


## **APPENDIX A14.6**

# **SITE ENVIRONMENTAL MANAGEMENT PLAN**



**SITE ENVIRONMENTAL MANAGEMENT PLAN**  
**VIKING WIND FARM**

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page i

# SITE ENVIRONMENTAL MANAGEMENT PLAN


## VIKING WIND FARM

### CONTENTS


#### DOCUMENT CONTROL SHEET

#### SECTIONS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Site Environmental Management Plan (SEMP): Aims & Objectives .....	1
1.2	SEMP Development & Implementation .....	1
1.3	SEMP Roles & Responsibilities .....	3
1.4	SEMP Structure .....	5
<b>2</b>	<b>PROJECT INFORMATION.....</b>	<b>8</b>
2.1	Site Location and Scheme Description .....	8
2.2	Planning Conditions and Outline Method Statements .....	11
2.3	Scheme Amendments .....	11
2.4	Register of Variations .....	13
<b>3</b>	<b>COMMUNICATION PLAN.....</b>	<b>14</b>
3.1	Contacts Sheet .....	14
3.2	Meetings, Reports and Consultations .....	14
3.3	Roles and Responsibilities .....	14
3.4	Reporting Procedures .....	14
<b>4</b>	<b>CORRESPONDENCE, RECORDS &amp; REPORTS .....</b>	<b>27</b>
4.1	Requirements .....	27
4.2	Environmental Audits .....	27
4.3	Environmental Consents, Licenses and Permits .....	28
<b>5</b>	<b>TECHNICAL SCHEDULES &amp; AVAILABLE INFORMATION.....</b>	<b>30</b>
5.1	Technical Schedules .....	30
5.2	Contractor Requirements .....	30

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page ii

VERSION			
Version No. :	Description:		Date:
<b>1.0</b>	<b>Viking Energy Partnership Addendum ES SEMP</b>		<b>Feb 2010</b>
	<b>Name :</b>	<b>Position :</b>	<b>Signature :</b>
<b>Prepared by :</b>	Jane MacDonald	Environmental Manager	
<b>Checked by :</b>	Oliver Moffat, BMT Cordah	Lead EIA Coordinator	
<b>Reviewed by :</b>	Viking Energy Partnership and all relevant consultants.	n/a	
<b>Comments:</b>	This version of the SEMP has been prepared as part of the Addendum ES and takes into account responses received from all statutory bodies in relation to the 2009 Environmental Statement.		
<b>2.0</b>	<b>Construction Phase SEMP</b>		
	<b>Name :</b>	<b>Position :</b>	<b>Signature :</b>
<b>Prepared by :</b>			
<b>Checked by :</b>			
<b>Reviewed by :</b>			
<b>Comments:</b>	Version 2.0 of the SEMP will be prepared following planning consent. Changes to the SEMP will be made to take into account requirements of relevant planning conditions. Version 2.0 will form part of the construction contract between Viking Energy Partnership and the appointed Contractor.		

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 1

## 1 INTRODUCTION

### 1.1 Site Environmental Management Plan (SEMP): Aims & Objectives

- 1.1.1 This Site Environmental Management Plan (SEMP) is provided as Appendix A14.6 to the Addendum Environmental Statement (ES) and has been developed in accordance with the Institute of Environmental Management and Assessment (IEMA) Practitioner “Environmental Management Plans”, Best Practice Series, Volume 12, December 2008.
- 1.1.2 Viking Energy Partnership commit to safeguarding the environment through the identification, avoidance and mitigation of the potential negative environmental impacts associated with the development, construction, operation and decommissioning of the Viking wind farm.
- 1.1.3 The principle objective of the SEMP is to avoid, minimise and control adverse environmental impacts associated with the development of the wind farm.
- 1.1.4 This SEMP aims to define good practice as well as specific actions required to implement mitigation requirements as identified in the Environmental Statement (ES), the planning process and/or other licensing or consenting processes.
- 1.1.5 The SEMP is considered to be a live document which will be developed further and / or amended where necessary subsequent to planning consent to take account of planning condition requirements and any information which may be made available from additional consultations, site surveys etc.
- 1.1.6 The SEMP will form part of the main civils construction works Contract. The *Contractor* will take account of the structure, content, methods and requirements contained within the various sections of this SEMP when developing their detailed SEMP (including environmental plans and other related construction method statements) as required by the Contract.
- 1.1.7 While this version of the SEMP provides a benchmark for good practice, where avoidance or further minimisation of risks to the environment can be demonstrated through use of alternative methods or improvements to current practices the *Contractor* will implement these wherever possible.

### 1.2 SEMP Development & Implementation

- 1.2.1 There are two main stages in the development of the SEMP, each of which produces a revised version, as detailed below:

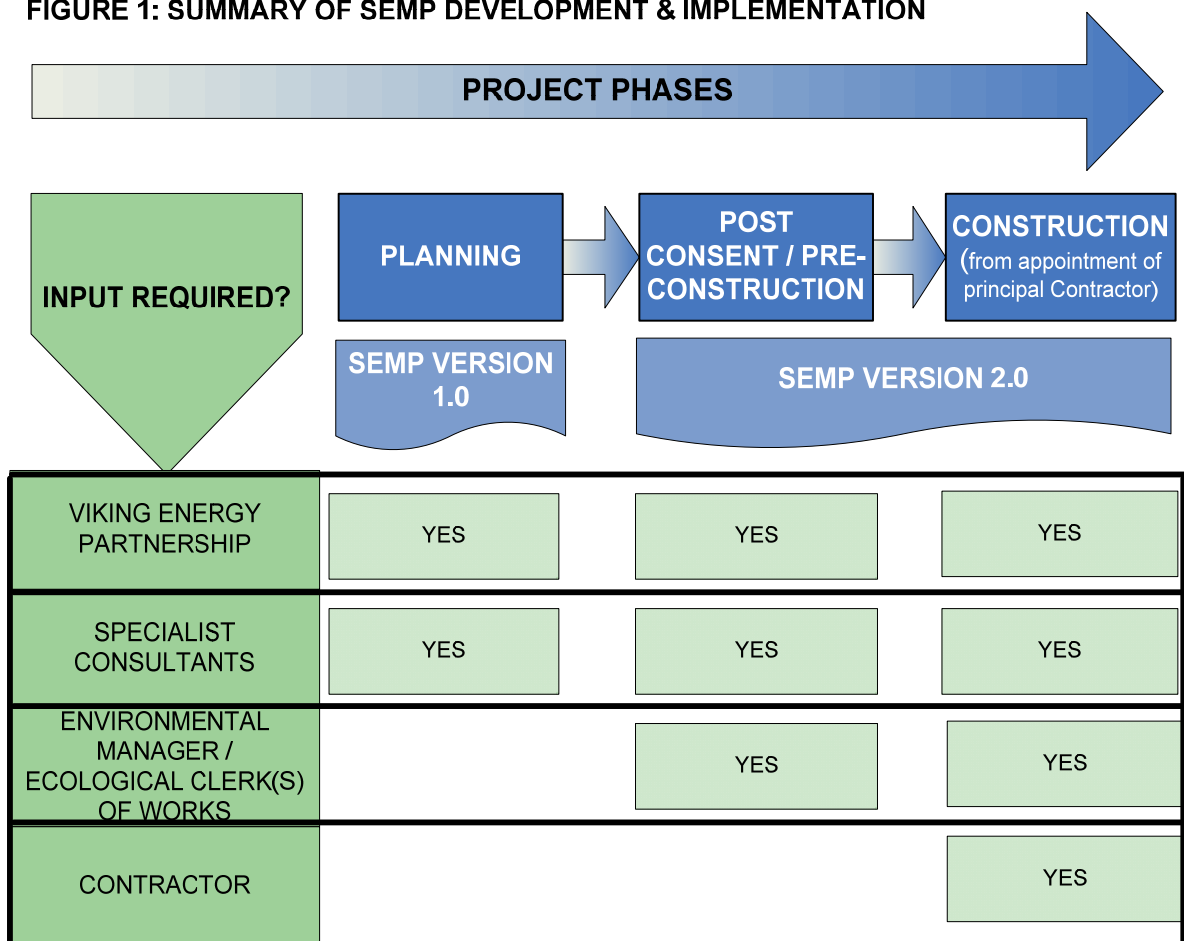
**Version 1.0** Version 1.0: The SEMP, including all technical schedules, is prepared as part of the EIA for inclusion within the ES, or in this case the addendum ES. The documents are reviewed by all relevant consultants involved in preparation of the Addendum ES chapters to ensure consistency with required mitigation measures and input of site specific information. In this case, SEPA has been provided with draft versions of relevant SEMP documents for discussion as part on-going consultations during the ES / Addendum production. All comments and input received throughout this process are incorporated into Version 1.0.


