Intended for

Viking Energy Wind Farm LLP

Date

May 2022

Project Number

1620009158

VIKING ENERGY WIND FARM PLANNING MONITORING OFFICER AUDIT REPORT 019: 16TH APRIL 2022 TO 20TH MAY 2022



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1. AUDIT DETAILS

1.1 Audit Details

Audit Number	PMO 019
Location	Kergord
	Sandwater Road
	Mid Kame Ridge
	North Compound
	North Nesting
	Main Construction Compound
	Nesting
	Substation
Weather Conditions	Windy, Dry with sunshine (11°C).
Audit Date	18 th May 2022
Audit Period	16 th April 2022 to 20 th May 2022
Audit Owner	Ramboll UK Ltd

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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
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 24^{th} May 2019.

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

- Construction of the Kergord Access Track¹ (consented on 29th April 2019).
- Re-alignment of Sandwater Road² between the Burn of Weisdale and the junction with the A970 to facilitate construction access for the Viking Wind Farm (consented on 26th 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 9th 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.

 $^{^{}m 1}$ 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 Audits 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.
 - A complaint surrounding the dust generated by construction vehicles using the access tracks during the dry conditions observed on Shetland during the last audit period.
- 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 Site Manager, RJM
 Environmental Clerk of Works and SIC Planning Enforcement Officer undertaken on 18th May 2022 which included the following locations:
 - Kergord;
 - Sandwater Road;
 - Mid Kame Ridge;
 - North compound;
 - Main Compound; and
 - Nesting;
- Discussions were held with the Geotechnical Clerk of Works (GCoW), Environmental Clerk of Works (ECoW) and Archaeological Clerk of Works (ACoW).

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		
SSE Renewables	Environmental Advisor		
RJ McLeod	Design Engineer		
Tony Gee and Partners	Geotechnical Clerk of Works		
MBEC	Environmental Clerk of Works		
Headland Archaeology	Archaeological Clerk of Works		

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.

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 in this area during the audit included progression of access tracks and peat restoration areas, rock extraction at borrow pits and formation of crane pad hardstanding areas.

3.1.2 Observations

The construction of tracks and bases has continued across the arrays with steelwork and concrete pouring, and the backfilling of bases ongoing (Photo 1). Installed drainage measures are of good quality and preventative mitigation will continue to be installed as turbine base and hardstanding excavation continue (Photo 2). Track construction is progressing towards K68 with peat and turf stripping noted (Photo 3).

The PMO observed the backfilling of the base at K62, including the installation of cable and cable ducting and advancement of the track (including drainage) from Junction 6 to K68.

3.2 Sandwater Track

3.2.1 Site Setting and Activities

A track has been constructed at Sandwater, located at the southern limit of the central site area, which provides access to the Kergord and Mid Kame Ridge wind farm areas for all construction traffic. The new track is located adjacent to the existing Sandwater Road (B9075), which remains operational for public traffic until handover of the New Sandwater Road at project end.

The Sandwater Loch is located directly to the south of the site boundary. Sandwater Loch is designated as a Site of Special Scientific Interest (SSSI)⁵, notified for 'Open Water Transition Fen' and 'Mesotrophic Loch' habitats.

3.2.2 Observations

No new observations on Sandwater Track to be reported.

3.3 Mid Kame Ridge

3.3.1 Site Setting and Activities

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

Cable trench excavation, the laying of the base material (site won aggregate) and the laying of the cables was being undertaken during the audit.

 $^{^{\}rm 5}$ As notified under the Nature Conservation (Scotland) Act 2004

3.3.2 Observations

Cable trench excavation on MKR including landscaping and drainage installation (Photo 4) was ongoing to the south of the cable trench. "Whin-Dust" (site-won fine graded dust for cable bedding) was being imported and rolled to create a 75 mm bedding for the cables (Photo 5). The cables (installed in three phase arrays) and the fibre optic cables were being laid and connected to the turbine bases in preparation in the central and north of the cable trench (Photo 6).

All turbine bases at MKR have been backfilled. Junction 18, entrance to MKR from Sandwater Road has been widened, as per approved plans.

3.4 North Compound

3.4.1 Site Setting and Activities

The North Compound is located towards the northern limit of the site on the eastern side of the A970. At the North Compound batching plant 1 and 2 are in place.

3.4.2 Observations

The PMO visited the North Compound during the audit.

The fuel storage at the compound was noted to be in good order, with spill kit provided.

