## ARCHAEOLOGICAL MANAGEMENT PLAN



## APPENDIX A13.5 ARCHAEOLOGICAL MANAGEMENT PLAN

#### 1. INTRODUCTION

## 1.1 Planning Background

1.1.1 This document provides an archaeological management plan designed to ensure the appropriate protection and investigation of archaeological remains in advance of and during construction works. These works have been designed in consultation with and to satisfy the anticipated requirements of the local planning authority as advised by the Shetland Regional Archaeologist have been designed to fully accord with the principles inherent in PAN 42 and SPP 2010. The site is being developed by Viking Energy Partnership.

## 1.2 Archaeological Background

- 1.2.1 The *Viking Wind Farm Environmental Statement* (May 2009 & *ES Addendum* May 2010, Chapter 13 Cultural Heritage) sets out the archaeological background of the Viking Wind Farm site and its immediate environs.
- 1.2.2 The area proposed for the Viking Wind Farm contains a total of 99 known sites within the application area boundary. These comprise diverse remains including prehistoric cairns, settlements and a field system, medieval and post-medieval settlement and associated agricultural structures, as well as WWII structures. A total of eight sites lie within the vicinity (100 m) of the proposed footprint of the development. These are the remains of an agricultural and industrial landscape associated with the Catfirth Linen Industry (Site 448); World War II remains (Sites 9 and 10); two marker stones/cairns (Site 341 and 349); a possible prehistoric mound (Site 445), a possible prehistoric settlement (Site 447) and a cist (Site 450). As a result of the soil studies that were carried out for the EIA the ES demonstrated that a significant proportion of the site is covered by peat and there is therefore the potential for discovering hitherto unknown archaeological remains.

## 2. OBJECTIVES

- 2.1 The objectives of the archaeological works are:
  - to safeguard the archaeological resource from any inadvertent adverse physical impact deriving from the ground-breaking works associated with the construction phase of the wind farm development;
  - *ii)* to determine the character, extent and quality of any archaeologically significant remains in the parts of the proposed development area where ground disturbance will occur;

*iii*) in the event that significant archaeological deposits are discovered and that preservation *in situ* proves unfeasible, to prepare a mitigation strategy compliant with PAN 42 and SPP 2010 and the necessary works undertaken.

#### 3. PROGRAMME OF WORKS

## 3.1 Works Summary

- 3.1.1 The necessary archaeological works will consist of seven components and will take the form of a phased approach:
  - Archaeological Clerk of Works supported by additional professional archaeologists as required, both field staff and specialists.
  - Walkover Survey to inform micro-siting in sensitive areas
  - Demarcation of Archaeologically Sensitive Areas
  - Geophysical Survey
  - Archaeological Trial Trenching/Area excavation as determined by the results of earlier stages
  - Archaeological Watching Brief as determined by the results of earlier stages
  - Archive Deposition

## 3.2 Archaeological Clerk of Works.

- 3.2.1 An Archaeological Clerk of Works will be employed to oversee the archaeological programme of works and will be responsible, on behalf of the developer, for the successful implementation of the Archaeological Management Plan. The Archaeological Clerk of Works will be a professional archaeologist with experience of archaeology in the north of Scotland. The creation of this role reflects the need to co-ordinate a range of archaeological works in a large and complex construction site and to ensure that the developer meets its obligations to minimise impacts on the archaeological resource.
- 3.2.2 The Archaeological Clerk of Works will be employed by Viking Energy Partnership and will be responsible for the full implementation of the archaeological programme of works as outlined in this Archaeological Management Plan. The Archaeological Clerk of Works will prepare a detailed Written Scheme of Investigation (WSI) and supplementary archaeological method statements, as necessary, in addition to this archaeological management plan and will ensure that any necessary approvals are obtained.
- 3.2.3 The Archaeological Clerk of Works will monitor construction works in line with the procedure set out in this document and ensure that all necessary archaeological records are made. The Archaeological Clerk of Works will maintain records, documenting the progress of the archaeological works.
- 3.2.4 The Archaeological Clerk of Works will liaise with all relevant bodies and individuals, including Viking Energy Partnership, the main site contractor, sub-contractors, the Shetland Regional Archaeologist, Historic Scotland and the Planning Authority. The Archaeological Clerk of Works will identify items in the archaeological works where