**Version 2.0** Version 2.0 of the SEMP will be prepared following planning consent. Changes to the SEMP will be made to take into account requirements of relevant planning conditions. Version 2.0 will form part of the construction contract between Viking Energy Partnership and the appointed *Contractor*. Version 2.0 becomes a live document on site and will be developed further by the *Contractor* with site specific method statements and plans as required prior to each phase of the works. Version

2.0 is also effectively a document management system for recording information and data relating to environmental checks, reports, surveys, monitoring data and auditing. Upon completion of the construction works, the *Contractor* will submit a complete CD copy of the final SEMP to Viking Energy Partnership for their records

- 1.2.2 While version numbers will remain fixed depending on the stage of the project, it is acknowledged that the SEMP is a continually evolving document which can be updated in part or whole at any stage of the project. Hence, revision and document distribution records are included at the front of each SEMP document to enable individual documents to be updated at any time.
- 1.2.3 A summary of the SEMP development process and the required input from the main parties involved in the planning and construction of the wind farm is indicated in Figure 1.

**FIGURE 1: SUMMARY OF SEMP DEVELOPMENT & IMPLEMENTATION**



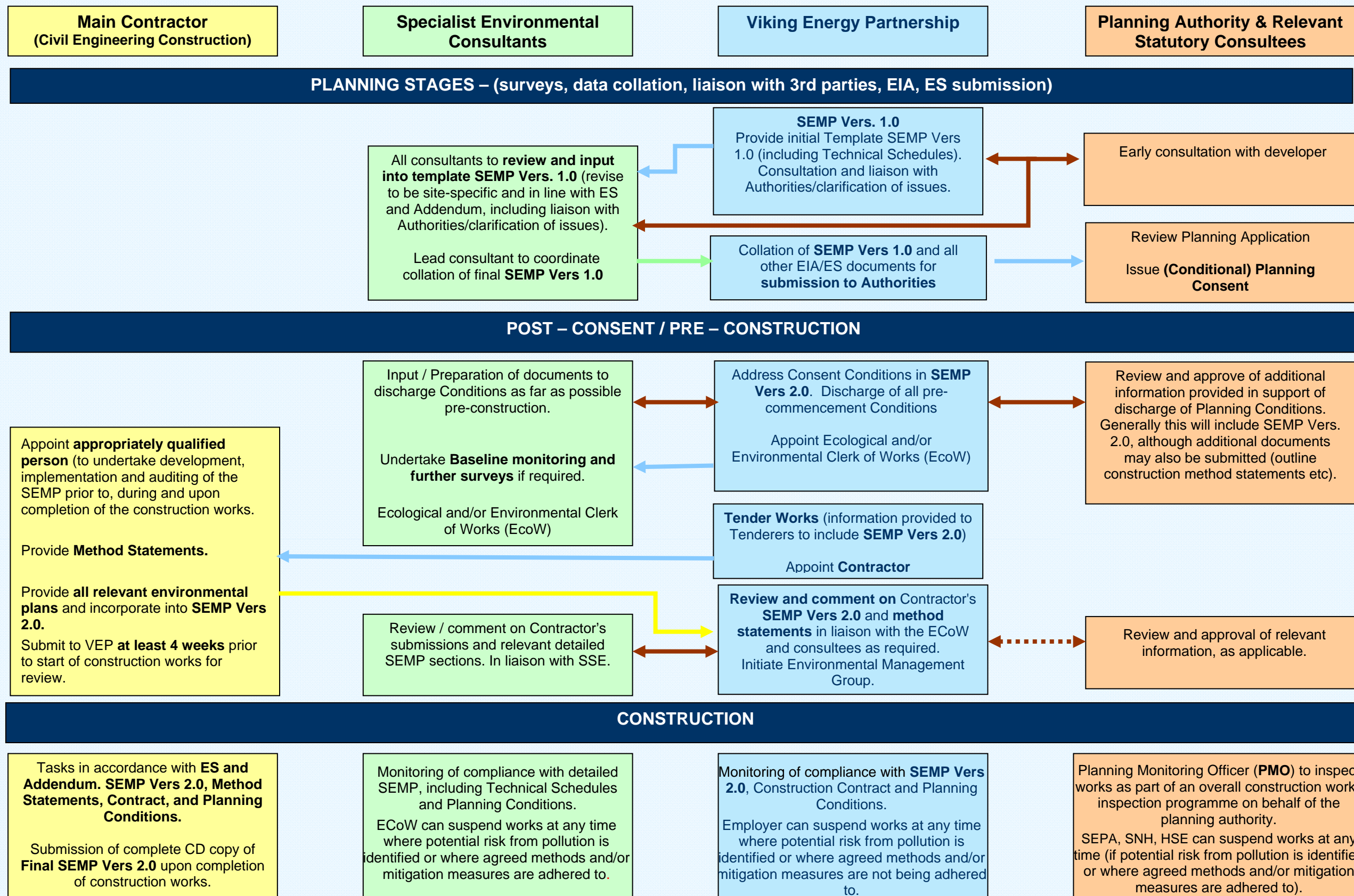
VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 3

### 1.3 SEMP Roles & Responsibilities


- 1.3.1 Figure 2 illustrates the SEMP development process and outlines roles & responsibilities at each stage of the wind farm development and construction.
- 1.3.2 This SEMP (Version 1.0) has been prepared by Viking Energy Partnership. Viking Energy Partnership will be responsible for further development of the SEMP in line with planning condition requirements (Version 2.0). This will involve liaison with the planning authority, SEPA, SNH and other relevant bodies where appropriate.
- 1.3.3 Prior to commencement of construction works, Viking Energy Partnership will identify a core Environmental Management Group, comprising of specific project personnel and including an Environmental Manager and/or Ecological Clerk of Works (ECoW). The Environmental Management Group will meet monthly to discuss the monthly environmental report and will advise site personnel on areas where improvements may be made on site. The group will draw on technical expertise from relevant specialists where required and will liaise with other relevant external bodies, such as a proposed Shetland Wind Advisory Group (SWEAG).
- 1.3.4 Viking Energy Partnership will appoint an Environmental Manager who will be responsible for coordination and development of the SEMP and any other surveys, reports or method statements required for discharge of relevant pre-commencement planning conditions. In conjunction with the ECoW, the Environmental Manager will also review the Contractors method statements and environmental plans as required by the SEMP, carry out compliance auditing during the construction phase and coordinate the Environmental Management Group and required liaisons between Viking Energy Partnership, the *Contractor*, the planning monitoring officer (PMO) and other statutory authorities.
- 1.3.5 Viking Energy Partnership will appoint an independent Ecological Clerk of Works (ECoW). The main roles and responsibilities of the ECoW relate to compliance monitoring with the SEMP and planning conditions and advice provision in relation to ecological matters. The ECoW will also assist the Environmental Manager.
- 1.3.6 The *Contractor* will also appoint an appropriately qualified person(s) to undertake development, implementation and auditing of their detailed SEMP.



