No amorphous material, with easily identifiable plant structure, insignificant decomposition. (H2).
	0.50 - 1.00							Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, very slight decomposition. (H3).
	1.00 - 1.50	C	0.50 - 1.00	Recovery = 70%		1.50		Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, moderate decomposition (H5).
	1.50 - 2.00	C	1.00 - 1.50	Recovery = 100%		2.00		Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, slight decomposition observed (H5).
	2.00 - 2.50							Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, slight decomposition observed (H5).
		C	2.00 - 2.50	Recovery = 100%		2.50		Peat Core Complete at 2.50m

Remarks:
1. Peat auger refused on gravel. 2. Strength descriptions based on field descriptions. 3. The von Post Classification for Peat Humification designates peat from H1 (No decomposition) to H10 (decomposed) based on the degree of humification.



Peat Core Log

Hole No.
Auger 3
Sheet 1 of 1

Project: Balmeanach Wind Farm Client: Wind 2 Project Limited Date: 01/03/2023

Project No: 428.11223.00001 Logger: FS Coordinates: E: 133335.00 N: 846283.00

Location: Balmeanach, Isle of Skye Hole Type: HA Method: Peat Core Vertical Scale: 1:20

Water	Depth (m)	Sample Type	Depth	Recovery (%)	Depth (m) / Discontinuity Detail	Level (mAOD)	Legend	Stratum Description
	0.00 - 0.50	C	0.00 - 0.50	Recovery = 100%		0.50		Dark brown fibrous PEAT. No amorphous material, with easily identifiable plant structure, insignificant decomposition (H2).
	0.50 - 1.00							Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, very slight decomposition (H3).
	1.00 - 1.50	C	0.50 - 1.00	Recovery = 100%				
	1.50 - 2.00	C	1.00 - 1.50	Recovery = 100%				
	2.00 - 2.50	C	1.50 - 2.00	Recovery = 100%		2.00		Brown fibrous PEAT. Very slight amorphous material, with easily identifiable plant structure, slight decomposition (H3).
	2.00 - 2.50	C	2.00 - 2.50	Recovery = 100%		2.50		Peat Core Complete at 2.50m

Remarks:

1. Peat auger refused on gravel. 2. Strength descriptions based on field descriptions. 3. The von Post Classification for Peat Humification designates peat from H1 (No decomposition) to H10 (decomposed) based on the degree of humification.



Photograph 1: Auger 1 (0.00m – 0.50m)



Photograph 2: Auger 1 (0.50m – 1.00m)



Photograph 3: Auger 1 (1.00m – 1.50m)



Photograph 4: Auger 1 (1.50m – 2.00m)



Photograph 5: Auger 1 (2.00m – 2.50m)



Photograph 6: Auger 2 (0.00m – 0.50m)



Photograph 7: Auger 2 (0.50m – 1.00m)



Photograph 8: Auger 2 (1.00m – 1.50m)



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Project : Balmeanach, Isle of Skye



Project No. :- 428.11223.00001

Date :- March 2023



Photograph 9: Auger 2 (1.50m – 2.00m)



Photograph 10: Auger 2 (2.00m – 2.50m)



Photograph 11: Auger 3 (0.00m – 0.50m)



Photograph 12: Auger 3 (0.50m – 1.00m)



Photograph 13: Auger 3 (1.00m – 1.50m)



Photograph 14: Auger 3 (1.50m – 2.00m)



Photograph 15: Auger 3 (2.00m – 2.50m)



Photograph 16: Auger 3 (Peat Section 1.75m)

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