- formal consents, authorisation or permission is required from others (e.g. Viking Energy partnership, Shetland Regional Archaeologist, Historic Scotland, Planning Authority).
- 3.2.5 The Archaeological Clerk of Works will identify situations where the archaeological resource is at risk and action is required to avoid or limit damage. The Archaeological Clerk of Works will ensure that appropriate action is taken and any decisions are fully documented and that the Regional Archaeologist is kept fully informed at all times.
- 3.2.6 Prior to the commencement of groundbreaking works the Archaeological Clerk of Works will produce a document that provides brief and clear written guidelines for the use of all construction contractors, outlining the need to avoid unnecessary damage to known archaeological sites. This will include descriptions of the sites in close proximity to groundbreaking works and a plan showing the location of these features. The document will be used to inform the Site Working Area Plan issued to all construction contractors.
- 3.2.7 The written guidelines will contain details of arrangements for calling upon professional archaeological support in the event that buried archaeological remains of potential archaeological interest (such as building remains, human remains, artefacts, etc) are discovered in areas not subject to archaeological monitoring. The guidance will also make clear the legal responsibilities placed upon those who disturb artefacts or human remains.
- 3.2.8 Following the completion of the walkover survey and using results of engineering surveys of gradient, The Archaeological Clerk of Works will draw up detailed maps of archaeological potential for areas of floating roads taking into account gradients, water courses, height AOD and proximity of known archaeological remains.

## 3.3 Walkover survey

- 3.3.1 A programme of walkover surveys will be undertaken once the site has been laid out. The walkover survey will be undertaken by the Archaeological Clerk of Works with at least one qualified archaeologist assisting. Due to the nature of the terrain, the walkover survey will be conducted in transects which are never more than 20m apart, and will be at closer intervals wherever either weather or the topography (e.g.: peat hags) reduce visibility. Every effort will be made by the developer to avoid archaeological sites. This may lead to redirection of cable trenches and access roads in order to ensure that any ground disturbance lies at least 20 m from archaeological remains.
- 3.3.2 Should the walkover survey encounter possible archaeological remains it may be necessary to carry out further works. These works would be specified in an addendum to this management plan.

## 3.4 Demarcation of Archaeologically Sensitive Areas

3.4.1 The Archaeological Clerk of Works will ensure that all areas of known archaeological significance which lie 20m or less from the development are robustly fenced off in order to safeguard them from accidental disturbance or damage. This also applies to archaeological sites at a greater distance but which might lie on a route favoured by plant or vulnerable to be used as hardstanding for plant/huts etc. Affected sites will be identified by the Archaeological Clerk of Works in consultation with Viking Energy

Partnership and agreed with the Shetland Regional Archaeologist. As the exact positions of the various elements of the construction may be subject to alteration during the course of works, it is not possible to provide detailed plans of proposed fence locations prior to construction works. At present it is anticipated that fencing will apply to the following Site Nos: 9, 10, 13, 19, 20, 21, 341, 347, 349, 445, 448, 449, 447, 450 and 453.

- 3.4.2 The extent of the buffer zone around these features will be 20 m. The Archaeological Clerk of Works shall be present to supervise the fencing works. All fences shall be clearly visible from a minimum of 50m in normal visibility.
- 3.4.3 The barrier will take the form of high visibility orange mesh fencing mounted on wooden posts firmly anchored into the ground. The integrity of the barrier will be monitored by the Archaeological Clerk of Works. Any damage to a fence will be repaired or the fence replaced. The barrier will be removed on the conclusion of construction works.