**FIGURE 2.0:  
 SEM DEVELOPMENT AND ROLES & RESPONSIBILITIES**






VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 5

## 1.4 SEMP Structure

- 1.4.1 The SEMP is divided into discreet Sections which are designed to be filed as separate documents / folders if required. All versions of the SEMP, including the Contractors detailed SEMP, are required to follow a similar format / structure to this.
- 1.4.2 The *Contractor's* detailed SEMP will contain all the requested environmental plans and method statements as detailed within Technical Schedules 1 through 10 (as applicable) and as summarised within Tables 1.0 and 5.0 (contained within Sections 1 and 5 of the SEMP).
- 1.4.3 A copy of the SEMP documents / folder(s) will be kept in the site offices for the duration of the site works and will be made available for review at any time.
- 1.4.4 Upon completion of the construction works, the *Contractor* will submit a complete CD copy of the final SEMP to Viking Energy Partnership for their records. This final SEMP will include electronic scans of all hard copy reports, data, field records and correspondence which are gathered over the course of the construction works.
- 1.4.5 Where the *Contractor* has standard documents within his own company / corporate Environmental Management Plan which might cover a particular requirement of this SEMP, these will either be inserted or cross referenced within the relevant Section of the SEMP.
- 1.4.6 The SEMP Sections are listed in Table 1.0 as follows:


VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 6

**TABLE 1.0**  
**SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP): DOCUMENT STRUCTURE**

<b>Section</b>	<b>Title &amp; Brief Description</b>	<b>Contractor Development Required?</b>
<b>1</b>	<b>Introduction (this chapter)</b>	<b>No</b>  (Information purposes only)
<b>2</b>	<p><b>Project Information</b></p> <p>Provides details on site location, scheme description and a summary of the environmental sensitivities at the site in Table 2.0 (as derived from the Environmental Statement and other information where available).</p> <p>Provides details on relevant Planning Consent Conditions</p> <p>Any documents prepared by Viking Energy Partnership in response to Consent Conditions will be recorded in Table 2.1.</p> <p>Contains a record of all Scheme Amendments and a Register of Variations.</p>	<p><b>Yes</b></p> <p>Any documents prepared by the <i>Contractor</i> in response to Consent Conditions will be recorded by the <i>Contractor</i> in Table 2.1.</p> <p>Any Scheme Amendments and / or Variations to the SEMP required during the works will be recorded by the <i>Contractor</i> in Tables 2.2 and 2.3.</p>
<b>3</b>	<p><b>Environmental Communication Plan</b></p> <p>Contains details on specific requirements relating to:</p> <ul style="list-style-type: none"> <li>• Contact details for Viking Energy Partnership personnel, technical specialists, <i>Contractor</i> personnel, regulators, landowners, other stakeholders etc;</li> <li>• Meetings, reports and consultations;</li> <li>• Roles and responsibilities; and</li> <li>• General reporting procedures and tasks.</li> </ul>	<p><b>Yes.</b></p> <p>The <i>Contractor</i> will:</p> <ul style="list-style-type: none"> <li>i) Insert contact information for regulatory authorities and other stakeholders (where not already provided) into Table 3.0 and</li> <li>ii) Refer to Table 3.1 for details on requirements for meetings, reports and consultations; and</li> <li>iii) Insert information on <i>Contractor</i> appointments and responsibilities relating to environmental management and implementation of this SEMP into Table 3.2.</li> <li>iv) Refer to Figure 3.0 for a summary of the main communication lines.</li> </ul>
<b>4</b>	<p><b>Correspondence, Records and Reports</b></p> <p>This Section relates to document control and retention of records. The information at the start of Section 4 provides:</p> <ul style="list-style-type: none"> <li>• A list of all documents to be retained / filed within the SEMP.</li> </ul> <p>Table 4.0 provides a record of all Environmental Consents, Licenses and Permits issued for the project.</p>	<p><b>Yes.</b></p> <p>The <i>Contractor</i> will complete Table 4.0.</p> <p>Throughout the duration of the Contract, the <i>Contractor</i> will insert / file all communication records, data, field records and reports associated with Environmental Management and implementation of this SEMP into this Section 4.</p> <p>This Section may be sub-divided into</p>

**TABLE 1.0**  
**SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP): DOCUMENT STRUCTURE**


Section	Title & Brief Description	Contractor Development Required?
		<p>sub-folders for specific information relating to discrete areas of Environmental Management (such as waste management, pollution prevention, water quality monitoring, ecology etc). Alternatively, this information may be filed within the individual Technical Schedules in Section 5. The filing method selected by the <i>Contractor</i> will be made explicit at the start of Section 4.</p>
<p><b>5</b></p>	<p><b>Technical Schedules &amp; Available Information</b></p> <p>Technical Schedules include the following:</p> <ol style="list-style-type: none"> <li>1. Site Induction Schedule</li> <li>2. Pollution Prevention Plan (PPP)</li> <li>3. Site Waste Management Plan (SWMP)</li> <li>4. Drainage Management Plan (DMP)</li> <li>5. Water Course Crossing Plan (WCCP)</li> <li>6. Water Quality Monitoring Plan (WQMP)</li> <li>7. Excavated Materials and Reinstatement Plan (EMRP)</li> <li>8. Ecological Protection Plan (EPP)</li> <li>9. Environmental (Emergency and Incident) Response Plan (ERP)</li> </ol> <p>Other relevant Available Information documents will also be included or cross referenced here.</p>	<p><b>Yes</b></p> <p>The <i>Contractor</i> is required to develop the Technical Schedules and/or include additional information or method statements as appropriate and where required by the Contract. The development of the Technical Schedules will generate more site-specific documents which address particular environmental management procedures applicable for works in specified areas of the site. These Technical Schedules form the <i>Contractor's</i> Environmental Plans (for example Pollution Prevention Plan, Site Waste Management Plan, Excavated Materials and Reinstatement Plan etc).</p> <p>Table 5.0 lists all Technical Schedules and provides information on <i>Contractor</i> responsibilities.</p>

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 8

## 2 PROJECT INFORMATION

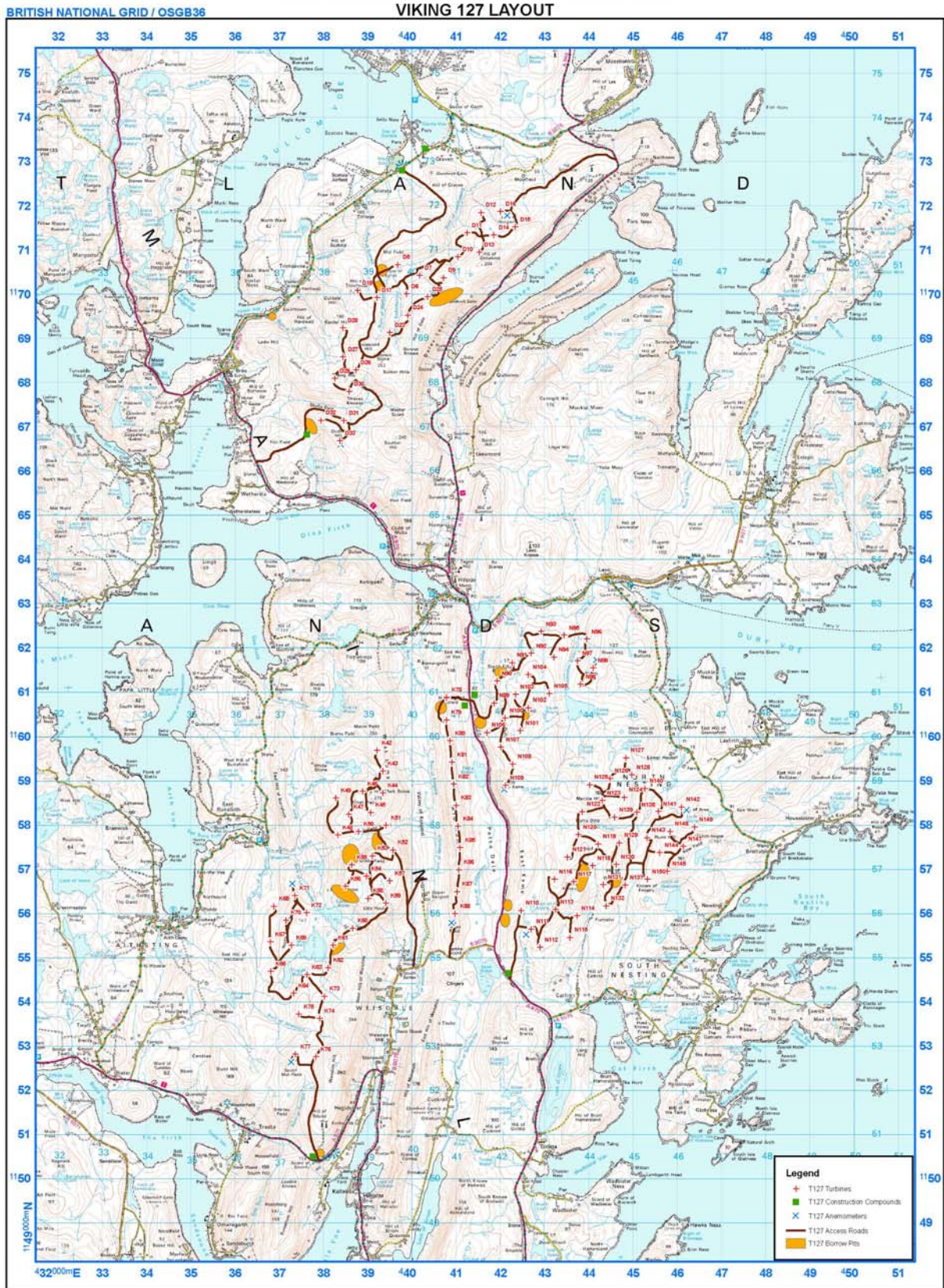
### 2.1 Site Location and Scheme Description

