Intended for
Viking Energy Wind Farm LLP

Date
July 2023

Project Number
1620009158

VIKING ENERGY WIND FARM
PLANNING MONITORING OFFICER AUDIT REPORT 033: 19TH JUNE TO 20TH JULY 2023

RAMBOLL

VIKING ENERGY WIND FARM
PLANNING MONITORING OFFICER AUDIT REPORT
033: 19TH JUNE TO 20TH JULY 2023

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1. AUDIT DETAILS

1.1 Audit Details

Audit Number	PMO 033
Location	Kergord Mid Kame Ridge Main Construction Compound Nesting North Compound
Weather Conditions	overcast, wet (10°C).
Audit Date	19th July 2023
Audit Period	19th June– 23th July 2023
Audit Owner	Ramboll UK Ltd

1.2 Distribution

Position	Action
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 24th of May 2019.

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

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

[1] Shetland Islands Council Planning Reference No: 2018/096/PFF
[2] Shetland Islands Council Planning Reference No: 2019/079/PPF
[3] Shetland Islands Council Planning Reference No: 2019/188/PPF
[4] 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 Turbine Site Manager, SIC Planning Enforcement Officer as undertaken on the 19th of July 2023. The site visit included the observation of the following locations:
  - Kergord;
  - Sandwater Road;
  - Mid Kames Ridge;
  - Main Compound;
  - North Compound; and
  - 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, turbine erection, capping of hardstanding and reinstatement.

3.1.2 Observations

In this area, all of the 35 turbine pre-installations have been completed and of these 32 have been fully constructed by the end of this audit period.

Cross country cable trench cable laying activities and backfilling from Kergord to the Substation has been completed, with cable laying ongoing across Kergord.

KBP05 is being used by Vestas as satellite compound and was observed during the visit. The compound appeared tidy and in good order (photo 1). Fuel cells and a petrol bowser were observed within a newly formed bunded area covered by plastic sheeting with stones placed on top (photo 2). The plastic sheeting was observed to be damaged on the walls of the bund at two locations (one location shown in photo 3). The damage noted on the sheeting appeared to be where it had been torn to allow it to fit into the vertical corners. This does not compromise the integrity of the underlying material, however the plastic sheeting should be replaced where damaged and care should be taken during operations to prevent any damage. Observation of this area should form part of the next PMO audit. It was also noted that the plastic sheeting on top of the bund was weighted down by rocks placed onto the sheeting (photo 2, 3). Although this is not considered to represent a risk, the use of more robust weighting measures would improve the area and should be considered.

During the visit, RJ McLeod was observed to be preparing for refuelling on a steep section of the track between junction 12 and T024. The operator however relocated, but the refuelling operation was not observed. The CEMP and RAMS on fuel handling should continue to be clearly communicated to all operators to ensure compliance, with tool box talks and monitoring of refuelling operations undertaken on a daily basis. The observation of refuelling operations should form part of the next PMO audit.

The reinstatement works at T026 were observed during the visit, with peat capping on-going (photo 4). A system of ponds has been created downgradient from T026 hardstanding (photo 5) to help increase the pH of the water runoff. The pH of the water continues to be monitored.

During the visit, KPBP02 was observed. Peat capping has been undertaken in the northeast section of KBP02. This was completed as part of the reinstatement works agreed with SEPA to address the production of oxidised metallic elements entering the Burn of Lunklet system.

It appears that anaerobic conditions are having a positive impact, and monitoring continues. To improve the anaerobic cover, a request has been made to increase the capping thickness if

excess reinstatement peat is available. Drainage channels on spur 5 between KBP02 and junction 13 were observed to be working well (photo 6).

Peat from the temporary storage in the main body of the borrow pit was being taken for backfilling of cable trenches and reinstatement works elsewhere on site (photo 7). The reinstatement plans for the main body of KBP02 are still under consideration.

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 turbine erection along MKR, cross-country cable trench backfilling and cable laying works from T036 to the substation.

3.2.2 Observations

In this area, all 11 turbine pre-installations have been completed and of these 8 have been fully constructed by the end of this audit period.

On the MKR, cable laying activities and backfilling were observed to take place south of T036 during the visits (photo 8).

