

Intended for  
**Viking Energy Wind Farm LLP**

Date  
**August 2023**

Project Number  
**1620009158**

# **VIKING ENERGY WIND FARM PLANNING MONITORING OFFICER AUDIT REPORT 034: 24<sup>TH</sup> JULY TO 20<sup>TH</sup> AUGUST 2023**

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034: 24TH JULY TO 20TH AUGUST 2023**

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## 1. AUDIT DETAILS

### 1.1 Audit Details

<b>Audit Number</b>	PMO 034
<b>Location</b>	Kergord Mid Kame Ridge Main Construction Compound North Nesting Sandwater Road North Compound
<b>Weather Conditions</b>	Fair with a slight breeze (15°C)
<b>Audit Date</b>	16 <sup>th</sup> August 2023
<b>Audit Period</b>	24 <sup>th</sup> July– 20 <sup>th</sup> August 2023
<b>Audit Owner</b>	Ramboll UK Ltd

### 1.2 Distribution

<b>Position</b>	<b>Action</b>
Ramboll Project Director Planning Monitoring Officer	For information
SSE Renewables Development Manager	For information
SSE Renewables Consents Manager	For information
SSE Renewables Environmental Advisor	For information
SSE Renewables Vestas Package Manager	For information
RJ McLeod Design Management Engineer	For Information
Shetland Islands Council Planning Enforcement Officer	For information
Shetland Islands Council Natural Heritage Officer	For information

### 1.3 Terms of Reference

This audit has been completed with reference to the following key documents:

- Application under Section 36C of the Electricity Act 1989 to vary the consent granted under Section 36 of that Act on 4 April 2012 to construct and operate the Viking Wind Farm located in Shetland Islands Council Planning Authority Area and for a direction under Section 57 of the Town and Country Planning (Scotland) Act 1997 for planning permission to be deemed to be granted in respect of the proposed development (i.e. the 'Variation Application').

The Viking Wind Farm project will comprise the construction of 103 wind turbines with a turbine tip height of 155 m; development of a temporary construction compound; construction of associated access tracks; development of a substation; development of a convertor station; erection of permanent Met Masts; and the excavation of borrow pits.

The project was consented as detailed above, receiving Section 36C Consent and deemed planning permission on the 24<sup>th</sup> of May 2019.



Separate planning consents are in place for the following specific aspects of the development:

- Construction of the Kergord Access Track<sup>1</sup> (consented on the 29<sup>th</sup> of April 2019).
- Re-alignment of Sandwater Road<sup>2</sup> between the Burn of Weisdale and the junction with the A970 to facilitate construction access for the Viking Wind Farm (consented on the 26<sup>th</sup> of May 2020).
- Formation of temporary construction compounds at two locations; Sandwater (Main)<sup>3</sup>, consented on 22<sup>nd</sup> June 2020; and North (South of Voe)<sup>4</sup> consented on the 9<sup>th</sup> of September 2020.

#### 1.4 Role of the Planning Monitoring Officer

Condition No. 3 of the Variation Application states that:

"No development shall commence unless and until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified environmental consultant to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent (a Planning Monitoring Officer ("PMO")). The terms of the appointment shall:

- Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent;
- Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site; and
- Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the deemed planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to completion of post construction restoration works.

In order to discharge the above requirements, the PMO undertakes site-based audits at monthly intervals to monitor the compliance with the conditions of the consent. The primary documents used for compliance monitoring are the Construction Environmental Management Plan (CEMP); and the Pollution Prevention Plan (PPP). Additional documents will be referenced as required for specific detail.

The following traffic light system is used to indicate action status:

	Green – activities appear to be compliant with the CEMP, PPP and other applicable environmental management procedures and plans and there are no other issues.
	Amber – in general activities are compliant with the CEMP, PPP and other applicable environmental management procedures and plans but there are minor actions required.
	Red – activities may not be compliant with the CEMP, PPP and other applicable environmental management procedures and there are critical actions.

<sup>1</sup> Shetland Islands Council Planning Reference No: 2018/096/PPF

<sup>2</sup> Shetland Islands Council Planning Reference No: 2019/079/PPF

<sup>3</sup> Shetland Islands Council Planning Reference No: 2019/188/PPF

<sup>4</sup> Shetland Islands Council Planning Reference No: 2019/210/PPF

## **1.5 General Limitations and Reliance**

This report has been prepared by Ramboll UK Limited ("Ramboll") exclusively for the intended use by Viking Energy Wind Farm LLP (the "client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or in respect of any matters outside the agreed scope of the services or the purpose for which the report and the associated agreed scope were intended or any other services provided by Ramboll.

In preparation of the report and performance of any other services, Ramboll has relied upon site observations, publicly available information, information provided by the client and information provided by third parties. Accordingly, the conclusions in this report are valid only to the extent that the information provided to Ramboll was accurate, complete and available to Ramboll within the reporting schedule.

Ramboll's services are not intended as legal advice, nor an exhaustive review of site conditions and/or compliance. This report and accompanying documents are intended to form a record for the purpose of documenting compliance with Condition No. 3 of the Variation Application.

Ramboll neither owes nor accepts any duty to any third party, unless formally agreed by Ramboll through that party entering into, at Ramboll's sole discretion, a written reliance agreement.