PMO 18 noted that the waste skips within the northern compound were note labelled consistency. During this visit the skips were labelled with labels on the skips themselves, and additional signage on wooden posts in front of the skips (Photo 7).

IBCs were being stored on the compacted stone surface, and not on designated hardstanding (Photo 8). The Developer informed that the IBCs were filled with an additive for the concrete mixing. Since there had been limited cement deliveries during the past month (due to production lines being switched off for maintenance by the supplier), the additives had not been used and there was currently a surplus. The Developer and the PMO agreed that temporary bunding would be necessary to mitigate the risk from potential spills from the IBCs reaching the ground.

3.5 North Nesting

3.5.1 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. Track and bridge construction, peat restoration, reinstatement, crane pad hardstanding formation and cable trench excavation were being undertaken during the audit.

3.5.2 Observations

North Nesting was not visited during this PMO inspection.

3.6 Main Compound

3.6.1 Site Setting and Activities

The Main Compound is located at the southern extent of the development 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.

3.6.2 Observations

The car parking, site offices and welfare facilities are functioning well. All materials are stored according to regulations. No evidence of leaks or staining was observed in the vicinity of the store. All waste skips are clearly labelled.

3.7 Nesting

3.7.1 Site Setting and Activities

The Nesting arrays are accessed from the A970. Activities in this area during the audit included progression of access tracks, bridges and peat restoration areas, cable trench excavation, rock extraction at borrow pits and formation of crane pad hardstanding areas.

3.7.2 Observations

A track had been constructed to access the future cross country cable route that will eventually connect North Nesting to the substation. The turf and peat had been removed and segregated, storing them separately ready for re-use (Photo 9).

Localised surface movement was observed surrounding borrow pit NBP05 (Photo 10). The movement was believed to have happened during a period of heavy rain after a dry spell. It was also noted that material was placed on top of the edges of the borrow pits prior to the movement, which may also have contributed to additional loading on the peat edges. The movement was made safe and the area will be reprofiled. Internal discussions between RJ McLeod, SSE and the Geological Clerk of Works have established the root cause and agreed measures to ensure a repeat does not occur. This will continue to be monitored throughout the PMO visits.

As part of a programme of educational visits to the windfarm, the base at N112 has been partially poured in order to give visitors a view of the construction of a base (Photo 11). This is supplemented with information boards describing why and how Viking is being built. The programme of school visits has had a positive effect with the majority of primary schools taking up the project's invitation to come along and learn all about the project.

3.8 Substation

3.8.1 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. Activities in this area included construction of building frame, cladding and pre-cast equipment foundations.

3.8.2 Observations

The substation was not visited during this PMO inspection

3.9 Communication with SIC

As described in Section 2.2, SIC advised the PMO of a public complaint that had been received regarding the dust generated by construction vehicles using the access tracks at Kergord during dry weather.

The Developer explained that the Principal Contractor were currently capping the access tracks with graded stone which contains less fines, and therefore less potential for dust. Weather conditions are reviewed daily, and dust mitigation, such as dampening down with water bowsers,

remained to be undertaken as required on the site. The mitigation is targeted specifically on the day's activities e.g. concrete pours, and movement of quarried material for the cable trenches.

The Developer has provided detailed response to SIC which will then be communicated to the relevant parties.

3.9.1 Desk-based Audit

SIC has requested the PMO to check the Developer's compliance with the terms of approvals given under Condition 8 and Condition 13 of the deemed planning permission.

The PMO has completed a desk-based audit of the following documents:

- Borrow Pit Management Plan (including handling of overburden; drainage measures; Ground Investigation Summary; General GWDTE Protection measures; Programme of implementation and reinstatement);
- Borrow Pit Method Statement;
- Written approval from SIC on the discharge of Condition 8 (Borrow Pit Working Scheme);
- Blasting Schedule;
- · Blasting Report (including vibration monitoring); and
- Written approval from SIC on blasting delays.

The Principal Contractor confirmed that there are active works in KBP02, KBP03, KBP05, NBP01 and NBP05.

Following the desk-based audit, the PMO is satisfied that the Developer has complied with the terms of approvals given under Condition 8 and Condition 13 of the deemed planning permission to date and have received confirmation from SIC that Condition 8 has been discharged.

3.10 Communication with Clerks of Work

3.10.1 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 before the site visit, on the 13th May 2022.