## 3.5 Geophysical Survey

- 3.5.1 The purpose of the geophysical survey is to maximise the amount of information known about the archaeology as rapidly and cost effectively as possible. The results will be used, together with the walkover survey information and desk based assessment, in order to inform what work is required subsequently.
- 3.5.2 Ground Penetrating Radar (GPR) provides the most effective non destructive method of sub-surface peatland survey in areas where the peat depth is between 1.5 and 4m. The efficacy of GPR in the detection of buried archaeological remains has been demonstrated (Clarke et al 1999) but ideal conditions for GPR are frequently absent in Shetland due to peat hags, erosion and slope. In areas of very wet deposits or degraded peat this technique is not likely to be appropriate.
- 3.5.3 Magnetometry measures localised variations in the earth's magnetic field caused by features in the top metre or two of the ground. The technique is especially suited to locating ditches, pits, midden deposits, pottery, ferrous debris, hearths and ovens and burnt material. It is particularly suited for use in areas where peat depth is less than 1m.
- 3.5.4 Geoarchaeological coring can be used in peat. The effectiveness of coring as a means of detecting the presence or absence of archaeological remains has been the subject of some study (see Verhagen & Tol 2004) but its effectiveness as a prospection technique in areas of low artefact densities remains unclear.
- 3.5.5 The programme of geophysical survey will be carried out to the following specifications:
- 3.5.6 All turbine bases, borrow pits, construction laydown areas, substations, met mast locations, etc will be subject to 100% GPR (if this is inappropriate alternative strategies e.g.: magnetometer survey or coring may be applied in agreement with the Regional Archaeologist.
- 3.5.7 In areas of tracks where the peat depths are 1m or less and where the tracks will be cut into the peat and not floating, magnetometry will be carried out along the line of the tracks.

- 3.5.8 In areas where peat depth is in excess of 1m, the tracks will be 'floated' on the surface of the peat. This will not involve cutting into the peat but there may be some compression or spreading of peat caused by the loading on the track. There is no evidence that compression of peat caused by floating tracks would damage archaeological deposits within or buried beneath the peat. As the peat will essentially remain undisturbed beneath the tracks the investigation of the presence/absence of archaeological remains by trial trenching would be unsuitable and would potentially destroy remains. It is proposed, however, that an experimental reconnaissance coring programme is undertaken along some of the lengths of track in an attempt to advance our knowledge of the effectiveness of archaeological coring as a means of detecting the presence or absence of archaeological remains within and beneath peat.
- 3.5.8 Floating tracks located within areas of high potential as defined by the Archaeological Clerk of Works (see 3.2.8) will be cored on a triangular grid along the length of the track. Up to 20% of the total length of the track, up to a maximum of 1500 cores, will be investigated using this method, focusing on areas of high archaeological potential. The coring strategy will be reviewed as part of the process of testing the effectiveness of this methodology and the total amount of coring may amount to significantly less than a 20% sample of the track length. The completion of this coring programme will create a dataset which could be used as a case study for future assessment of the effectiveness of archaeological coring for detecting the presence or absence of archaeological remains within and beneath peat.
- 3.5.9 Six pollen cores (two from each quadrant) will be removed prior to the commencement of development and their potential to inform us about past environments will be assessed by palynologists as part of the community heritage project (see Appendix A13.6, 5.2.2).
- 3.5.10 The locations of all cores taken and of the geophysical survey will be accurately plotted using differential/realtime GPS or EDM survey.
- 3.5.11 Upon completion of the survey, the data obtained will be presented visually, in report form, and be accompanied by a written description of the survey and an interpretation of the results. This will indicate the likely nature of the features giving rise to anomalies and an estimate of the reliability of the results, as far as is possible. The following will be provided as a minimum: a) raw data should be plotted in greyscale, b) geophysical anomalies should be identified as to the type of anomaly and plotted without archaeological interpretation, c) anomalies should be interpreted, and d) confidence percentages or intervals should be provided for types of interpretation or anomaly with respect to substrate (e.g. we are 95% confident that this type of anomaly on this type of substrate is this type of feature). The survey report will follow the current specifications of English Heritage (2008, 9-10) as a minimum.
- 3.5.12 The cores will be inspected and recorded on site by an archaeologist who has experience of the process and the ability to recognise pedogenic features. It is likely that the there will be more than one team of two working on this in the field simultaneously. The sediment retrieved during the coring will be examined in the field and the presence of any archaeological material (e.g. pottery and flint) and archaeological indicators (e.g. charcoal and burnt loam) will be recorded. The colour and texture and any other pedogenic features of the natural sediments will also be recorded. All auger holes will be backfilled and will not be visible on the ground; neither will the back-filled auger holes present a danger to livestock.

