

8. LANDSCAPE CHARACTER

8.1 INTRODUCTION

This section assesses the landscape character within 35km from the periphery of the proposed development site and describes the key components, features and characteristics that contribute to the quality and perception of the landscape within this study area. This assessment considers the extent to which loss of features and introduction of the proposed wind farm would influence perception of the landscape character types as a result of the proposed development.

The Landscape Character assessment has been undertaken by ASH design+assessment and provides an evaluation of the implications of the proposed development in terms of:

- Direct impacts on key landscape components and features by construction works and the components of the proposed development;
- the extent to which loss of features and the introduction of the proposed development and associated infrastructure would influence perception of local character within the study area;
- the implications for wider regional landscape character.

The character of the landscape relates to the natural processes and human activities that have worked over long periods to shape the land into its present condition. Landscape character and resources are considered to have an importance in their own right and are valued for their intrinsic qualities. The aim of the assessment is to determine the effect of the proposed development on the landscape character of the area and the elements which contribute to the quality and sensitivity of the landscape.

8.1.1 Related Subjects

Landscape character and visual impact assessment, although closely related to one another, have been considered separately in this document for reasons of clarity and robustness. However, cumulative landscape and visual impacts are assessed together towards the end of the Visual Assessment Chapter in line with current best practice. Other related subjects include recreation and tourism, ecology and cultural heritage. Reference is made to these topics as part of the landscape assessment. However consideration of them is limited to the extent to which they influence the form, quality and value of the landscape of the proposed development site and the wider area. Impacts and their effects that are specific to these topics are addressed in the relevant sections of the Environmental Statement:

- Visual Assessment – Chapter 9
- Ecology – Chapter 10
- Cultural Heritage – Chapter 13
- Recreation and Tourism – Chapter 19

8.1.2 Proposed Development Overview

The proposed development consists of four individual areas which originally comprised the proposed Muckla Moor Wind Farm and the smaller Viking Energy Limited (VEL) Wind Farm. Together these are now to be known as the Viking Wind Farm and for the purposes of this assessment will be referred to as the “proposed development”.

At the centre of the proposed development is the settlement of Voe. For reference, the four quadrants will be referred to as follows (see Figure 1.1 in Volume 3):

- Delting quadrant: The north west quadrant – to the west of the A968 and the north of the A970;
- Collafirth quadrant: The north east quadrant – to the east of the A968 and the north of the B9071;
- Nesting quadrant: The south east quadrant – to the east of the A968 and the south of the B9071; and
- Kergord quadrant: The south west quadrant – to the west of the A968 and the south of the B9071.

8.2 SCOPE OF ASSESSMENT

8.2.1 Preliminary scoping

In order to aid understanding of the landscape, to identify potential issues associated with the intended development and to define the nature and extent of assessment, a review of the landscape within the area and a preliminary analysis of potential impacts were undertaken as part of a scoping study for the project.

Originally the scoping study was reported in a report entitled Muckla Moor Wind Farm Environmental Scoping Report (Scottish & Southern Energy, May 2004). However, at that stage the proposed development covered only the Collafirth and Nesting quadrants with the Delting and Kergord quadrants being proposed by another developer. Subsequently, both parties recognised the benefits of a joint project, and therefore agreed to form a partnership (Viking Energy). This has led to the production of a comprehensive scoping report, entitled Viking Wind Farm Scoping Report (Viking Energy Partnership, January 2008), to cover the entire, combined, site area.

8.2.2 Study Area

The study area for the landscape and visual impact assessment has been taken to be 35km from the development periphery in accordance with current best practice. The development periphery, for the purposes of this assessment, is a line drawn around the outer extent of the area covered by the proposed turbines. Following initial familiarisation a detailed study area of 15km from the development periphery was identified as it was considered that this would be the area within which all potential significant landscape character impacts would occur. However, potential impacts to designated areas have been assessed up to the 35km boundary.

8.2.3 Consultation Responses

The Consultee responses to the Muckla Moor and Viking Wind Farm Scoping Reports of particular relevance to landscape character and visual impact are summarised in Table 8.1.

Table 8.1: Landscape Character and Visual Assessment – Issues raised during scoping

| Consultee | Response | Action |
|---------------------------------|--|--|
| Scottish Government | The Scottish Government response summarised many of the comments received from their consultees and other bodies likely to be concerned by the proposed development. The following are the most relevant to the landscape and visual assessment: -Consideration of and reference to various Planning Policies, Guidance and Advice Notes and the Shetland Islands Development Plans is required. -The response also refers to various SNH guidance notes which should be taken into account. | A review of relevant planning policies and guidance is included in section 8.3 and taken into account in EIA methodology (sections 8.4 & 9.4) |
| Shetland Islands Council (SIC) | -The Council requires all interlinked elements of construction activity to be assessed together. -The impacts of tracks and borrow pits should be taken into account when determining impacts. -The effects of decommissioning should be assessed and restoration proposals should be outlined. -It is important to consider effects of the 4 quadrants at each property. | Taken into account in EIA methodology (sections 8.4 & 9.4) |
| | -The council states that locations of viewpoints have already been discussed. | Appendix 9.1 outlines the process of viewpoint selection. See Figure 9.2.1 for location of viewpoints and Appendix 9.2 for detailed visual assessment of each. |
| | -Direct and indirect effects of the proposals on all designated sites should be clearly set out. | Effects on designated sites have been addressed in section 8.5.5 & 8.6.3 |
| | -Cumulative impact assessment to include the interconnector for the sub-sea link | Cumulative effects on all existing and proposed wind farms and the converter station have been addressed in section 9.8 |
| Scottish Natural Heritage (SNH) | -The EIA should consider the impact of grid connection infrastructure directly associated with the proposed development. -The effects of the development on the landscape and visual amenity are a high priority for consideration in the EIA. -Construction impacts should be taken into consideration when assessing impacts. | Taken into account in EIA methodology (sections 8.4 & 9.4) |