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

The monitoring identified a peat movement in the area of NBP05. This is discussed further in Section 3.7.2.

There is ongoing supervision throughout the site with the GCoW working with the ECoW to perform snagging on completed peat restoration areas.

The GCow reminded the Principal Contractor of the requirement to carry out a peat probing exercise in the area of the future cross country cable route. This has been undertaken by the Principal Contractor and will feed into the design of the cross country cable construction.

3.10.2 ECoW

Condition 19 of the planning consent requires the appointment of an Ecological Clerk of Works 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 13th May 2022.

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 reported no incidents with ecological impacts.

The ECoW reminded of the importance of saving the turf removed during the formation of the access tracks and cable trenches. Whilst seeding was a good second option to have, the most effective peat restoration includes the re-use of the turf. This message was relayed during the PMO visit. A positive observation of turf segregation and stockpiling for future use was observed during the visit.

The ECoW is also working with GCoW to perform snagging on completed peat restoration areas.

3.10.3 ACoW

Condition 29 of the planning consent requires the appointment of an Archaeological Clerk of Works to ensure archaeological features are protected and recorded during the development. The ACoW communicated the ongoing works to the PMO on the 9th May 2022.

The ACoW described the ongoing and completed monitoring works across the site. Track construction watching briefs are complete other that one spur in Kergord which is ongoing. Cable trench works in Kergord have not started in areas where watching briefs are required.

The revised Written Scheme of Investigation to account for the requirements for watching briefs during cable trench excavations prepared by the ACOW has been approved without comments by the Shetland Regional Archaeologist.

The ACoW noted dialogue with the SSE Environmental Site Manager regarding the level of monitoring required for the cable trench works and the cross-country cable routes has completed and are in agreement.

The ACoW has continued with daily checks across the project site.

3.11 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 and Nesting.
- Consideration of any comments received by the SIC or the Developer in relation to the works, including visits to view specific areas of concern.
- Update on the formation of peat restoration areas.
- Update on the construction of borrow pits.
- Update on the construction of the VEWF Substation and audit in more detail.
- 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
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	PMO observed non-compliance with the waste management plan. Approximately 10 no. IBCs were being stored directly on the ground, rather than on an area of hardstanding.	A temporary bund is required whist the IBCs are being stored off the hardstanding.	Principal Contractor	Amber
Materials Storage and Handling (e.g. oil/fuel storage and peat/mineral soil storage and handling).	During the meetings with the GCoW and during the PMO audit, peat movement was observed at NBP05. A contributing factor was the additional weight being stored on the underlying nonstripped material The GCOW noted that peat and other materials should only be stored in areas where additional loading is appropriate.	The movement has been made safe. No further action required.	Principal Contractor	Green
Natural and Built Environment (e.g. ecology, biosecurity, protected sites,	Ecological constraints identifed by the ECoW team are communicated to the Principal contractor and Developer to allow mitigation	No action required.	N/A	Green