- 3.5.13 The supervisor for the commissioned archaeological contractor, who will be an archaeological geophysicist with relevant experience of working in peatlands, will maintain a daily site log for the geophysical works; this should record date, daily start and completion time, weather and daily progress, and personnel present on site. These logs shall be collated and issued to the Archaeological Clerk of Works and the Shetland Regional Archaeologist at weekly intervals, with a progress report on the work undertaken and a forecast of the activities of the following week. The Archaeological Clerk of Works will convey the results of these reports to the developer as appropriate.
- 3.5.14 A report will be produced detailing all aspects of the geophysical survey. The report will take the form of a Data Structure Report, prepared in accordance with current standard Historic Scotland procedural requirements. Copies of the report will be provided to the client (Viking Energy Partnership), Historic Scotland and the Regional Archaeologist at Shetland Amenity Trust as soon as possible, but within no more than 3 months.
- 3.5.15 The results of all the geophysical work will be collated together with the results of the walkover survey, any subsequent field observations, and the desk based assessment in order to update maps of archaeological potential and determine what level of further archaeological work is necessary. This might comprise trial trenching, area excavation or watching briefs. It is also possible that areas might be deemed probably to be archaeologically sterile at this point, in which case development will be able to proceed without further intervention, other than the requirement to follow the protocols which will be prepared by the Archaeological Clerk of Works for unexpected discoveries. The Archaeological Clerk of Works will ensure that every plant operator on site is aware of these through the induction process and will be responsible for ensuring that they are adhered to.
- 3.5.16 The resultant report, which will be prepared by the Archaeological Clerk of Works, will take the form of written recommendations for consideration by the Regional Archaeologist. Any detailed mapping to accompany this should be at an appropriate scale and general maps should be no smaller than 1:1000. The report will also include details of any micrositing whether for archaeological or other reasons. The report does not have to deal with the entire development at once, but can deal with each quadrant or indeed defined areas within quadrants individually, in order to progress development.

## 3.6 General Principles for Archaeological Investigation Methodology

## 3.6.1 Archaeological Watching Brief

Following the results of the geophysical works, a revised report of archaeological potential will be produced. This will include recommendations on which areas should be targeted for archaeological watching brief during development. The report will be produced in consultation with, and for the approval of, the Shetland Regional Archaeologist and Viking Energy Partnership. The purpose of an archaeological watching brief is to ensure that any buried features disturbed by ground-breaking works can be identified and recorded as appropriate. A schedule for site attendance will be agreed between Viking Energy Partnership, and the Archaeological Clerk of Works in accordance with the project programme. This will be approved by the Regional Archaeologist.