## 2. INTRODUCTION

### 2.1 Objectives of Audit

The purpose of the PMO Audit is to monitor the provision of appropriate environmental management at active work sites of the project, via desk-based review of relevant documentation and site visits to be undertaken on a monthly basis to ensure compliance with the conditions of the planning consent and associated environmental management plans.

### 2.2 Scope of Audit

The scope of the audit was as follows:

- Liaison with SIC regarding public concerns or complaints received during the audit period (if any).
- Review of documents provided by the Client and Principal Contractor prior to and following the audit visit. Specific references are included in the relevant sections of the report.
- A site visit attended by the PMO, SSE Renewables Environmental Advisor and the SIC Planning Enforcement Officer as undertaken on the 16<sup>th</sup> of August 2023. The site visit included the observation of the following locations:
  - Kergord;
  - Sandwater Road;
  - Mid Kames Ridge;
  - Main Compound;
  - North Compound; and
  - North Nesting.
- Discussions were held with the RJ McLeod Project Manager, SSER Geotechnical Clerk of Works (GCoW), Environmental Clerk of Works (ECoW), Archaeological Clerk of Works (ACoW) and Vestas' Package Manager.

A selection of photographs taken during the audit are included in Appendix 1.

### 2.3 Site Personnel

The following site personnel were interviewed as part of this audit:

Company	Position
RJ McLeod	Project Manager and Design Management Engineer
Tony Gee and Partners	Geotechnical Clerk of Works
MBEC	Environmental Clerk of Works
Headland Archaeology	Archaeological Clerk of Works
SSE	Vestas Package Manager

### 3. SITE SETTING, RECORDS AND OBSERVATIONS

Observations made during the audit are described in this section. Corresponding photographs are included in Appendix 1, alongside a plan of the site indicating the location of each photograph. The turbine numbers used in the site plan have been updated to the operational numbering. The turbine numbering system previously shown is being phased out in line with onset of turbine erection activities.

#### 3.1 Kergord

##### 3.1.1 Site Setting and Activities

Access to the Kergord Arrays is taken via the Kergord Access Track (KAT), which was accessed from the Sandwater track along the southern boundary of the central area of the development.

Activities observed in this area during the audit included progression and backfilling of cable trenches. All turbines had been fully erected at the time of the PMO audit.

##### 3.1.2 Observations

All cable laying activities across Kergord have been completed, including the cross-country route to the substation. The cable trenches are in the process of being backfilled across the area (Photo 1), using peat stored in temporary stockpiles in KBP02 and other areas.

KBP05 is being used by Vestas as satellite compound and was observed during the visit. The compound appeared tidy and in good order. The refuelling area was inspected during the July PMO audit and the plastic sheeting was found to be in poor condition. The sheeting remains in poor condition (photo 2 and 3) with a hole leading directly to the unsurfaced ground beneath. Vestas have stated that they will be repairing the plastic sheeting this week. SSE will conduct an audit next week to monitor the progress. This should be monitored during the next PMO audit.

Peat from the temporary storage in the main body of the KBP02 was being taken for backfilling of cable trenches and reinstatement works elsewhere on site, and being replenished by rock from the blade fingers that are being decommissioned, for example in T026 (photo 4). Rocks from the decommissioned blade fingers are also used to upgrade tracks and infill of borrow pits. The reinstatement plans for the main body of KBP02 are still under consideration.

The ongoing treatment of the water from KBP02, as part of the works agreed with SEPA including settlements ponds (photos 5 and 6), seem to be having the intended impact on the pH of the water. The pH has increased and metal concentrations reduced in the Burn of Lunklet and Weisdale. The water will continue to be monitored and variations related to seasonal changes will be recorded.

It was noted in the previous July PMO audit that refuelling was to be observed during the next PMO visit. Observing refuelling methods was not able to be observed during this PMO audit; however, the Vestas refuelling RAMS have been reviewed by the PMO and are in line with the CEMP.

#### 3.2 Mid Kame Ridge and Sandwater Track

##### 3.2.1 Site Setting and Activities

The Mid Kame Ridge (MKR) is accessed from the Sandwater track and stretches northwards to Hamarigrind Scord.

Activities in this area include cable trench backfilling on the cross-country route from MKR to the substation and MKR to Sandwater Road. Morgan Sindall contractors were working on site,

installing the 132kV cable from the substation to Lerwick but their works do not fall within the remit of this audit. All turbines had been fully erected at the time of the PMO audit.

### 3.2.2 Observations

Cable trench backfilling was being undertaken along the cross-country route from MKR to the substation (photos 7 and 8). The peat originally stripped from the excavations has been stockpiled and will be reused for the backfilling of the trench. A temporary peat store was also being used as a source of peat to enable backfilling of the cable trenches. The upslope trench is nearing completion of backfill and the downslope trench is being backfilled using the remaining peat. A small slump of the peat stockpile was noted during communications with the GCoW and was observed during the PMO, however, the GCoW confirmed that there were no stability issues, have not caused any issues since the observation and the peat was due to be used imminently. Backfilling of the cable trenches was also being undertaken along the cross-country route from MKR to Sandwater Road (photo 9). The temporary fine material "whin-dust" stockpiled near the Sandwater Road cutting is being used as bedding material in the cable trenches.