TABLE 2.0 General Project Information and Scheme Description	
<b>Site Name:</b>	Viking Wind Farm
<b>Location:</b>	The central part of mainland Shetland, stretching from near Scatsta in the north to Weisdale in the south. A site location and layout plan is included below.
<p><b>Environmental Sensitivities</b></p> <p><b>Statutory Protected Areas</b></p> <p>There are no statutory conservation designations within the area where the proposed physical development will actually take place. However, there are two nature conservation designated sites within the wider Viking study area: The Burn of Lunklet SSSI (1.4ha designated for endemic hawkweed species) and the Kergord plantations SSSI (6.45ha designated for broadleaved, mixed and conifer woodlands). Neither of these designated sites lies directly within the area directly proposed for development and no impact is anticipated provided that all ecological (habitats and species), pollution prevention and other hydrological mitigation measures referred to within the ES and this SEMP are implemented.</p> <p>Commenting on the 2009 ES, SNH objected due to potential impacts on the Sand Water SSSI. They acknowledged that <i>“although not directly affected by the windfarm itself or associated infrastructure within the development boundary, the Sand Water SSSI is likely to be adversely affected by other associated works outwith the development boundary”</i>. The potential impacts relate to changes at the A970/B9075 junction, to upgrades to the B9075 and its bridge, and to the location of a construction compound. In particular, releases of sediment and polluting materials, nutrient enrichment and possible changes to the flow reaching the Sand Water SSSI were issues of concern. The following mitigation is required to address potential issues within the Sand Water catchment:</p> <ul style="list-style-type: none"> <li>(i) road alterations must take place on the north side of the existing B9075, so that the works do not encroach into the SSSI;</li> <li>(ii) construction methods, pollution prevention measures and details of water crossings and culverting to be fully agreed with SEPA, and ultimately implemented and controlled by the Ecological Clerk of Works;</li> <li>(iii) toilet, washroom and kitchen facilities for workers at the construction compound, near to Sand Water, to be in the form of sealed units which are regularly maintained and emptied to ensure no waste water spills from them.</li> </ul> <p><b>Habitats</b></p> <p>Blanket bog (mire) is the dominant vegetation type over the whole survey area. It occurs on peat over 50cm in depth and usually at least 2m deep, characterised by a range of species. In addition, wet and dry dwarf shrub heath, acid grassland and a small number of scattered woodland plantations are present within the development area. Blanket bog is a Priority habitat covered by EC and UK Biodiversity Action Plan legislation. Several trout and sea trout spawning burns are located in the area. Atlantic salmon was recorded in two watercourses (although these may be associated with fish farms).</p>	

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 9

<b>TABLE 2.0</b> <b>General Project Information and Scheme Description</b>	
<p><b>Birds</b></p> <p>The Viking Site is of particular importance for breeding red-throated diver and merlin. Other breeding species of national importance within the Viking area include dunlin, whimbrel, arctic skua, golden plover, great skua, and in some years black-tailed godwit and whooper swan. In addition, greylag goose, wigeon, red grouse, golden plover, lapwing, snipe, curlew, common sandpiper, wood pigeon, goldcrest and fieldfare were noted. Some species, like the golden plover and merlin, are protected under the EC Birds Directive and UK law.</p>	
<p><b>Mammals</b></p> <p>Otter (protected under UK and EC legislation) are recorded as possibly present on site or likely to be affected by negative impacts on drainage.</p>	
<p><b>Further information is provided on these sensitivities in:</b>  <b>TS8 Ecological (Habitats and Species) Protection Plan.</b></p>	





Based upon the Ordnance Survey Map with the permission of the controller of Her Majesty's Stationary Office  
 Crown copyright reserved.



Produced by J McDougall  
 SSE Renewables Developments (UK) Ltd  
 Dated: 19 Apr 10  
 Task No: VIKING\_T127 Layout

## 2.2 Planning Conditions and Outline Method Statements

2.2.1 This SEMP and its future versions/revisions will form part of the Contract for the Viking Wind Farm. It will therefore be updated and revised during the different stages of the wind farm development, including pre-construction subsequent to receipt of a conditioned planning consent. Where additional documents are prepared by Viking Energy Partnership or the *Contractor* in accordance with the requirements of Planning Conditions for this site, the documents will be listed in Table 2.1 below.

TABLE 2.1: RELEVANT PLANNING CONDITIONS AND RELATED DOCUMENTATION		
Planning Condition	Document Title	Responsible Party

2.2.2 **The *Contractor* will consider all of the mitigation measures and best practice construction methods detailed within the above plans in his design and in any detailed environmental plans as required by this SEMP or the Contract.**

2.2.3 **Where any mitigation measures or construction methods described in other documents deviate in any way from those contained within this SEMP, the *Contractor* will abide by whichever is the most onerous and stringent in terms of environmental protection.**

## 2.3 Scheme Amendments

2.3.1 “Scheme Amendments” will be recorded in Table 2.2. These amendments do not include changes to the scheme design which are completed in accordance with the existing planning consent; instead, this refers to changes in the design of the wind farm for which additional approvals and / or consents may be required from the Planning Authority. For instance, amendments to track layouts or turbine locations out with approved micro-siting boundaries.

2.3.2 The purpose of recording Scheme Amendments here is to provide a record of any changes in the design and siting of the wind farm infrastructure such that any associated environmental impacts and mitigation measures may be appropriately instigated through this SEMP.




<b>TABLE 2.2 SCHEME AMENDMENTS</b>			
<b>Ref.</b>	<b>Date</b>	<b>Scheme Amendment Description</b>	<b>Environmental Sensitivities Potentially Impacted by Scheme Amendment</b>

**DRAWINGS AND OTHER INFORMATION RELEVANT TO SCHEME AMENDMENTS AND VARIATIONS TO BE INSERTED IN SECTION 2.**

## 2.4 Register of Variations

2.4.1 Where any amendments and variations to the Technical Schedules and SEMP are required (either as a result of Scheme Amendments or through corrective actions or improvements noted and undertaken on site) these will be recorded in Table 2.3, Register of Variations. Furthermore, all changes to construction methods, design, mitigation and the implications of these changes and authorising personnel will be recorded in the table below.

TABLE 2.3 REGISTER OF VARIATIONS			
No.	Variation Description	Authorising Personnel	Completion Date

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Section 3: Communication Plan	Page 14

### 3 COMMUNICATION PLAN

#### 3.1 Contacts Sheet

3.1.1 Table 3.0 provides a list of all Viking Energy Partnership, *Contractor* and relevant third party contact details. This table should be updated and kept current by the *Contractor* for the duration of the Contract.