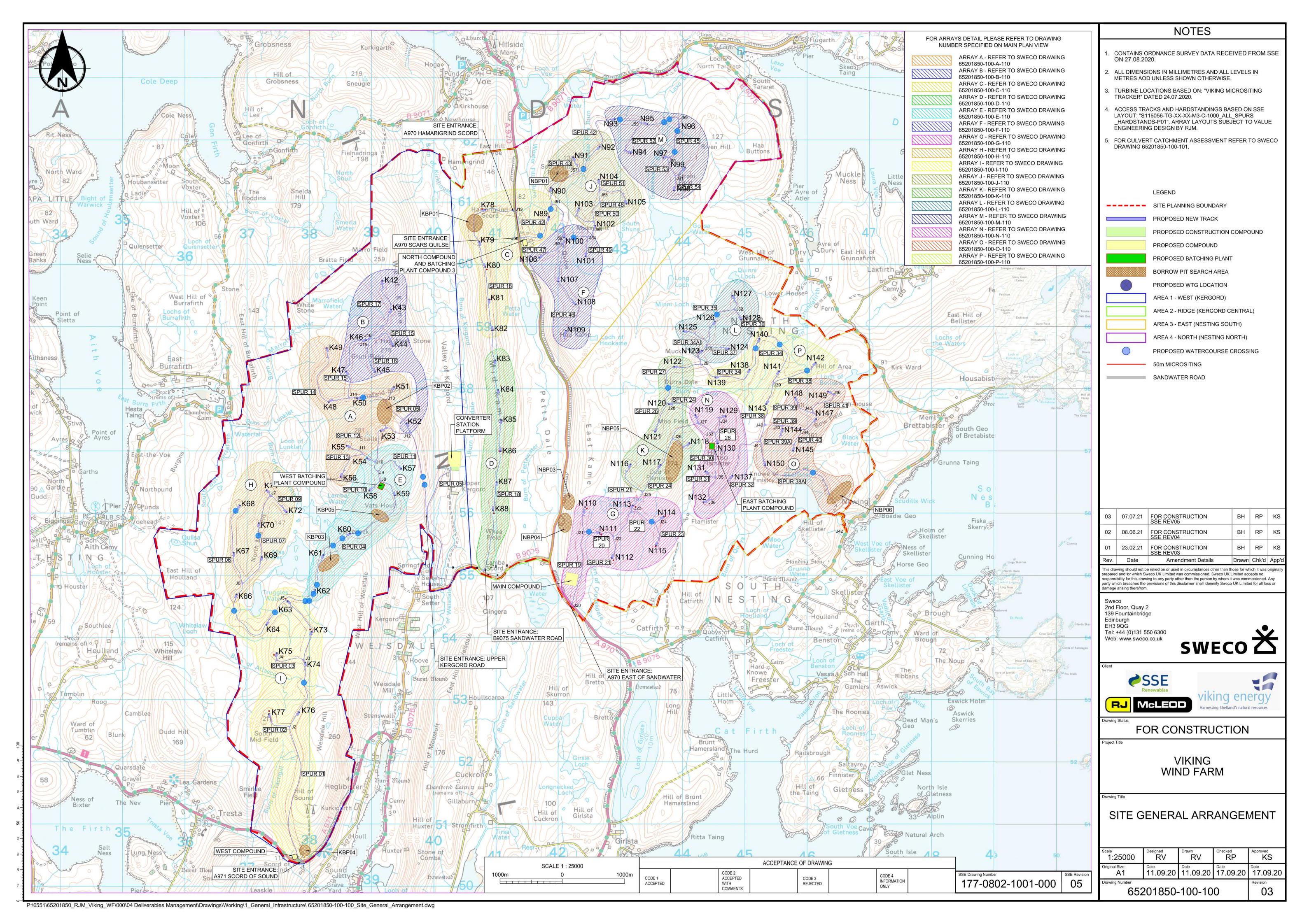
Issue	Auditor Comments	Required Action	Action Owner	Status
archaeology and site restoration).	measures to be implemented and rescheduling of preparatory and construction work as required. These are also marked out by poles on the site and included on ecological sensitive plans issued to the Principal contractor. Watching briefs have been undertaken by the AcoW where potential archaeolgical constraints are identifed. Where there are known archaelogical features the track is micro-sited to avoid the feature.			
Pollution Prevention and Response (e.g. use of spill kits, silt control, cement/concrete, water resources).	The project has recieved authorisation to abstract water from eight locations from SEPA. The authorisation allows the water to be used for dust suppression. 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. During the audit the PMO observed spill kits to be well stocked and readily available in areas where liquids are stored. The project continues to improve the pollution prevention measures with additional measures installed in high risk area. 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
Noise, Dust, and Air Quality	Complaints regarding dust had been received by SIC during the audit period. The weather had been particularly dry during this time.	Continued monitoring of dust conditions and implementation of control measures as needed; and ongoing liaison as required with other construction operators.	N/A	Green

VIKING ENERGY WIND FARM

Issue	Auditor Comments	Required Action	Action Owner	Status
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 pre-construction surveys, nesting bird surveys, and micro-siting of access tracks to account for constraints. Potential constraints are identified and suitable mitigation measures implemented to prevent negative impacts.	No action required.	N/A	Green

LANNING	MONITORING	OFFICER	AUDIT	REPORT	019:	16th	April	2022	То	20th	May	2022
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APPENDIX 1
SITE LOCATION PLAN, PEAT RESTORATION PLAN AND PHOTOLOG