A silty water event occurred during a period of heavy rainfall on the 11<sup>th</sup> of August, the week prior to the PMO audit. No exceedances of the permit thresholds were recorded and hence is not a reportable event under the terms of the Construction Site License. It was noted that the primary mitigation measures consisting of settlement ponds and water pumps were in use to cope with the silty water run off, however, the saturation of the moorland dispersal area and the silty water flowing into the Burn of Pettawater was unforeseen. Once noted, the pump was turned off and the silty discharge ceased within an hour. The sediment was believed to have originated from a combination of the cable trenches (which hadn't been backfilled at that point) and run off from Sandwater track. The trenches are now in the process of being backfilled and the stockpile of fine material is in the process of being removed from this location. RJ McLeod have reviewed the mitigation measures to prevent a recurrence but there is an appreciation that the lack of space and naturally saturated conditions in this area mean that measures can be stretched to capacity. The removal of the sediment source will limit the risk of future silty water incidents at this location.

Non-reportable silty water events were also observed in the Weisdale Burn and Droswell Burn on the 11<sup>th</sup> of August, with no exceedances of the permit thresholds recorded. No discernible source has been noted, however ECoW will continue to investigate and the Principal Contractor will check and bolster mitigation measures.

The observation in the Droswell Burn is believed to have originated from the run-off at the junction between the KAT and Spur 5, which migrated through the eastern tracksides drainage systems and into the Burn of Droswell north of the culvert area (photo 10). It is noted that this is in a different source of sediment and water to those mentioned in previous PMO reports. SSE have taken an action to review the drainage set up in this area and determine the cause.

It is noted that a widescale assessment of the drainage across all areas of the Viking site is being undertaken by SSE and the Principal Contractor. As the civils work is being completed, an assessment is being undertaken to determine whether temporary drainage is required to remain in specific areas, and if so, how to make this drainage permanent. This will be monitored by the PMO throughout the remaining audits.

During the prior audit, it was noted that plant nappies were not in place under all of the pre-energisation generators. Plant nappies were observed under all pre-energisation generators during this audit (photo 11).

### **3.3 North Compound**

#### **3.3.1 Site Setting and Activities**

The North Compound is located towards the northern limit of the site on the eastern side of the A970. The North Compound is used by Vestas as a satellite compound for turbine erection works in the northern arrays.

#### **3.3.2 Observations**

The north compound was visited during this PMO audit. The compound appeared tidy and in good order, with the presence of welfare facilities, containers, skips, equipment, and Ad Blue IBCs.

Plant nappies were observed to be present under static equipment stored at the compound (photo 12), rather than the drip tray observed during the previous PMO audit. Plastic waste was observed to be lying directly on the ground rather than in skips during the July audit, and it was confirmed that these had been removed from site (photo 13). Skips are present within the compound, and all were observed to be labelled (photo 14).

### **3.4 North Nesting**

#### **3.4.1 Site Setting and Activities**

The northern Nesting turbine arrays are located towards the northern limit of the site on the eastern side of the A970.

Activities in this area during the audit included backfilling of the cable trenches. All turbines had been fully erected at the time of the PMO audit.

#### **3.4.2 Observations**

Cable trenches were being backfilled and excavation / work areas were being reprofiled across North Nesting during the PMO audit.

Peat was being excavated from the temporary peat store in NBP01 for the backfilling of cable trenches (photo 15). Some borrow pit restoration plans have been received but are awaiting geotechnical review.

Discussions were being undertaken around assessing whether temporary drainage solutions require removal or whether permanent drainage is required, as stated in Section 3.2.2 and as part of normal construction practice. This includes the silt fences at Junction 57 in North Nesting (photo 16).

The reprofiling and hydroseeding of the peat at Spur 52 was observed (photo 17). Previous discussions with the GCoW suggested that the profile being created may be too steep (following previous peat runouts). The Principal Contractor has provided evidence to SSE that the slope is within specification. This area will be monitored by SSE and the GCoW to ensure that the angle of the slope is suitable for the peat.

### **3.5 Main Compound**

#### **3.5.1 Site Setting and Activities**

The Main Compound is located at the southern extent of the site, accessed from the A970. The lower level comprises car parking and site offices and welfare facilities. The upper level is in use for material and equipment laydown.

### 3.5.2 Observations

The car parking, original site offices and welfare facilities are functioning well. The compound appeared tidy and all materials (including materials on the upper level) were stored according to regulations. No evidence of leaks or staining was observed in the vicinity of the store. All waste skips were labelled.

## 3.6 Nesting

### 3.6.1 Site Setting and Activities

The Nesting arrays are accessed from the A970.

Activities in this area during the audit included the erection of the three remaining turbines, and backfilling of cable trenches.

### 3.6.2 Observations

This area could not be accessed during the PMO audit. A road closure was in place to allow the crane to be dismantled at T069.

## 3.7 Substation

### 3.7.1 Site Setting and Activities

The Substation occupies the northern third of the HVDC Converter Station Platform located in the Kergord Valley, between Mid Kame Ridge and Kergord. Access to the Substation is taken via the KAT. Only the substation area is subject to the PMO audit.

### 3.7.2 Observations

The civil works at the substation have been completed and the remaining work includes the commissioning of the electrical equipment within the purpose-built housing. The laydown area was observed, and plant nappies were being used during storage of equipment (photo 18). The majority of items have been removed from the area; however, some fuel storage remains. SSE are going to enquire whether this is necessary for any upcoming work or whether this could be removed.