Pre-energisation checks were observed to be taking place at T041, with the presence of a generator at the base of the turbine (Photo 9). This was also observed at T040 and at a number of other turbines. Although the generators are double skinned, plant nappies are required to be used. It was noted that plant nappies were missing at a few locations. This was discussed with SSE who indicated that Vestas were having supply issues in receiving the last of the required plant nappies, but the delivery of these were expected imminently. A check of plant nappy usage during pre-energisation operations should form part of the next PMO audit visit.

The cross-country cable trench was observed from a distance. It is understood that cable laying activities from MKR to the Substation are on-going.

Backfilling operations were observed along the Sandwater track during the visit (photo 10), with backfilling of the cable trench in the upper areas and backfilling of the trench and track in the lower part by the Burn of Pettawater.

A silty water incident occurred on the 15th of July 2023. Bad weather was being anticipated and RJ McLeod had made provision for resources to be on hand and on stand-by from 7:00 on the day of the incident. Around midday on the 15th of July, the silty water mitigation measures at the Sandwater Road works were unable to cope with the volume of water runoff generated. As the cable trench excavation was open, it resulted in silty water being released in Sandwater Loch. RJ McLeod made attempts to address the issue but the volume of water was overwhelming. The SSE ECoW team were in attendance during the event and provided input and assistance. Field samples were taken to establish the concentration of suspended solids/turbidity which exceeded the threshold for reporting to SEPA. In keeping with the requirements in the Construction Site License, RJ McLeod notified SEPA of the incident and SEPA visited the incident the following day noting satisfaction that the issue had abated. By the next morning, no visible impact to the Loch water could be observed. The incident was further discussed during the site visit. 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 risk of further incidents will be greatly lessened by the completion of

the backfilling of the cable tracks, which RJ McLeod are making efforts to expedite. The next audit visit should include observations in this area.

Separate to the incident of the 15th July, SIC received a complaint on 1st July 2023 of a suspected silty plume in Sandwater Loch which was refuted as being due to VEWF construction works. Thiswas also discussed during the site visit. The project team is very aware of the risks in this area and an RJ McLeod environmental representative was onsite throughout the day on the 1st of July to monitor the situation. Throughout the day, and around 16:00 (a period when the rain was at its most intense), no indication of an obvious release of silty water from works was noted by the RJ McLeod environmental representative. Following the complaint received by SIC, checks were carried out on the potentially obvious source, that being the newly "sanded" cable trenches. Although some movement was noted locally, the mitigation measures were containing this, and there was no observed loss of sedimentary material from this source to Sandwater Loch. Another possibility may have been the wash out of fines material from the stone recently installed to create the cable route. However observations of the pathways did not indicate that to have been the case. It was noted that one sump was in danger of being overwhelmed and the pumping set up was reconfigured to deal with this.

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. Two generators were observed to be placed over opened metal drip trays (photo 11), these should be replaced with plant nappies as per the CEMP requirements.

Covers for the end of nacelles were observed to be piled behind the skip area (photo 12). The plastic waste was loose and although heavy, was observed to be prone to being caught by strong wind. The plastic waste should be appropriately stored in skips. Additional plastic skips will be required. This is to be assessed during the next PMO site audit.

All skips (except 1) were clearly labelled (Photos 13), which appeared to be for plastic (Photo 14). During an SSE internal audit prior to the PMO July audit visit, it was noted that one skip was not labelled and was notified through the raising of a Safety Observation Card. SSE is to follow up on action taken. IBCs and fuel tanks were bunded. No activity was taking place at the compound during the visit.

it be noted that the observations noted had been picked up in an SSE audit of the compound and SSE are continuing to work with Vestas to have the issues resolved.

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 progression and backfilling of the cable trenches, and turbine erection.

3.4.2 Observations

This area was not observed during this PMO audit. It is understood that all of the 21 turbine pre-installations have been completed and that 18 turbines have been fully constructed by the end of this audit period.

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

Vestas have set up site offices and welfare facilities across the car park, opposite the original offices and welfare facilities.

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 progression of cable trench backfilling, cabling, and reprofiling work at borrow pit NBP05.

3.6.2 Observations

All 36 turbine pre-installation at South Nesting area have been completed, with 13 turbines fully constructed by the end of this audit period.

During the visit, T069 pre-installation had been completed and was awaiting final construction, with the remaining turbine components stored on the hardstanding (Photo 15). At T075, a crane was observed to be present, with components at the base waiting to be lifted. Spill kits were noted to be present by the crane (photo 16).