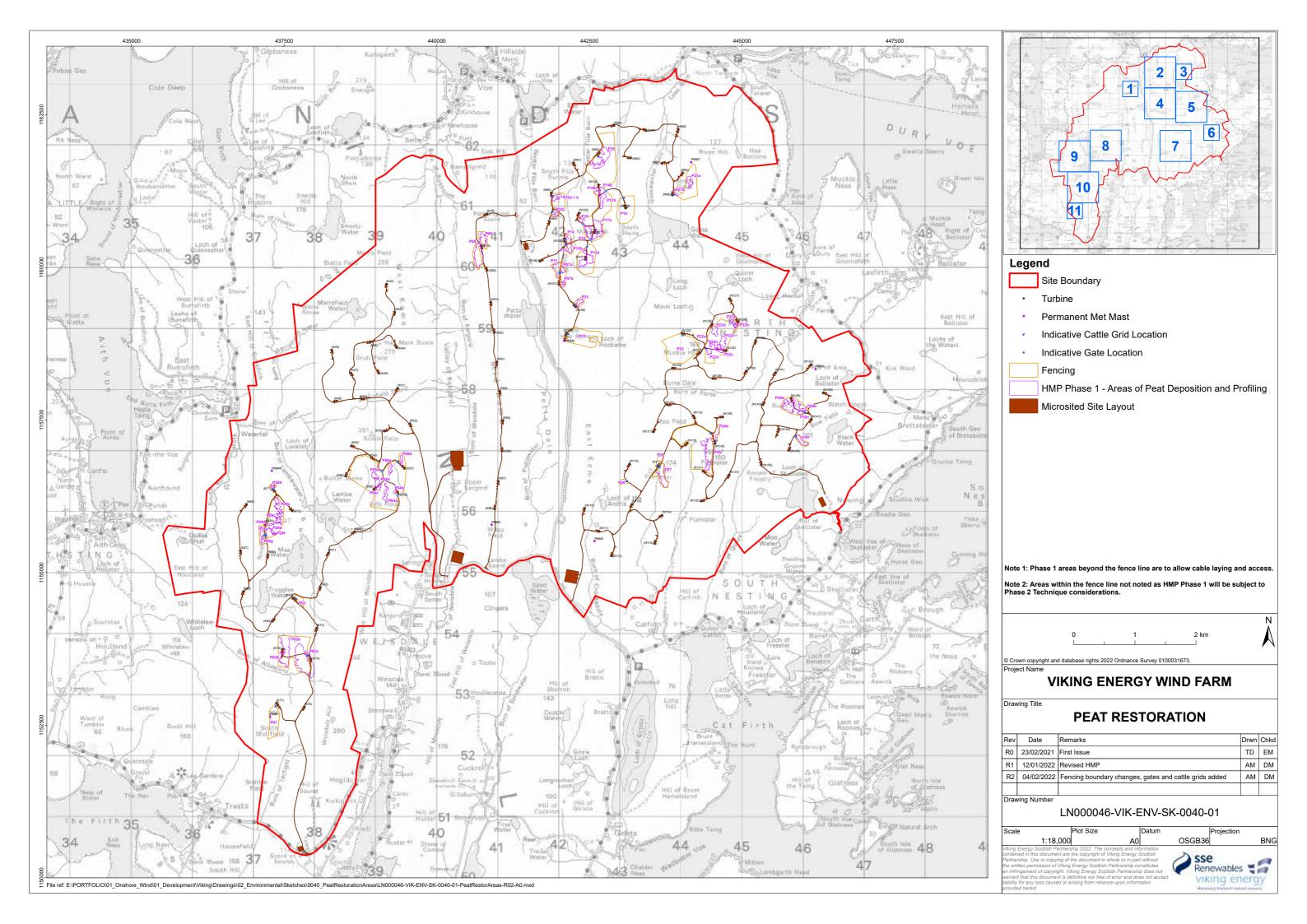






Photo 1. Backfill of base, and cable ducting at K62.



Photo 2. Drainage in Kergord.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022





Photo 3. Good segregation of turf and peat at the track at Spur 6, towards K68.



Photo 4. Cable trench preparation at Mid Kames Ridge.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022





Photo 5. 75 m of "Whin-Dust" being laid as cable bedding.



Photo 6. Cables being laid in cable trench at Mid Kames Ridge.

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022





Photo 7. Signage at Waste area in North Compound



Photo 8. IBCs stored on the ground in the North Compound

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022





Photo 9. Turf removed and peat segregated ready for re-use in Nesting



Photo 10. Peat movement at NBP05

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022





Photo 11. Show base

Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022



Title:	Photographic Log	Client:	Viking Energy Wind Farm
Site:	Viking Energy Wind Farm	Date:	17 th May 2022