The land to the north of the substation has been reprofiled and growth from the remaining turves and inherent seed bank has been observed (photo 19). Seeding will be completed once the cable jointing works are signed off. Palisade fencing has been erected, enclosing the substation area.

Given that the civil works have been completed, the PMO considers that the substation no longer falls under the scope of the PMO audit and no longer need to visit the area.

## 3.8 Off-site activity/ turbine component delivery convoys

The turbine delivery to site is now complete and no further turbine delivery is required. It is understood that no correspondence from the public regarding abnormal load convoys have been received, indicating that the management plan and communications protocols have worked effectively.

### **3.9 Communication with SSER Clerks of Work**

#### **3.9.1 GCoW**

Condition 39 of the planning consent requires the appointment of a Geotechnical Clerk of Works (GCoW) to minimise the risk of peat failure arising from the development. A discussion was held between the PMO and GCoW on 10<sup>th</sup> of August 2023 before the site visit.

The GCoW described the ongoing monitoring work across the site, which has included monitoring of the general construction works including cable routes and of peat restoration areas and providing advice on peat handling.

No specific areas of concern were highlighted by the GCoW during the audit period. It was noted that currently there is a focus on backfilling trenches, with peat being moved from peat stores to areas requiring backfilling.

#### **3.9.2 ECoW**

Condition 19 of the planning consent requires the appointment of an Ecological Clerk of Works (ECoW) to ensure protection of the natural heritage of the area. A discussion was held between the PMO and ECoW before the site visit, on 14<sup>th</sup> August 2023.

The ECoW continues to work with the Principal Contractor to identify and implement mitigation measures throughout different stages of construction. The measures aim to ensure the project maintains compliance with relevant licences. The ECoW is monitoring the progress of these measures on an ongoing basis.

The ECoW is having ongoing communication with the Principal Contractor including discussion about dust mitigation with the Design Engineer and Vestas. RJ McLeod and Vestas are working together to ensure that dust mitigation measures are particularly in place prior and during heavy load deliveries across the site.

Bird breeding season is coming to an end and there was not much to note on bird nesting activities during the past months. The ECoW indicated that communication with Vestas and the Principal Contractor is going well. The ECoW continues to liaise directly with the contractors' HSE, designers and planners to ensure that all parties are aware of constraints so that disturbance is avoided. Overall, disturbance has been negated without causing any significant delays to the work programme through forward planning, good communication and pre-emptive planning of activities.

Borrow pit reinstatement is ongoing and being closely monitored by the ECoW. Three borrow pit reinstatement plans have been received and reviewed by the ECoW.

Several non-reportable silt events have occurred during an intense period of heavy rainfall the week prior to the PMO visit. No exceedances of the permit thresholds were recorded in any of the events. The ECoW, RJ McLeod and Vestas are discussing how to mitigate these events as we come into winter where more rainfall events are to be expected.

#### **3.9.3 ACoW**

Condition 29 of the planning consent requires the appointment of an Archaeological Clerk of Works (ACoW) to ensure archaeological features are protected and recorded during the development. The ACoW communicated the ongoing works to the PMO on the 11<sup>th</sup> August 2023.

The ACoW described the ongoing and completed monitoring works across the site, which have focused on the cross-country cable track. The ACoW indicated that their monitoring work is now mostly complete and that their full time presence is no longer required. An archaeology reporting



system is being put into place to ensure all archaeological events are recorded and the correct steps are taken by site personnel, even in the absence of the AcoW.

### **3.10 Communication with Vestas' Package Manager**

A Teams call was held with the SSE Package Manager for the Vestas works on the 24<sup>th</sup> of August 2023. As of the 20<sup>th</sup> of August, all 103 turbines have been fully delivered and erected (including blades) with T085 being the last to be installed on 17<sup>th</sup> August. Of the 103 turbines, 74 have been mechanically completed and pre-commissioning has been completed on 41 turbines.

Cranes associated with the installation of turbines have been disassembled, some are still awaiting to be transported off site.

With the completion of turbine installation, risks associated with bird disruption significantly decreased and the need for mitigation reduced. Work associated with mechanical completion and pre-commissioning are mostly internal, however, Vestas confirmed they will continue the good communication between the SSE ECoW and contractors regarding breeding bird constraints.

### **3.11 Communication with SIC**

The PMO asked SIC if there had been any observations or complaints from members of the public regarding activities on site or as a result of the turbine component deliveries. SIC confirmed that no complaints or communications had been received during this audit period.

### **3.12 Scope of next audit**

The scope of the next PMO audit will be dependent on the specific activities undertaken at the development site in the preceding days and weeks. This is likely to include:

- Update on progress of construction works at Kergord, Mid Kame Ridge, Sandwater Road, North Compound and North Nesting, Main Compound, Nesting and Substation.
- Consideration of any comments received by the SIC or the Developer in relation to the works, including visits to view specific areas of concern.
- Observation of refuelling operation by Vestas and contractors.
- Update on the site wide reinstatement works and cable trench backfilling, and the cross-country cable route construction.
- Update on dust mitigation measures.
- Update of bird nesting.
- Update on Vestas satellite compounds with particular reference to observations made during the July and August audit visits.
- Update on borrow pit detailed reinstatement and restoration plans.
- Updates from the ACoW, ECoW and GCoW teams.