Cable trench backfilling is ongoing across Nesting. During the visit, backfilling of cable trenches was observed by T071 with whin-dust being brought in for placement on top of the cables (photo 17).

Material processing was ongoing at NBP05 at the time of the audit (photo 18). The review of borrow pit restoration plans for NBP05 is on-going.

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 substation was not visited during this PMO audit. It was observed from a distance from Upper Kergord Road (Photo 19). It was noted that the majority of the works have now been completed at the substation. On-going reinstatement works could be observed directly west and south of the substation during the visit.

3.8 Off site activity/ turbine component delivery convoys

Turbine component delivery off site was not observed during the PMO audit. It is understood that no correspondence from the public regarding abnormal load convoys have been received, indicating that the management plan and communications protocols are working 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 17th of July 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 the 14th July 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 especially given the recent dry period. 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 well underway, with some fledging having already observed. The ECoW indicated that communication with Vestas and the Principal Contractor is going well. He indicated that Vestas agreed to modify their turbine erection schedule to minimise disturbances to nesting birds. Screens installed to provide a screen between ground works and red-throated diver nesting

lochans will stay in place until completion of the works in this area. 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 but remain outstanding for geotechnical comment as this has not been returned by RJ McLeod.

The Sandwater Loch silt event on 15th July occurred after the discussion between the PMO and the ECoW took place, however follow up discussions allowed the PMO to understand the circumstances leading to the event, and the monitoring and investigation undertaken.

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 14th July 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 should be complete in the next two weeks, however they were waiting to hear from the main contractors as to whether they may still be needed onsite.

3.10 Communication with Vestas' Package Manager

A Teams call was held with the SSE Package Manager for the Vestas works on the 17th of July 2023. As of the 17th of July, 67 turbines have been fully erected (including blades), with the western section nearly complete. In terms of delivery, most of the abnormal loads have been delivered (with 48 still to be delivered, consisting of blades and tower sections).

SSE confirmed that good communication between the ECoW, Vestas and contractors continues. Nesting birds continue to present a potential constraint to turbine erection works, however good communication has allowed to prevent any disturbances to birds and minimal disruption to the work programme. Vestas modified the construction sequence for the lower half of the MKR to minimise disturbances to nesting birds.

Review and refinement of contractors fuel storage and handling RAMS have taken place, and contractors RAMS are now in keeping with CEMP requirements.

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 it had received one complaint relating to silt being observed in Sandwater Loch on the 1st of July 2023. This was responded to by SSE as detailed in section 3.2.2 of this report.

During the PMO visit, the complaint and the silt incident which occurred on the 15th July 2023 were discussed with all parties. The mitigation measures in place to limit impact to the Loch were audited, and further discussion took place around possible improvement/ways to limit silt entrainment, as detailed in section 3.2.2 of this report.

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 cable track areas, 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 audit visit, delivery schedule and turbine erection.
- 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).	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. 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. 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.	No action required	Principal Contractor	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites, archaeology and site restoration).	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. 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.	No action required.	N/A	Green

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	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. 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.	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

Issue	Auditor Comments	Required Action	Action Owner	Status
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	During the audit the PMO observed spill kits to be well stocked and readily available in areas where liquids are stored. SSE have carried out their own audits on spill kits and refuelling processes when Vestas contractors have been conducting the lifts. This is to be continued, to ensure that refuelling operations across all areas are compliant with the CEMP and approved RAMS on fuel handling.	Toolbox talk to remind contractors of refuelling procedures and refuelling procedures monitoring required.	Principal Contractor and all sub contractors	Amber
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. 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.	Vestas	Amber
Pollution Prevention and Waste (e.g. use of spill kits and littering)	During the audit the PMO observed plant nappy to not be used by Vestas' contractor under generator for the pre-energising checks. This however did not result in any spill or environmental incidents. Open metal drip trays were observed to be used at the Vestas Satellite compound. This however did not result in any spill or environmental incidents.	Toolbox talk to remind contractors of refuelling procedures and refuelling procedures monitoring required. No open drip tray to be used. Plant nappies to be placed under all static plant.	Vestas	Amber

Issue	Auditor Comments	Required Action	Action Owner	Status
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
Resources, Waste and Transport.	Loose plastic waste observed at the Vestas North compound requires to be placed in skips. Plastic skip observed at the Vestas North compound to not be labelled.	Loose plastic waste identified to be placed in skips. Labelling of all skips present on site required.	Vestas	Amber
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