#### 3.2 Meetings, Reports and Consultations

3.2.1 Table 3.1 lists all meetings and consultations as required by the Contract. The table also provides details on the schedule/frequency, scope & objectives and attendees / responsibility for each meeting.

#### 3.3 Roles and Responsibilities

3.3.1 Roles and responsibilities for environmental management, monitoring and reporting are detailed in Table 3.2.

#### 3.4 Reporting Procedures

3.4.1 Figure 3.0 provides a diagrammatic outline of the general tasks and communication lines, based on the roles described in Tables 3.1 and 3.2 and tasks detailed in the Technical Schedules. The *Contractor* will update this information as part of the detailed SEMP.

3.4.2 Technical Schedule TS9, Environmental Incident and Emergency Response, includes a figure illustrating the communications plan for reporting procedures for all potential environmental risks, hazards or incidents which may relate to ecology, water quality, dust, noise or archaeology.

**TABLE 3.0  
 CONTACTS SHEET**

<b>COMPANY</b>	<b>POSITION</b>	<b>NAME</b>	<b>TEL / MOBILE NO.</b>	<b>ADDRESS</b>
Viking Energy Partnership	Development Project Manager			
Viking Energy Partnership	Civil Engineering Manager			
Viking Energy Partnership	Construction Project Manager			
Viking Energy Partnership	Construction Site Manager			
Viking Energy Partnership	Environmental Manager			
Viking Energy Partnership	Ecologist			
Viking Energy Partnership	Operational Phase Environmental Coordinator			
TBC – (Independent / External Appointment)	Environmental / Ecological Clerk of Works			
(TBC – Contractor)	Project Manager			
(TBC – Contractor)	Site Agent			
(TBC – Contractor)	Foreman			
(TBC – Contractor)	Environmental Manager			
(TBC – Contractor)	TBC – Other Site Responsibility for Environmental Management			

**TABLE 3.0  
 CONTACTS SHEET**

<b>COMPANY</b>	<b>POSITION</b>	<b>NAME</b>	<b>TEL / MOBILE NO.</b>	<b>ADDRESS</b>
(TBC – External Appointment)	Archaeological Clerk of Works			
(TBC – External Appointment)	Geotechnical Clerk of Works			
SEPA				
SNH				
Planning Authority				
Planning Monitoring Officer				
Fisheries Trusts				
Water Users				
Landowners / Land managers / Crofters				
[Sub-contractors to be listed]				
[Others to be listed as appropriate]				

TABLE 3.1 MEETINGS, REPORTS AND CONSULTATIONS			
MEETING / REPORT	SCHEDULE / FREQUENCY	SCOPE & OBJECTIVE	ATTENDEES / RESPONSIBILITY
<b>A record of all meetings, environmental checks, consultations, permissions, consents and licenses will be retained within Section 4 of this SEMP.</b>			
<b>Pre-construction Consultations</b>	As required	To determine requirements for and to obtain all necessary consents and licenses.	<i>Contractor</i> and Viking Energy Partnership as required.
<b>Start Up Meeting</b>	Prior to construction commencement	<p>Following submission of environmental plans and documents as required by the Contract (and as listed in Section 5 of this SEMP), an initial Start Up Meeting will be held.</p> <p>The objective of this meeting is to introduce all relevant personnel and to ensure awareness of all roles and responsibilities with respect to Environmental Protection and the implementation of this SEMP.</p>	<p>Meeting to be organised by <i>Contractor</i> and held on site, or at a location close to the site such that a site visit may be arranged to investigate any specific issues raised. Attendees should include:</p> <p><b>Employer:</b>            Project Environmental Manager            Project Ecologist            Construction Project Manager            Construction Site Manager            Ecological Clerk of Works (ECoW)            Archaeological Clerk of Works (ACoW)            Geotechnical Clerk of Works (GCoW)</p> <p><b>Contractor</b>            Project Manager            Site Agent            Site Foreman            Contractors appointed Site Environmental Manager or otherwise responsible person(s).</p>

**TABLE 3.1  
 MEETINGS, REPORTS AND CONSULTATIONS**

MEETING / REPORT	SCHEDULE / FREQUENCY	SCOPE & OBJECTIVE	ATTENDEES / RESPONSIBILITY
<b>Site Inductions</b>	All new site personnel and visitors.	Provide information on specific environmental issues relative to the site and to the activities to be undertaken by the personnel / visitors being inducted (Refer to Technical Schedule TS1: Site Inductions).	To be organised by the <i>Contractor</i> . A record must be kept of all inductions completed on site. A sign in register must be maintained on site.  All employees, sub-contractors, suppliers and visitors.
<b>Weekly Environmental Update Meeting</b>	Weekly	To provide updates on environmental mitigation measures and performance and identify actions for improvement.  As per the requirements of the Pollution Prevention Plan (Technical Schedule TS2), the ECoW is required to maintain a Pollution Prevention Measures Register (PPMR) in which all mitigation measures put into place will be listed, and checked weekly to assess the requirement for maintenance. The results of these checks will be discussed at the meeting and corrective actions agreed as required.	Attendance required: ECoW, Site Manager, <i>Contractor's</i> Site Agent and any other relevant personnel or statutory consultees where necessary.  Meeting minutes to be documented by ECoW and forwarded to the Construction PM within two days of meeting.  Construction PM to inform Site Environmental Manager and Project Manager in the event that any significant environmental issues are reported.



**TABLE 3.1  
MEETINGS, REPORTS AND CONSULTATIONS**

MEETING / REPORT	SCHEDULE / FREQUENCY	SCOPE & OBJECTIVE	ATTENDEES / RESPONSIBILITY
<b>Monthly Environmental Report &amp; Monthly Environmental Management Group Meeting</b>	Monthly	<p>To provide a compiled record of weekly meeting minutes and environmental performance and monitoring results (e.g. air, noise or water quality monitoring as appropriate).</p> <p>To identify any areas / action for improvement.</p>	<p>To be prepared by ECoW.</p> <p>Report to be issued to the Environmental Management Group, <i>Contractor</i> and Construction PM and Environmental Manager before the end of each calendar month.</p> <p>Report to be discussed at the monthly meeting with recommendations for improvement passed to the Contractor in written format within 2 working days of the meeting.</p>
<b>Final Environmental Report</b>	Upon completion of construction works.	The final report will document the environmental and ecological effects of the construction period. The evidence for effects will be based on findings included in the minutes of weekly meetings and monthly meetings, together with other recording information maintained by the ECoW. The report will relate results to residual effects predicted in the ES.	The Final Report will be prepared by the ECoW. The report will be made available to the <i>Contractor</i> , planning authority, SNH and SEPA.
<b>Environmental Checks and Monitoring of Mitigation Works</b>	<p>As required in advance of construction works</p> <p>Regular checks should also be made at least every 14 days.</p>	<p>Environmental Checks are to be carried out in advance of construction works. This will comprise an on site meeting / inspection to confirm the appropriate use of identified mitigation measures and highlight any further issues / measures which may be relevant prior to commencement of works in any area.</p> <p>As a minimum, Environmental Checks will be completed at each main piece of site infrastructure (turbine bases, construction compounds, sub-station, control room, borrow pits etc) prior to works commencing in that area. Advance checks will be undertaken no less than every 100m of constructed or upgraded access track.</p> <p>Environmental Checks will include:</p>	<p>Environmental checks will be undertaken by the <i>Contractor</i>, supervised by the ECoW where appropriate. The ECoW may also undertake regular checks, either independently or in conjunction with the <i>Contractor's</i> checks as required.</p> <p>The <i>Contractor</i> and ECoW will retain a record of all inspections / findings of Environmental Checks within Section 4 of this SEMP. All records will be made available for audit / review by the Employer, Planning Monitoring Officer (PMO) and any other interested parties. All records will also be made available for discussion during regular meetings as scheduled herein.</p>

**TABLE 3.1  
 MEETINGS, REPORTS AND CONSULTATIONS**

MEETING / REPORT	SCHEDULE / FREQUENCY	SCOPE & OBJECTIVE	ATTENDEES / RESPONSIBILITY
		<ul style="list-style-type: none"> <li>• Inspection and maintenance of all passive bird discouraging measures put in place.</li> <li>• Checks for visual evidence of contamination / sediment alongside watercourses, near by working areas and in areas of surface water discharge.</li> <li>• Regular checks of all plant and equipment to identify any oil or fuel leaks to confirm the condition of the plant.</li> <li>• Inspection of drainage and erosion and sediment control measures. Additional checks should be made before, during (where safe to do so) and immediately following anticipated storm events or periods of continuous or heavy intermittent rainfall over one or more days.</li> <li>• Environmental checks will also encompass a review of:                         <ul style="list-style-type: none"> <li>– Waste management procedures;</li> <li>– General site tidiness;</li> <li>– Temporary materials storage (extracted materials stockpiles) and restoration works; and</li> <li>– Peat stability (in conjunction with the GCoW).</li> </ul> </li> </ul>	
<b>Environmental Audit</b>	At least once every 12 months	Refer to Section 4	Environmental Audits may be carried out by the <i>Contractor</i> , Viking Energy Partnership or any other interested party at any time during the works.