## 4. AUDIT FINDINGS AND REQUIRED ACTIONS

Issue	Auditor Comments	Required Action	Action Owner	Status
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	<p>Peat restoration areas are managed through the project Habitat Management Plan and by a dedicated HMPO which balances the geotechnical and ecological objectives of the restoration.</p> <p>Potential risks relating to storage of peat are recorded on the PRRs and communicated to the Principal Contractor to allow mitigation / monitoring to be undertaken. The PMO will request evidence in future audits to confirm compliance with requirements for GCoW and ECoW approval of proposed peat restoration areas.</p> <p>The project COSHH stores are typically used for the storage of maintenance oils and greases. The stores were all locked and the assessment for each substance was readily available in each store. The stores were bunded and no leaks or staining was observed around the stores.</p>	Maintain plastic sheet bund in refuelling area. SSE to undertake further audit of the compound.	Vestas/ Principal Contractor	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	<p>Ecological constraints identified by the ECoW team are communicated to the Principal Contractor and Developer to allow mitigation measures to be implemented and rescheduling of preparatory and construction work as required. These are also marked out by poles on the site and included on ecological sensitive plans issued to the Principal Contractor.</p> <p>Watching briefs have been undertaken by the ACoW where potential archaeological constraints are identified. Where there are known archaeological features the track is micro-sited to avoid the feature.</p>	No action required.	N/A	Green

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Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	<p>The project has received authorisation to abstract water from eight locations from SEPA. The authorisation allows the water to be used for dust suppression management. The PMO has reviewed documents confirming that the appropriate registration is in place with SEPA under The Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended.</p> <p>The project continues to improve the pollution prevention measures with additional measures installed in high risk areas (e.g. downstream of KBP02). PMO observed effective measures in place including but not limited to cut off drains, settlement ponds, silt controls, track side ditches and water pump reactor.</p>	No action required.	N/A	Green
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	Silty water has been observed being discharged for a short time into watercourses during period of heavy rainfall. This was not a long and uncontrolled continuous discharge. The levels of sediment in the water have not exceeded the permitted levels. Further mitigation has been put in place in the areas of concern.	No action required. Field testing for suspended solids determines whether further action and/or external reporting is required.	Principal Contractor and all sub-contractors	Green
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	The SSE Renewables Environmental Manager notified the PMO in March 2023 that there have been some exceedances of Environmental Quality Standards of some trace metals in water quality sampling in the Burn of Lunklet.	Investigation into the source of the trace metals is ongoing. Short-term mitigation measures have been implemented as per the SEPA accepted mitigation plan with long-term mitigation strategy progressing.	VEWF	Amber