1. CONTAINS ORDNANCE SURVEY DATA RECEIVED FROM SSE ON 27.08.2020.
2. ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
3. TURBINE LOCATIONS BASED ON: "VIKING MICROSITING TRACKER" DATED 24.07.2020.
4. 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.
5. 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
- (A) ARRAY GROUPS

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

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SWECO

Client: SSE Renewables; RJ McLEOD; viking energy — Harnessing Shetland's natural resources

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: A1	Date: 11.09.20	Date: 11.09.20	Date: 17.09.20	Date: 17.09.20

Drawing Number: 65201850-100-100 — Revision: 05

SSE Drawing Number: 177-0802-1001-000 — SSE Revision: 07

SCALE 1 : 25000

1000m 0 1000m

ACCEPTANCE OF DRAWING

CODE 1 ACCEPTED		CODE 2 ACCEPTED WITH COMMENTS		CODE 3 REJECTED		CODE 4 INFORMATION ONLY	

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:-

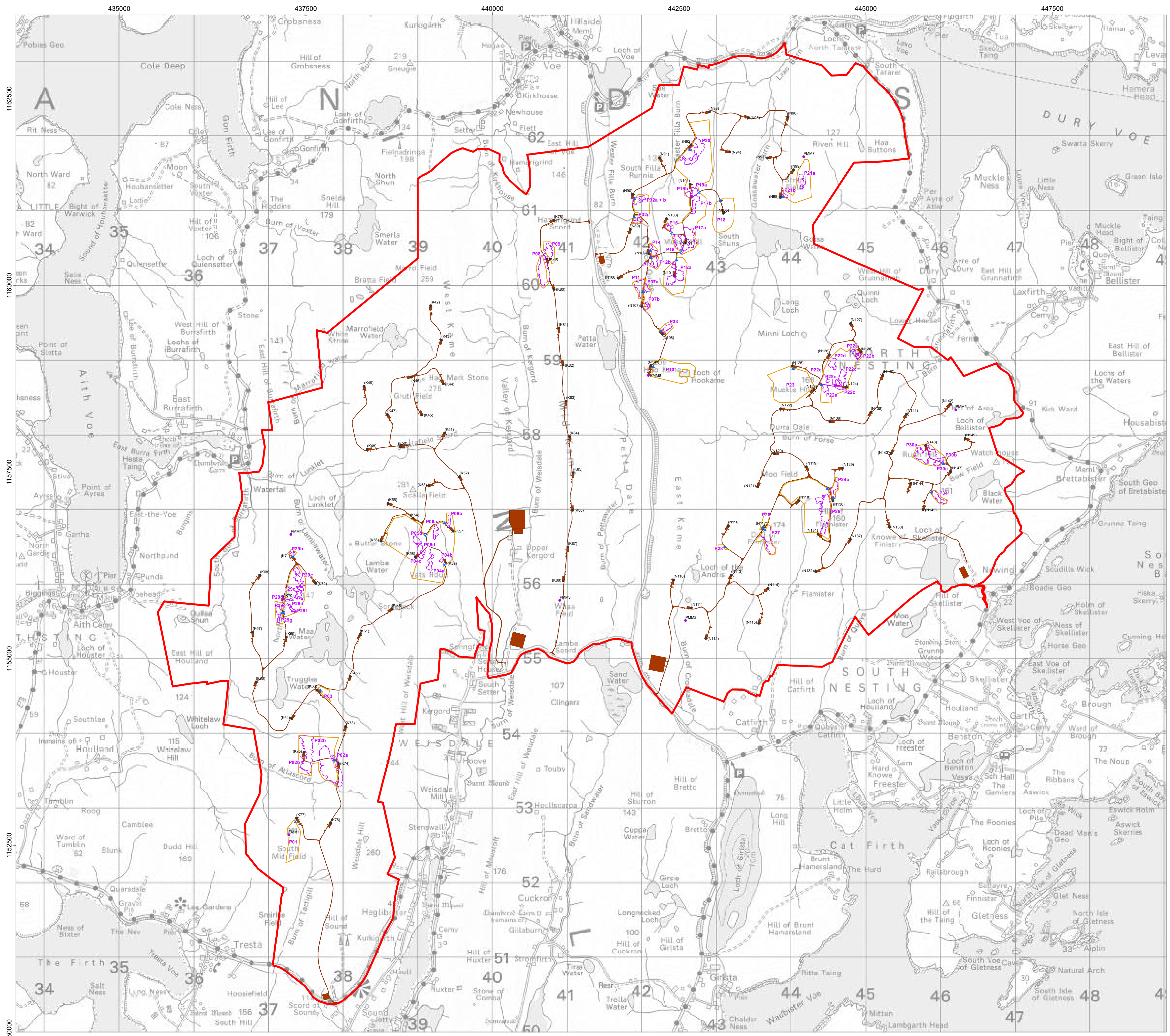
DESIGNER'S RISK ASSESSMENT REFERENCE GIVING FULL DETAILS:-

IP09-F01 DESIGN RISK ASSESSMENT

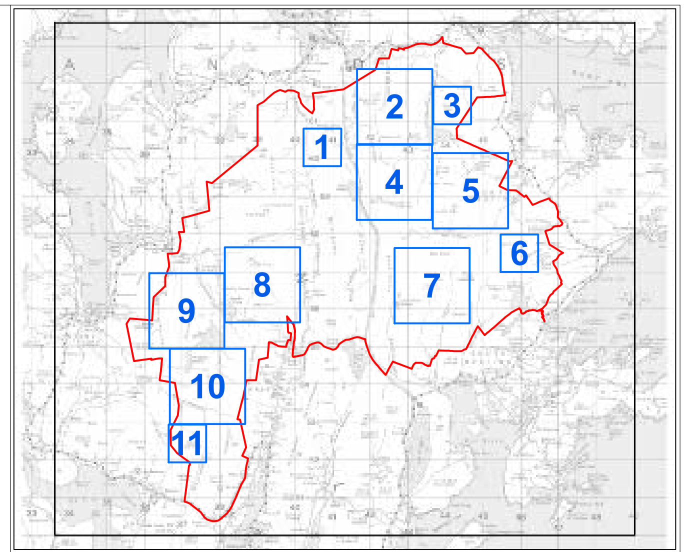
CONSTRUCTION PHASE:-
1. UNKNOWN SERVICES
2. WORKS TO BE COORDINATED WITH CABLE DESIGN
3. POTENTIAL FOR PUBLIC ACCESS
4. RISK OF GENERATING CONTAMINATED/SILT LADEN RUNOFF TO SENSITIVE ENVIRONMENTAL AREAS. CONTRACTOR TO PROPOSE ADDITIONAL TEMPORARY CONSTRUCTION STAGE DRAINAGE.
5. RISK OF PEAT SLIP ACROSS THE SITE
6. 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.

\\...\04 Deliverables Management\Drawings\Working\1_General_Infrastructure\ (working) 65201850-100-100_Site_General_Arrangement.dwg



File ref: E:\PORTFOLIO\01_Onshore_Wind\01_Development\Viking\Drawings\02_Environmental\Sketches\0040_PeatRestorationAreas\LN000046-VIK-ENV-SK-0040-01-PeatRestorAreas-R02-A0.mxd



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.