- 3.6.2 Where a watching brief is required, excavation until natural subsoil or the formation level is reached will be subject to constant monitoring. Within each area where a watching brief is required, monitoring of ground-breaking will be maintained until natural subsoil or the formation level is reached, whichever occurs first.
- 3.6.3 Where small discoveries (those requiring less than two hours to excavate and record) are encountered, and preservation *in situ* proves unfeasible, these will be excavated and recorded in accordance with IfA standard practice.
- 3.6.4 Where larger / more significant discoveries are made (those requiring more than two hours to excavate and record and again where preservation *in situ* proves unfeasible) the archaeological contractor will immediately inform the Shetland Regional Archaeologist and Viking Energy Partnership. The Archaeological Clerk of Works will describe the features, itemise the costs and propose a mitigation strategy for their excavation. Once Viking Energy Partnership and the Shetland Regional Archaeologist agree to these works, they shall be set out in an addendum to the *Written Scheme of Investigation*, and the arrangements confirmed by fax or email. All excavation works will be undertaken in accordance with the procedures as summarised above.
- 3.6.5 The Archaeological Clerk of Works will maintain a daily site log for the watching brief, which records personnel present on site, date, daily start and completion time, weather and daily progress.
- 3.6.6 The final results of the watching brief will be presented to the Shetland Regional Archaeologist in the form of a written report post-construction. This report will synthesise the results of the watching brief and determine the significance and extent of any archaeological features identified. This report will be presented before the conditions pertaining to it will be discharged.
- 3.6.7 The report will take the form of a Data Structure Report, prepared in accordance with current standard Historic Scotland procedural requirements and IfA standard procedures. Specifically the Data Structure Report will include the following:
  - *i*) a full descriptive text detailing the features identified and an interpretation of their date and purpose;
  - *ii)* plans and elevations at an appropriate scale showing watching brief areas and features located:
  - *i*) appropriate lists and diagrams summarising the contexts and artefacts recovered and the records made of them;
  - *ii)* analysis of the results of the works, including any appropriate post-excavation appraisals.
- 3.6.8 Limited examination of artefacts will have been undertaken as an element of the report. However, should significant artefacts and samples be recovered there may be the need for further post-excavation assessment or analyses. The need for, and scale of, such works would be determined by the Shetland Regional Archaeologist.
- 3.6.9 The results of the watching brief will also be reported using the OASIS digital reporting facility. In addition a Summary Report on the works and its findings will be submitted to *Discovery and Excavation Scotland*.

3.6.10 Further work including any further reporting, post excavation, archiving of primary record and finds disposal will follow the protocols below.

## 3.7 Test Pits/Area Excavation/Machine Excavation

- 3.7.1 The location, spacing and dimensions of all excavation will be dependent on the results of previous archaeological work, taking into account the topography, geology and known/potential archaeology of the site.
- 3.7.2 The excavations will be located in relation to the National Grid using differential/real time GPS or EDM. Sections and spot heights will be related to the level of the Ordnance Datum, unless it has been agreed with the Regional Archaeologist that this is unnecessary. If required, the level can also be related to the client's site datum, if they provide the necessary information.
- 3.7.3 All machining will be undertaken by plant of an appropriate size, using a toothless bucket. This will usually involve tracked excavator equipped with a toothless ditching bucket of maximum width 2.0m down to the first significant archaeological horizon or to natural subsoil. Trenches will be expanded around significant archaeology to assist in determining its lateral extent. Deep trenches will be laterally stepped or subject to gradual batter where access for archaeological inspection is required. All machine excavation will be supervised by an experienced field archaeologist with a demonstrable good working knowledge of Archaeology in the north of Scotland.
- 3.7.4 For area excavation, appropriate surveys (e.g. geophysical, earthwork, contour) and sampling strategies (e.g. for topsoil artefact densities, metal detecting, phosphate analysis) will be undertaken prior to the stripping of any area excavation.
- 3.7.5 After the uppermost significant archaeological horizon has been exposed, the Archaeological Clerk of Works will decide upon the best manner in which to excavate ensuing archaeological horizons. This will usually be by hand, with cleaning, inspection and recording in plan and in section.
- 3.7.6 If the objective is to define archaeological remains, it may not be necessary to excavate all trenches to natural subsoils or bedrock. However, an assessment of the full depth of archaeological deposits across the site will be made.
- 3.7.7 If the remains are to be left in situ, then the minimum excavation necessary to determine their significance will be carried out.
- 3.7.8 The areas selected will be excavated in stratigraphic units and/or measured spits if appropriate e.g.: in deep peat, which will be allocated individual numbers. A written record (both factual and interpretative) of these will be compiled on pro forma sheets and in site notebooks.
- 3.7.9 All significant archaeological features will be cleaned and fully defined. As many features as are necessary to determine the character, function, condition, nature and date of the full suite of features present will be investigated. The advice of the Regional

Archaeologist will be sought concerning the importance of the remains and, together with Viking Energy, a strategy devised as to whether the site is to be fully excavated or avoided by micrositing.