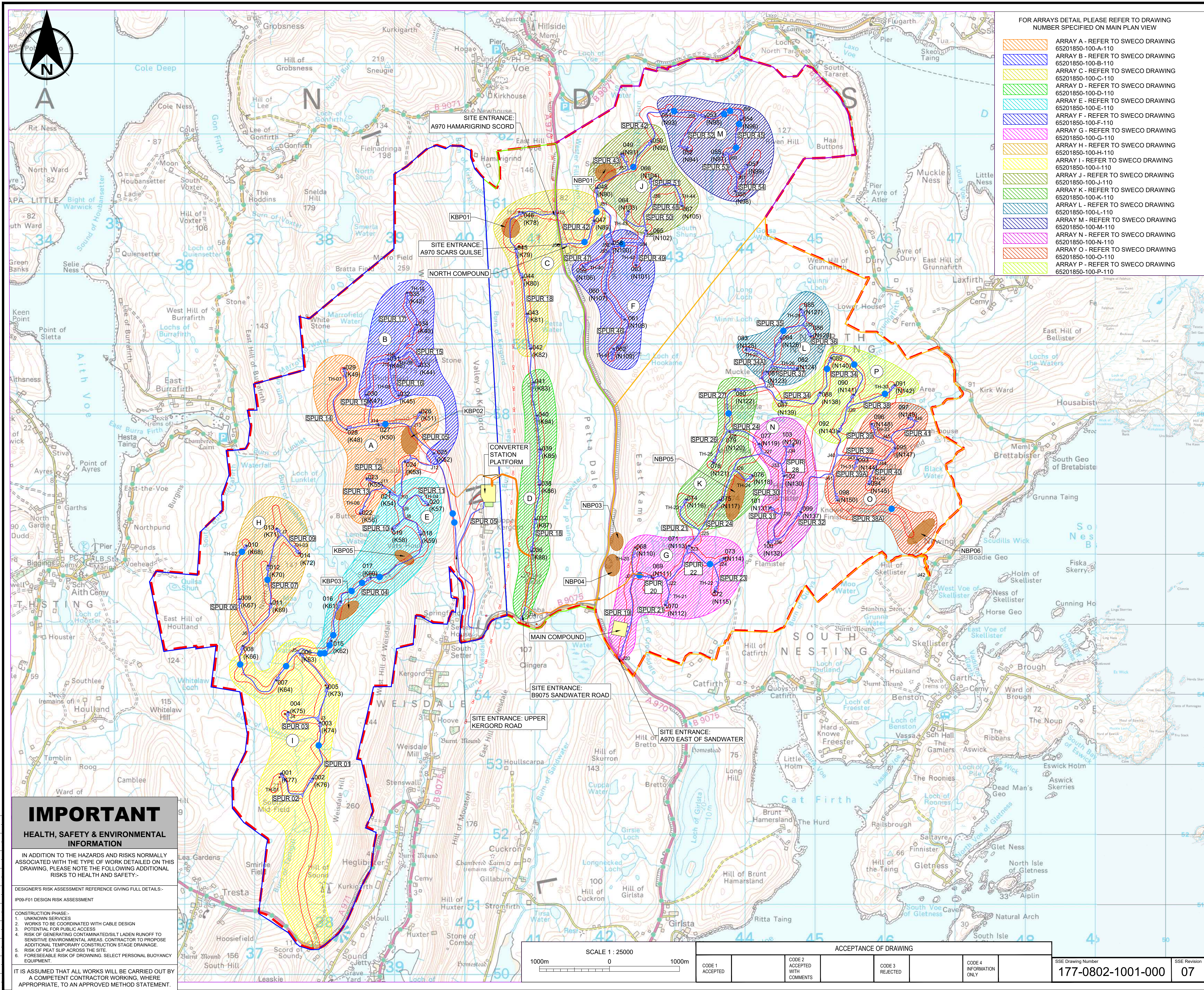
## VIKING ENERGY WIND FARM

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Waste (e.g. use of spill kits and littering)	During the audit the PMO observed the plastic sheeting present on the walls of the fuel storage bunded area at the Vestas Satellite compound to be damaged. A direct breach in the floor of the refuelling area was observed. This however did not result in any spill or environmental incidents.	Replacement of damage plastic sheeting required.  Good maintenance and care of plastic sheeting during operations required.  SSE to conduct audit of the compound to ensure this is carried out before the next PMO audit.	Vestas	Amber
Noise, Dust, and Air Quality	No complaints regarding dust had been received by SIC during the audit period.	Continued monitoring of dust conditions and implementation of control measures as needed; and ongoing liaison as required with other construction operators.	N/A	Green
Resources, Waste and Transport.	The project manages wastes through a Site Waste Management Plan, the plan identifies the contractors transferring the waste and the disposal sites. Documents are retained in line with regulatory requirements.	No action required.	N/A	Green
Pre-Planning Works (e.g. site set-up and general management, access tracks, community liaison).	Evidence of pre-planning works observed and reported during the audit included archaeological watching brief, nesting bird surveys, community liaison. Potential constraints are identified and suitable mitigation measures implemented to prevent negative impacts.	No action required.	N/A	Green

## **APPENDIX 1**

### **SITE LOCATION PLAN, PEAT RESTORATION PLAN AND PHOTOLOG**





FOR ARRAYS DETAIL PLEASE REFER TO DRAWING  
NUMBER SPECIFIED ON MAIN PLAN VIEW

- ARRAY A - REFER TO SWECO DRAWING 65201850-100-A-110
- ARRAY B - REFER TO SWECO DRAWING 65201850-100-B-110
- ARRAY C - REFER TO SWECO DRAWING 65201850-100-C-110
- ARRAY D - REFER TO SWECO DRAWING 65201850-100-D-110
- ARRAY E - REFER TO SWECO DRAWING 65201850-100-E-110
- ARRAY F - REFER TO SWECO DRAWING 65201850-100-F-110
- ARRAY G - REFER TO SWECO DRAWING 65201850-100-G-110
- ARRAY H - REFER TO SWECO DRAWING 65201850-100-H-110
- ARRAY I - REFER TO SWECO DRAWING 65201850-100-I-110
- ARRAY J - REFER TO SWECO DRAWING 65201850-100-J-110
- ARRAY K - REFER TO SWECO DRAWING 65201850-100-K-110
- ARRAY L - REFER TO SWECO DRAWING 65201850-100-L-110
- ARRAY M - REFER TO SWECO DRAWING 65201850-100-M-110
- ARRAY N - REFER TO SWECO DRAWING 65201850-100-N-110
- ARRAY O - REFER TO SWECO DRAWING 65201850-100-O-110
- ARRAY P - REFER TO SWECO DRAWING 65201850-100-P-110

NOTES

- CONTAINS ORDNANCE SURVEY DATA RECEIVED FROM SSE ON 27.08.2020.
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
- TURBINE LOCATIONS BASED ON: "VIKING MICROSITING TRACKER" DATED 24.07.2020.
- ACCESS TRACKS AND HARDSTANDINGS BASED ON SSE LAYOUT: "S115056-TG-XX-XX-M3-C-1000\_ALL\_SPURS\_HARDSTANDS-P01". ARRAY LAYOUTS SUBJECT TO VALUE ENGINEERING DESIGN BY RJM.
- FOR CULVERT CATCHMENT ASSESSMENT REFER TO SWECO DRAWING 65201850-100-101.