TABLE 3.1 MEETINGS, REPORTS AND CONSULTATIONS			
MEETING / REPORT	SCHEDULE / FREQUENCY	SCOPE & OBJECTIVE	ATTENDEES / RESPONSIBILITY
			Audit procedures and forms are included within Section 4. These will be followed / completed by the Employer when undertaking environmental audits and may also be adopted by the <i>Contractor</i> , unless alternative procedures and forms are submitted and approved as part of the Contractor's detailed SEMP.
<b>Liaison with regulator / statutory consultees</b>	As required	Provide regular updates to relevant authority on environmental performance and maintain good working relationships with the regulatory bodies.	<p><i>Contractor</i> and ECoW where required.</p> <p>Meetings will be initiated as required by Planning Condition, Technical Schedules or as agreed on a site by site basis.</p> <p>The <i>Contractor</i> is responsible for obtaining all relevant permissions, consents, licenses and permits. Some permits may require application and implementation by an appropriately qualified person. In these instances, the <i>Contractor</i> will consult with the ECoW, ACoW, or other specialist Environmental Consultant where required.</p>

TABLE 3.2 ROLES & RESPONSIBILITIES	
POSITION	ROLES & RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT
<b>Construction Project Manager</b>	<p>The Construction Project Manager will:</p> <p>Ensure that the <i>Contractor</i> has obtained the relevant approvals and licenses and consents from regulatory bodies and statutory consultees where required.</p> <p>Ensure that the <i>Contractor</i> has submitted all relevant documentation to the ECoW and Project Environmental Manager</p> <p>Liaise with the Site Manager and the ECoW and ensure that the Project Environmental Manager is informed where corrective actions and</p>

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 22

**TABLE 3.2  
ROLES & RESPONSIBILITIES**

POSITION	ROLES & RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT
	variations to the SEMP have been instigated.
<b>Project Site Manager</b>	<p>The Site Manager will provide liaison between the ECoW and the <i>Contractor</i> where environmental sensitivities, instruction for environmental performance improvements or corrective actions are requested by the ECoW, Environmental Manager or other appropriate person(s) as a result of environmental checks or audits conducted by these person(s).</p> <p>The Site Manager will ensure that all notifications of environmental sensitivities and incidents as well as other general observations on environmental performance are reported back to the Project Manager.</p>
<b>Project Environmental Manager</b>	<p>The Project Environmental Manager is responsible for review and further development of the SEMP in the pre-commencement phase prior to appointment of a <i>Contractor</i>. The Project Environmental Manager will coordinate the Environmental Management Group.</p> <p>The Project Environmental Manager, or other nominated representative, will undertake regular visits to the site for the purposes of auditing and monitoring of compliance with SEMP. The Environmental Manager will maintain regular contact with the ECoW and Project and Site Management Team.</p>
<b>HMP Ecologist</b>	<p>The HMP Ecologist is responsible for coordination of the Habitat Management Plan (HMP) implementation and ensuring that all contractors, sub-contractors and consultants appointed to undertake works associated with the implementation of the Habitat Management Plan are provided with and also adhere to the general requirements of this SEMP.</p>
<b>ECoW: Ecological Clerk of Works</b>	<p>The Ecological CoW will work with Viking Energy Partnership and the <i>Contractor</i> to ensure compliance with best practice and with all environmental mitigation and monitoring requirements as detailed within the ES, relevant planning conditions and SEMP.</p> <p>Where a particular ecological concern exists at the site, or specific habitat management activities are to be undertaken in conjunction with the main civils construction works, a specialist Ecological CoW may also be required unless the ECoW is suitably qualified to undertake the particular ecological responsibilities.</p> <p>The main roles of the Ecological CoW are as follows:</p> <ul style="list-style-type: none"> <li>• Organise start-up meetings with Viking Energy Partnership and site contractors to agree working methods, specifically including communications; weekly schedules; monitoring of data storage; and preparation of plans indicating location of key features including mitigation measures, monitoring points and sensitive habitats.</li> <li>• Maintain a full time presence on site during the main construction works.</li> </ul>

**TABLE 3.2  
 ROLES & RESPONSIBILITIES**

POSITION	ROLES & RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT
	<ul style="list-style-type: none"> <li>• Organise regular liaison meetings and procedures with Viking Energy Partnership.</li> <li>• Organise a minimum of weekly meetings with the main <i>Contractor</i>, to allow briefing on the programme of works on site and to provide on-site guidance during construction.</li> </ul> <p><i>Note:</i> It is essential that the <i>Contractor</i> supplies information on proposed works and scheduling to the ECoW in advance order to anticipate and address any issues, specifically including drainage, silt mitigation measures, cabling, roads, turbine bases, met masts, borrow pits, compounds, landscaping, topsoil removal, storage and replacement, vegetation reinstatement and restoration works, planting, felling and habitat management.</p> <ul style="list-style-type: none"> <li>• Maintain regular liaison with the Project Environmental Manager and HMP Ecologist.</li> <li>• Maintain liaison with officers of the Local Planning Authority, specifically the Planning Monitoring Officer.</li> <li>• Maintain liaison with SEPA/SNH personnel as appropriate.</li> <li>• Ensure compliance with planning conditions.</li> </ul> <p><b>Note: If failures occur and actions are taken which contravene legislation then the ECoW has the power to stop works in the affected area with immediate effect and the appropriate statutory agency and planning officer will be informed. These actions will only be taken where appropriate. Notification to stop works will be by verbal means, followed up with written confirmation recording the time and date of the instruction, personnel involved and reasons for the instruction. Upon re-commencement of works, details of any corrective actions and / or remedial measures implemented will be recorded within Section 4.</b></p> <ul style="list-style-type: none"> <li>• Give tool box talks as agreed with the site contractor to address key areas, including water pollution prevention, protected species management, and on-site biodiversity.</li> <li>• Organise ecological survey work and all proposed mitigation as detailed in the ES, Planning Conditions and Technical Schedules.</li> <li>• Monitor potential environmental impacts, including:                         <ul style="list-style-type: none"> <li>– Dust emissions</li> <li>– Use of and storage of oils and toxic chemicals on site, e.g. cement</li> <li>– Dewatering of excavations (including borrow pits and turbine bases)</li> </ul> </li> </ul>