- 3.7.10 After the cleaning and planning of any archaeological features, the sampling strategy will be finalised. This will take into account the type, quality and quantity of remains revealed. The sampling strategy will normally seek to maintain at least the following levels:
  - all structures and all zones of specialised activity (e.g. funerary, ceremonial, industrial, agricultural processing) will be fully excavated and all relationships recorded;
  - ii) ditches and gullies will have all relationships defined, investigated and recorded. All terminals will be excavated. Sufficient lengths of the feature will be excavated to determine the character of the feature over its entire course; the possibility of re-cuts of parts of the feature, and not the whole, will be considered. The sample size will be determined by the length and nature of the archaeology in agreement with the Regional Archaeologist.
  - *iii*) Artefact assemblages will be recovered (wherever possible) to assist in dating the stratigraphic sequence and for obtaining ample ceramic groups for comparison with other sites;
  - iv) all pits, as a minimum, will be half-sectioned. Usually at least 50% (by number) of the pits will be fully excavated. Decisions as to which pits will be fully excavated will be taken in the light of information gained in the half-sectioning taking into consideration, amongst other things; pit function, artefact content and location and in discussion with the Regional Archaeologist;
  - v) for post and stake holes where they are clearly not forming part of a structure (see above) 100% (by number) will be half-sectioned ensuring that all relationships are investigated. Where deemed necessary, e.g.: due to artefact content or where the size is less than 12cm, a number may demand full excavation;
  - vi) for types of feature such as working hollows, quarry pits, etc the basic requirement will be that all relationships are ascertained. Further investigation will be a matter of on-site judgement, in conjunction with the Regional Archaeologist but will seek to establish as a minimum their extent, date and function;
  - vi) for layers which do not form part of a structure, an on-site decision will be made as to the limits of their excavation which will be informed by discussion with the Regional Archaeologist. The factors governing the judgement will include the possibility that they mask earlier remains, the need to understand function and depositional processes, and the necessity to recover sufficient artefacts to date the deposit and to meet the project aims.
  - vi) Palaeoenvironmental sampling (as appropriate) will comprise three main categories of sample: Routine Soil Samples (500 gm sample soil chemistry), Bulk Samples (30 litre sample macroplant, dating, faunal & micro-artefactual) and Purposive or Special Samples (e.g. kubiena tins soil micro-morphology, monolith tins pollen, etc).

- All on-site recording will be undertaken in accordance with the standards and requirements of the Old Scatness Excavation Manual (2007)/Museum of London Archaeology Service Field Manual 3<sup>rd</sup> Edition (1994).
  - i) Written descriptions, comprising both factual data and interpretative elements, will be recorded on standardised sheets.
  - ii) The site grid will be accurately tied into the National Grid.
  - iii) Plans will normally be drawn at a scale of 1:20. Sections of features will be drawn at 1:10. All sections will be accurately related to Ordnance Datum.
  - iv) A 'Harris' matrix of the stratigraphic units will be compiled on proforma sheets and in site notebooks.
  - v) A full colour print and digital photographic record will be maintained. The photographs will illustrate details, principal features, generalised contexts and working shots of the fieldwork.
- 3.7.11 All excavation trenches will be recorded whether any archaeological remains are found or not. A photographic record will be made. Scale drawings will be created if appropriate
- 3.7.12 Artefacts will be recovered and recorded by stratigraphic unit and/or spit, quantified, identified and, where appropriate, scanned for dating evidence. They will be bagged and packed by artefact class and stratigraphic unit and/or spit in a manner that accords with the United Kingdom Institute for Conservation (Archaeology Section's) First Aid for Finds.
- 3.7.13 All archaeological finds are potentially Treasure Trove and will be reported to the Scottish Treasure Trove Unit and the Queen's and Lord Treasurer's Remembrancer.
- 3.7.14 Any valuable artefacts (such as precious metal) will be removed to a safe place. If it is not possible to remove the item on the day of discovery, appropriate security measures will be taken to prevent theft or damage.
- 3.7.15 Any finds of human remains will be left in situ, covered and protected. It is a legal requirement to inform the local police of such a discovery. If it is necessary to remove the human remains, this will be done with police approval, with the knowledge of the Regional Archaeologist, and in accordance with Historic Scotland's Operational Policy Paper 5 'The Treatment of Human Remains in Archaeology'.
- 3.7.16 The works will be initially reported in a Data Structure Report, in accordance with the standards of IfA and Historic Scotland's guidelines. Further post-excavation work and possibly publication will be assessed and costed in conjunction with the Regional Archaeologist, the client and, if appropriate, Historic Scotland.
- 3.7.17 Trial trenches in areas of significant archaeological findings will be backfilled under archaeological supervision, otherwise archaeological supervision of the backfilling is not necessary. Where specialist reinstatement is required this will be supervised by an appropriate specialist (ecologist, engineer).
- 3.7.18 The Archaeological Clerk of Works will maintain a daily site log for the trial trenching work; this should record date, daily start and completion time, weather and daily progress, and personnel present on site. These logs shall be collated and issued to Viking Energy partnership and the Shetland Regional Archaeologist at weekly intervals, with a