LEGEND

- SITE PLANNING BOUNDARY
- PROPOSED NEW TRACK
- PROPOSED CONSTRUCTION COMPOUND
- PROPOSED COMPOUND
- PROPOSED BATCHING PLANT
- BORROW PIT SEARCH AREA
- PROPOSED WTG LOCATION
- AREA 1 - WEST (KERGORD)
- AREA 2 - RIDGE (KERGORD CENTRAL)
- AREA 3 - EAST (NESTING SOUTH)
- AREA 4 - NORTH (NESTING NORTH)
- PROPOSED WATERCOURSE CROSSING
- 50m MICROSITING
- SANDWATER ROAD
- CROSS COUNTRY CABLE ROUTES
- ARRAY GROUPS

05	16.01.23	FOR CONSTRUCTION SSE REV07	AF	RE	RY
04	27.01.22	FOR CONSTRUCTION SSE REV06	BH	RP	CM
03	07.07.21	FOR CONSTRUCTION SSE REV05	BH	RP	KS
02	08.06.21	FOR CONSTRUCTION SSE REV04	BH	RP	KS
01	23.02.21	FOR CONSTRUCTION SSE REV03	BH	RP	KS

Rev. Date Amendment Details Drawn Chk'd App'd

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Client  
Drawing Status  
FOR CONSTRUCTION

Project Title  
VIKING WIND FARM

Drawing Title  
SITE GENERAL ARRANGEMENT

Scale	Designed	Drawn	Checked	Approved
1:25000	RV	RV	RP	KS
Original Size	Date	Date	Date	Date
A1	11.09.20	11.09.20	17.09.20	17.09.20

Drawing Number  
65201850-100-100

Revision  
05

IMPORTANT

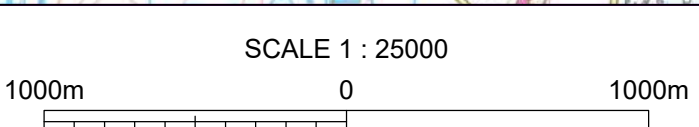
HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING ADDITIONAL RISKS TO HEALTH AND SAFETY:-

DESIGNER'S RISK ASSESSMENT REFERENCE GIVING FULL DETAILS:-  
IP09-F01 DESIGN RISK ASSESSMENT

- CONSTRUCTION PHASE:-
- UNKNOWN SERVICES
  - WORKS TO BE COORDINATED WITH CABLE DESIGN
  - POTENTIAL FOR PUBLIC ACCESS
  - RISK OF GENERATING CONTAMINATED/SILT LADEN RUNOFF TO SENSITIVE ENVIRONMENTAL AREAS. CONTRACTOR TO PROPOSE ADDITIONAL TEMPORARY CONSTRUCTION STAGE DRAINAGE.
  - RISK OF PEAT SLIP ACROSS THE SITE.
  - FORESEEABLE RISK OF DROWNING. SELECT PERSONAL BUOYANCY EQUIPMENT.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.



ACCEPTANCE OF DRAWING

CODE 1 ACCEPTED	CODE 2 ACCEPTED WITH COMMENTS	CODE 3 REJECTED	CODE 4 INFORMATION ONLY
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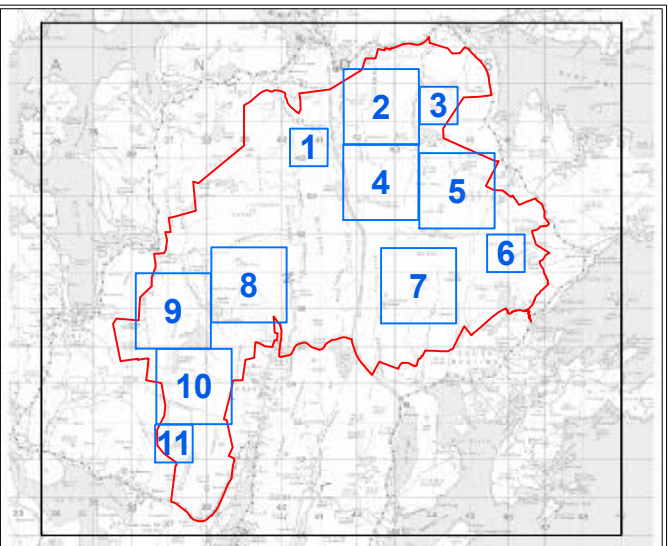
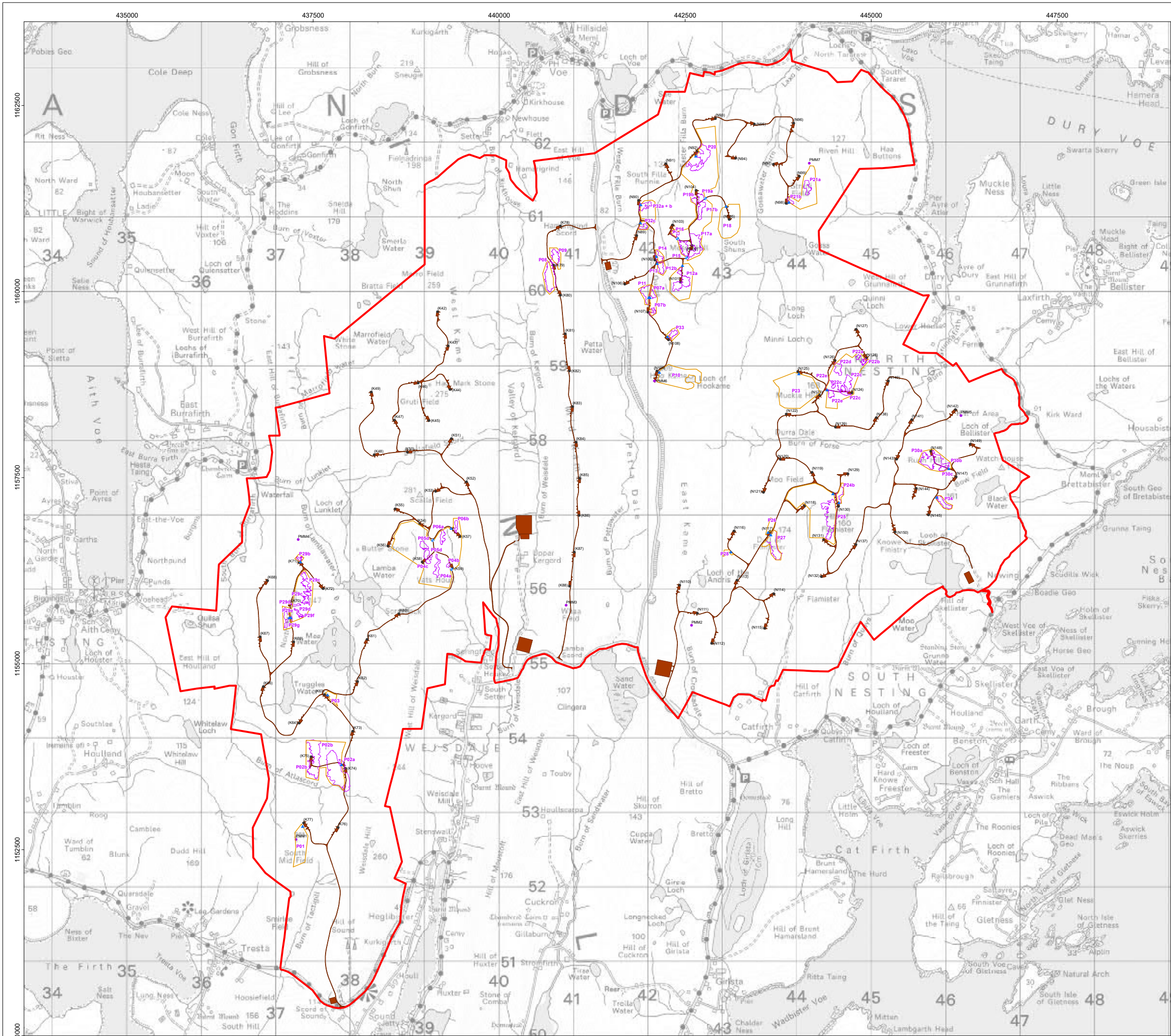
SSE Drawing Number