**TABLE 3.2**  
**ROLES & RESPONSIBILITIES**

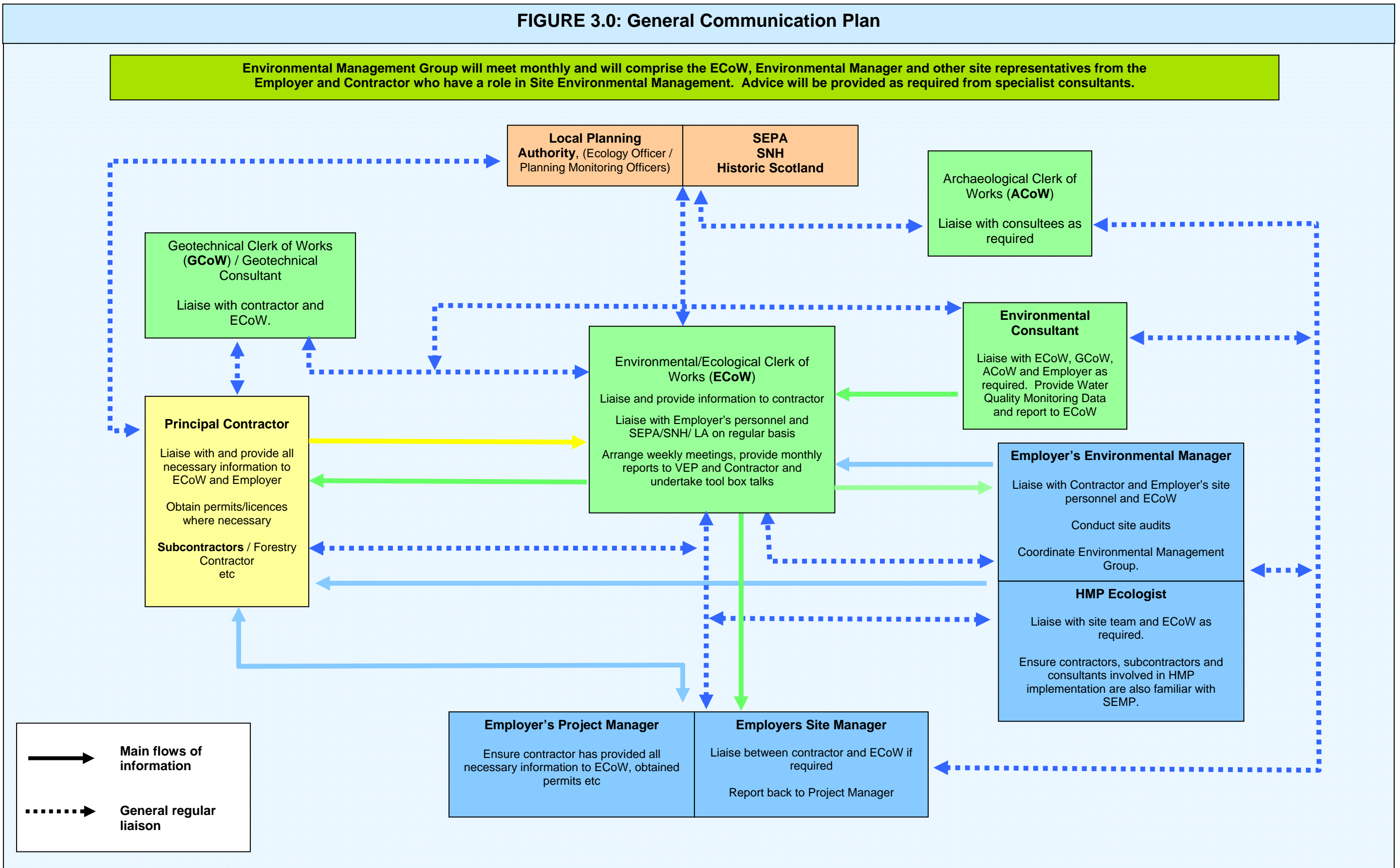
POSITION	ROLES & RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT
	<ul style="list-style-type: none"> <li>– Silt control</li> <li>– Water management, including working in or close to watercourses</li> <li>– Protection of ecological interests, e.g. protected species and habitats</li> </ul> <ul style="list-style-type: none"> <li>• Demarcate environmentally-sensitive areas and ecological hazards.</li> <li>• Produce written reports to Viking Energy Partnership and the <i>Contractor</i> following site visits and meetings. This includes monthly reports and a final report.</li> </ul>
<b>Environmental Consultant</b>	<p>Where a specialist Environmental Consultant is employed on a project, this person(s) will:</p> <ul style="list-style-type: none"> <li>• Provide advice and maintain regular liaison with the Project Site Manager, Project Manager, Ecologist and Environmental Manager, <i>Contractor</i> and / or ECoW, GCoW and ACoW as and when required.</li> <li>• Undertake specific monitoring activities and reporting as defined in agreed documentation prepared as part of the planning process.</li> </ul>
<b>Archaeological Clerk of Works (ACoW)</b>	<ul style="list-style-type: none"> <li>• Maintain regular liaison with the Project Site Manager, Project Manager, Ecologist and Environmental Manager as appropriate.</li> <li>• Maintain liaison with officers of the Local Planning Authority, specifically the Council Archaeologist and Planning Officers, SNH and Historic Scotland as appropriate.</li> <li>• Ensure compliance with planning conditions as defined in agreed documentation prepared as part of the planning process.</li> <li>• Demarcate any archaeologically-sensitive areas and set up exclusion zones as required on site.</li> </ul>
<b>Geotechnical Clerk of Works (GCoW) or appointed Geotechnical Consultant</b>	<p>The GCoW will be responsible for preparation and monitoring of a geotechnical risk register as well as specific duties relating to geotechnical issues as they may arise during site construction works.</p> <p>Peat instability and the potential for peat slide events can have a significant impact on environmental receptors. In completing the geotechnical risk register, the GCoW will work with the Contractor to identify suitable mitigation and monitoring methods.</p> <p>Where possible, construction works will avoid causing change to local hydrological and hydrogeological flow patterns and water levels.</p> <p>Blanket bog habitat restoration works, including drain/ditch blocking, are proposed as part of the Habitat Management Plan. Should these works be undertaken simultaneously to the main construction works, the GCoW will liaise closely with the <i>Contractor</i> and the ECoW to ensure that any works do not impact on the main construction works (and vice versa) and that the either the construction works or the HMP</p>


**TABLE 3.2  
 ROLES & RESPONSIBILITIES**

<b>POSITION</b>	<b>ROLES &amp; RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT</b>
	works do not result in peat instability.
<b>CONTRACTOR APPOINTMENTS</b>	
<b>Construction Manager</b>	[The <i>Contractor</i> is required to specify roles and responsibilities for each individual below]
<b>Site Agent</b>	
<b>Foreman</b>	
<b>Environmental Manager</b>	
<b>Other Nominated Person(s)</b>	



**FIGURE 3.0: General Communication Plan**



VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 viking energy Harnessing Shetland's natural resources
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document Ref.	SEMP Version 1	Page 27

## 4 CORRESPONDENCE, RECORDS & REPORTS

### 4.1 Requirements

4.1.1 The *Contractor* will insert / file all communication records and reports associated with Environmental Management and implementation of this SEMP under this Section 4. As a guide, the following sub-sections of filed information are required:

- 4-A) Start up meeting minutes and attendance record
- 4-B) Weekly Environmental Reports
- 4-C) Monthly Environmental Reports
- 4-D) Environmental Checks
- 4-E) Audit Reports
- 4-F) Ecology
- 4-G) Pollution Prevention, including a Pollution Prevention Measures Register
- 4-H) Water Quality Monitoring
- 4-I) Archaeology
- 4-J) Ground Risk, including a Geotechnical Risk Register
- 4-K) Waste Management
- 4-L) Licensing and Consents: copies of all permissions, consents, licenses and permits and related correspondence. A summary record of all such documents shall also be provided as per **Table 4.0** of this SEMP.
- 4-M) General Correspondence: all other relevant internal and external communication records relating to environmental management issues and implementation of the SEMP.

### 4.2 Environmental Audits

- 4.2.1 A blank Environmental Audit Report form is included in TS9 Environmental Incident and Emergency Response.
- 4.2.2 The Contractor is required to complete an audit once in every 12 months.
- 4.2.3 Audits may be completed at any time by the Employer.
- 4.2.4 All completed audit report forms and records of corrective actions (and close outs) must be filed within this Section of the SEMP.

### 4.3 Environmental Consents, Licenses and Permits


4.3.1 The *Contractor's* Environmental Manager (or otherwise nominated responsible person(s)), in conjunction with the ECoW and ACoW, will complete the summary record below for all applicable permissions, consents, licenses and permits obtained for the site. This record will follow the format provided in Table 4.0 below.