- progress report on the work undertaken and a forecast of the activities of the following week.
- 3.7.19 Any significant variation in the project design, including timetables, proposed after the agreement of the proposals must be acceptable to the local authority's archaeological representative.
- 3.7.20 A report will be produced detailing all aspects of any excavation. The report will take the form of a Data Structure Report, prepared in accordance with current standard Historic Scotland procedural requirements. Copies of the report will be provided to the client (Viking Energy Partnership), Historic Scotland and the Shetland Regional Archaeologist within no more than 3 months of the completion of work. A DSR will be required before the condition for excavation can be discharged.
- 3.7.21 Should the evaluation identify significant archaeological deposits, features or artefacts there may be requirement for further works including excavation, post-excavation (which would include assessment and analysis of the artefact and ecofact assemblages, as well as conservation) and publication. A costed *Post-excavation Research Design* would be prepared in these circumstances. The need for, and scale of, such works would be determined in discussion with the Shetland Regional Archaeologist. It may be appropriate for such post-excavation analysis to be delayed until further fieldwork (watching brief, evaluation or excavation) has taken place.
- 3.7.22 The results of evaluation will be also be reported using the OASIS and ASPIRE digital reporting protocols. In addition a Summary Report on the works and its findings will be submitted to *Discovery and Excavation Scotland*.
- 3.7.23 Copies of all reports will be supplied to the client (Viking Energy Partnership), the Regional Archaeologist, Shetland Amenity Trust and Historic Scotland.
- 3.7.24 Following the submission of the evaluation results, the Planning Authority may require:
  - the implementation of further archaeological works (further evaluation, watching brief or excavation) to record archaeological remains threatened by the development;
  - ii) post-excavation analysis and reporting, of either the evaluation results (see above), or the results of further archaeological works.
- 3.7.25 Following completion of each stage or the full extent of the fieldwork (as appropriate) the site archive will be prepared in the format agreed with the receiving institution.
- 3.7.26 Any significant variation in the project design, including timetables, proposed after the agreement of the proposals must be acceptable to the local authority's archaeological representative.
- 3.7.27 The results of the project, if of sufficient merit will be published in an appropriate journal or monograph. The suitable level of publication will be dependent on the significance of the project results, but as a minimum the basic requirements outlined in Project Design, Implementation and Archiving, Historic Scotland Archaeological Procedure Paper 2, 1996, will be met.

## 3.8 Archive Deposition

- 3.8.1 The archive from these works will be prepared for deposition in the NMRS within 6 months of the completion of all fieldwork.
- 3.8.2 The disposal of small finds will be conducted in accordance with Scottish legal requirements and according to the standard procedure.

## 4. OPERATIONAL FACTORS

#### 4.1 Timetable

4.1.1 The Shetland Regional Archaeologist will be given at least 15 working days notice prior to the beginning of archaeological works.

## 4.2 Monitoring

4.2.1 The Shetland Regional Archaeologist will be kept informed of the timetable and progress of the archaeological works and will be immediately informed of any significant discoveries. The Shetland Regional Archaeologist will be afforded reasonable access to the site. Whenever possible this will be immediate, although it is recognised that safety and logistics might dictate a delay of up to 24 hours. It is recognised that speedy access and good communication will facilitate efficient working and timely resolution of archaeological issues.