0 1 2 km

N

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

Photo 1. Vestas Satellite compound at KBP05

Photo 2. Bunded area within Vestas Satellite compound at KBP05

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 3. Damaged wall of bunded area plastic sheeting within Vestas Satellite compound at KBP05

Photo 4. Peat capping at T026

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 19th July 2023

Photo 5. Pond system at T026

Photo 6. Drains on spur 5 between KBP02 and junction 13

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 7. Temporary peat storage at the back of KBP02

Photo 8. Cable laying and trench backfilling operations south of T036

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 19th July 2023

Photo 9. On-going pre-energisation checks at T041

Photo 10. On-going backfilling works along the Sandwater track

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 11. Open drip tray at Vestas North compound

Photo 12. Loose plastic waste at Vestas North Compound

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 13. Labelled skips at Vestas North Compound

Photo 14. Plastic skip unlabelled at Vestas North Compound

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 15. View of partial construction at T069, with turbine components at the base

Photo 16. Crane at T075 with spill kits in place and turbine components at the base waiting to be lifted

Title:	Photographic Log	**Client:**	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	**Date:**	19th July 2023

Photo 17. Cable trench backfilling by T071

Photo 18. Material process at NBP05

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 19th July 2023

Photo 19. Substation observed from Spur 5 on approach to Upper Kergord

Title: Photographic Log	**Client:** Viking Energy Wind Farm
Site: Viking Energy Wind Farm	**Date:** 19th July 2023