177-0802-1001-000

SSE Revision

07



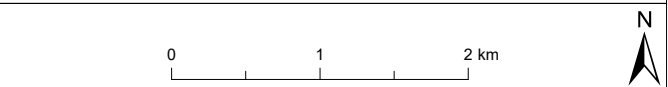


### Legend

- Site Boundary
- Turbine
- Permanent Met Mast
- Indicative Cattle Grid Location
- Indicative Gate Location
- Fencing
- HMP Phase 1 - Areas of Peat Deposition and Profiling
- Microsited Site Layout

Note 1: Phase 1 areas beyond the fence line are to allow cable laying and access.

Note 2: Areas within the fence line not noted as HMP Phase 1 will be subject to Phase 2 Technique considerations.



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Project Name

## VIKING ENERGY WIND FARM

### Drawing Title

## PEAT RESTORATION

Rev	Date	Remarks	Drwn	Chkd
R0	23/02/2021	First Issue	TD	EM
R1	12/01/2022	Revised HMP	AM	DM
R2	04/02/2022	Fencing boundary changes, gates and cattle grids added	AM	DM

Drawing Number  
LN000046-VIK-ENV-SK-0040-01

Scale 1:18,000 Plot Size A0 Datum OSGB36 Projection BNG

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**Photo 1.** Backfilling cables in Kergord Area



**Photo 2.** Sheetting in poor condition within refuelling bund in Vestas Compound

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023





**Photo 3.** Sheeting in poor condition within refuelling bund in Vestas Compound



**Photo 4.** Removal of blade finger and reprofiling at T026

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023



**Photo 5.** Lining of drainage gullies from KBP02



**Photo 6.** Settlement Ponds

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023





**Photo 7.**

Cable trench backfilling on the cross-country route from Mid Kames Ridge to the substation



**Photo 8.**

Cable trench backfilling on the cross-country route from Mid Kames Ridge to the substation

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023



**Photo 9.** Cable trench backfilling on the cross-country route from mid Kames Ridge to Sandwater Road



**Photo 10.** Land drains draining towards the Droswell Burn

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023





**Photo 11.** Plant nappies on energising generators



**Photo 12.** Plant nappies being used in North Compound

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023



**Photo 13.** Plastic waste removed



**Photo 14.** Skips labelled

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023





**Photo 15.** Using peat from temporary peat storage in NBP01



**Photo 16.** Silt fences at Junction 57 in North Nesting

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023



**Photo 17.** Reprofilng and hydroseeding of embankment at Spur 52 in North Nesting



**Photo 18.** Plant nappies being used in substation laydown area

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023





**Photo 19.** Land to the north of the substation has been reprofiled

<b>Title:</b> Photographic Log	<b>Client:</b> Viking Energy Wind Farm
<b>Site:</b> Viking Energy Wind Farm	<b>Date:</b> 16 <sup>th</sup> August 2023