<b>TABLE 4.0 RECORD OF ENVIRONMENTAL CONSENTS, LICENSES AND PERMITS ISSUED</b>		
<b>Consents, Licenses and Permits</b>	<b>Governing Legislation</b>	<b>Licensed Activity</b>
<b>Pollution Control &amp; Hydrology</b>		
Section 34 discharge consent (COPA)	COPA	
Abstraction license (CAR)	CAR	
CAR General Binding Rules	CAR	
CAR Registration	CAR	
CAR Licenses	CAR	
<b>Biodiversity</b>		
Operations Requiring Consent (ORCs) at Sites of Special Scientific Interest (SSSIs)	NCA	
Protected habitat or species licenses:	WCA HR PBA	
Felling License		
Tree Preservation Order		

**TABLE 4.0  
 RECORD OF ENVIRONMENTAL CONSENTS, LICENSES AND PERMITS ISSUED**

Consents, Licenses and Permits	Governing Legislation	Licensed Activity
<b>Waste Management / Contaminated Land</b>		
Waste Management Exemption  The Contractor will utilise only registered waste carriers and will retain a record of all registration details. All hazardous waste will be dealt with as per Special Waste Regulations 1996 (and subsequent amendments).	WML	
<b>Noise / Vibration</b>		
Section 61 consent (COPA)	COPA	
<b>Archaeology</b>		
Scheduled Monument Consent	AMAAA	
<b>Transport</b>		
Permission, notification or consent for road closure, opening or diversion.	RSA	
<b>Other</b>		

<b>Acronym</b>	<b>Legislation</b>
COPA	Control of Pollution Act
CAR	The Water Environment (Controlled Activities) (Scotland) Regulations 2005
WML	Waste Management Licensing Regulations
WCA	Wildlife and Countryside Act 1981
HR	Habitats Regulations 1994
PBA	Protection of Badgers Act 1992
NCA	Nature Conservation (Scotland) Act 2004
AMAAA	Ancient Monuments and Archaeological Areas Act 1979
RSA	Roads (Scotland) Act 1984

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document No.	SEMP Version 1	Page 30

## 5 TECHNICAL SCHEDULES & AVAILABLE INFORMATION

### 5.1 Technical Schedules

5.1.1 Various Technical Schedules have been prepared by Viking Energy Partnership as listed in Table 5.1 below. These are intended to provide a benchmark for best practice and to define Viking Energy Partnership's minimum requirements for environmental management and mitigation.

### 5.2 Contractor Requirements


5.2.1 The *Contractor* is required to further develop the Technical Schedules into detailed **site and works specific** environmental plans, method statements and procedural documents. Table 5.0 provides a summary of the content of the Technical Schedules and the *Contractor's* obligations for their further development.

TABLE 5.0 LIST OF TECHNICAL SCHEDULES (TS)		
TS No.	Provided at ES / Tender Stage	Contractor Requirements
TS1	Site Induction Schedule	The <i>Contractor</i> is required to produce detailed Site Induction Procedures.
TS2	Pollution Prevention Plan (PPP).	<p>The <i>Contractor</i> will provide a detailed PPP. The objective of a PPP is to identify potential risks to the environment from pollution and to document proposed mitigation measures in order to avoid or minimise these risks and ensure compliance with relevant legislation.</p> <p>A PPP is provided herein and provides a benchmark for best practice. The <i>Contractor</i> may make cross references to the generic measures contained herein; however, the detailed PPP will also provide specific details on the intended method of use and storage on site of chemicals, fuels and oils and stockpiled excavated materials, including specific locations intended for their storage noted on a plan and details on secondary containment measures and emergency response procedures. Details will also be provided on concrete batching and wash out areas and emergency response procedures associated with this potentially polluting activity.</p> <p>The Pollution Prevention Plan may overlap with the Drainage Management Plan (DMP) and therefore cross reference must be made to where specific drainage control measures detailed within the DMP are to be implemented to prevent pollution of water courses from silt run off or the containment of chemical contaminants potentially entering the drainage system.</p>
TS3	Site Waste Management Plan (SWMP)	<p>A SWMP is intended to implement reduction and effective management of resources and waste during the early design stages of the wind farm construction, through to completion, such that legal compliance is met; project build costs are minimised; a framework for continuous improvement and best practice is implemented and maintained; and carbon emissions and other negative environmental impacts associated with the production and management of waste materials are minimised.</p> <p>The SWMP contained within Technical Schedule TS3 provides an</p>



**TABLE 5.0  
LIST OF TECHNICAL SCHEDULES (TS)**

<b>TS No.</b>	<b>Provided at ES / Tender Stage</b>	<b>Contractor Requirements</b>
		outline of the minimum requirements to be contained within the <i>Contractor's</i> detailed SWMP. TS3 also provides an outline of the anticipated waste management procedures and routes that may apply during construction. In preparation of his detailed SWMP, the <i>Contractor</i> will liaise with SEPA to determine requirements for, and obtain, licenses and consents associated with waste management and foul water discharge from the site where appropriate.
<b>TS4</b>	Drainage Management Plan (DMP)	A detailed Drainage Management Plan (DMP) will be prepared by the <i>Contractor</i> prior to commencement of works. This will include a drainage impact assessment and procedures and methods for planning, design and management of appropriate sediment and silt control measures.
<b>TS5</b>	Water Course Crossing Plan (WCCP)	The <i>Contractor</i> will carry out a detailed survey of all water course crossings at the detailed design stage and prepare a detailed Water Course Crossing Plan. The <i>Contractor</i> is responsible for liaison with SEPA to determine all authorisations required under the Controlled Activities Regulations (CAR).
<b>TS6</b>	Water Quality Monitoring Plan (WQMP)	<p>An independent consultant will be appointed by Viking Energy Partnership to undertake water quality monitoring pre-, during and post-construction works. Monitoring of water quality at Private Water Supplies and in the surface water courses within the catchment of the wind farm will be undertaken. The outline scope of the Water Quality Monitoring is presented in TS6. The results of the monitoring will be presented within the Monthly Reports and retained under Section 4 of this SEMP.</p> <p>The <i>Contractor</i> is not obliged to undertake water quality monitoring, however, where a decrease in water quality resulting from construction works is observed the <i>Contractor</i> will undertake remedial measures and will bear the costs of all associated sampling and investigation. The <i>Contractor</i> may wish to undertake confirmatory sampling and analysis at any point during the works at his own cost.</p>
<b>TS7</b>	Excavated Materials and Reinstatement Plan (EMRP)	The <i>Contractor</i> will prepare a detailed Excavated Materials and Reinstatement Plan. This will include site-specific details on: intended programme of works; timing of reinstatement; estimated materials mass balance volumes (specifically peat, although other mineral soils and rock to be included); method statements for handling and storage of excavated materials, reinstatement methods and on-site soils classification and treatment methods if required.
<b>TS8</b>	Ecological (Habitats and Species) Protection Plan (EPP)	The <i>Contractor</i> will prepare a Construction Ecological (Habitats and Species) Protection Plan. This plan will include details of construction methods to be employed in areas where sensitive habitats or species are identified. The plan will also include a statement to the effect that all requirements of Technical Schedule TS8, Protected Habitats and Species Plan, will be adhered to.

VIKING WIND FARM ADDENDUM ENVIRONMENTAL STATEMENT TECHNICAL APPENDIX A14.6		 <b>viking energy</b> <small>Harnessing Shetland's natural resources</small>
SITE ENVIRONMENTAL MANAGEMENT PLAN (SEMP)		
Document No.	SEMP Version 1	Page 32

<b>TABLE 5.0</b> <b>LIST OF TECHNICAL SCHEDULES (TS)</b>		
<b>TS No.</b>	<b>Provided at ES / Tender Stage</b>	<b>Contractor Requirements</b>
<b>TS9</b>	Environmental (Incident and Emergency) Response Plan (ERP)	The <i>Contractor</i> will prepare a detailed Environmental (Incident and Emergency) Response Plan. This will include procedures for dealing with containment of accidental chemical or fuel spills, potential overload of the drainage system by silt during unforeseen adverse weather conditions (this should be over and above the 1:200 year storm event that the drainage system is required to be designed for) and also procedures for dealing with potential mass movement of material from peat instability / slide events.