| Consultee | Response | Action |
|--|---|--|
| | -There are a number of properties listed in the Inventory of Gardens and Designed Landscape within the study area | Designed Landscapes reviewed in section 8.5.5 |
| Royal Society for the Protection of Birds (RSPB) | -Tracks and borrow pits should be assessed as having likely significant effects on the landscape and crane pads and underground cables as having possible significant effects on the landscape. -Construction should be phased to avoid large scale disturbance across the site | Taken into consideration in the assessment |
| RFACFS (now Architecture & Design Scotland) | -Design issues are addressed at an early stage and that reference should be made to SPP1: The Planning System; ‘Designing Places’ – a statement for Scotland used as material consideration in determining planning applications; and ‘A Policy on Architecture For Scotland’ which recognises the importance and value of good design in the built environment. -The routing of tracks and design of control buildings should also be discussed and, unless the site boundaries are clearly defined by the landscape, the layout may relate to the landscape in a completely arbitrary way. -The wind farm location should be considered and determine whether it is a sensible location in relation to wind, access to the grid and the character of the landscape. | Taken into consideration in the turbine and tracks layout design and in the assessment. See Chapter 4 for details of design development. |

8.2.4 Effects to be assessed

Tables 8.2 and 8.3 present the potential effects identified in scoping and form the basis of this assessment.

Table 8.2 Potential Construction Effects – Landscape Character and Visual Impact

| Construction Effects | Impact | Potential Effects on Receptors | Specific Receptor Identified in Scoping |
|---|---|---|---|
| Mobile plant operations; Borrow pit operations; Traffic; Cable-Laying; Construction Compounds | Presence of machinery in landscape and views; visible disturbance of vegetation; presence of trenches/ compounds in landscape and views | Temporary effects on landscape character; Temporary effects on visual amenity | None |

Table 8.3 Potential Ongoing (Operational) Effects - Landscape Character and Visual Impact

| Ongoing Effects | Impact | Potential Effects on Receptors | Specific Receptor Identified in Scoping |
|-----------------|--------|--------------------------------|---|
|-----------------|--------|--------------------------------|---|

| | | | |
|---------------------------------|--|---|------|
| Likely Significant Effects | Presence of turbines in landscape and views; Presence of tracks in landscape and views | Effect on landscape character; Effect on visual amenity | None |
| Possibly Significant Effects | Presence of sub-station/control building in landscape views; Change of landform and landcover by borrow-pits | Effect on landscape character; Effect on visual amenity | None |
| Effects of Unknown Significance | Modification to Layout and appearance of public roads | Effect on landscape character; Effect on visual amenity | None |

In the light of the scoping and subsequent consultee responses, the following potential issues have been assessed:

- The direct impact of the proposed turbines, associated structures and required access tracks on the current character, quality and value of the landscape character of the proposed site; and
- the implications for the landscape character of the wider area arising from the introduction of potentially visible turbines into the area (indirect impact).

8.2.5 Effects scoped out of assessment

Effects arising from the process of decommissioning are of a similar nature to construction issues, but of a smaller scale and shorter duration. The results of decommissioning (i.e. the removal of the wind farm) are taken into account in assessing ongoing and operational effects where appropriate.

8.3 POLICY CONTEXT

The assessment has taken account of international, national, regional and local statutes, regulations, strategies, policies and plans. These are outlined below and described in detail in Chapter 7, Planning Context.

8.3.1 Legislation

The following pieces of primary legislation (as amended) are relevant to the study area since they relate to landscape as a specific interest and in relation to broader biological and cultural aspects of the natural heritage:

- The National Parks and Access to the Countryside Act 1949
- The Countryside (Scotland) Act 1967
- The Wildlife and Countryside Act 1981
- The Electricity Act 1989
- The Natural Heritage (Scotland) Act 1991
- The Town and Country Planning (Scotland) Act 1997
- The Wildlife and Countryside Act 1981

8.3.2 Planning Guidance

The primary source for planning guidance, with regards to Landscape Character assessment, is National Planning and Policy Guidance relating to the Natural Heritage (NPPG 14) - Scottish Executive 1999. The document defines statutory obligations in relation to the conservation of natural heritage, describes how natural heritage objectives should be reflected in development plans and the role of the planning system in safeguarding sites of national and international importance. It also highlights the importance of heritage outside of designated areas and provides guidance on the approach to be adopted in relation to local and non-statutory designations.

8.3.3 Structure and Local Plan Policies

Planning policy in Shetland is covered by the following local and structure plans:

- Shetland Structure Plan, adopted 2001; and
- Shetland Local Plan, adopted 2004.

Together these Plans are known as the Development Plan for Shetland. The following policies, as set out in these documents, have been considered.

(a) Shetland Structure Plan

General Development Policy GDS4 - Natural and Built Environment

'New development will conserve and where possible improve the quality of life and the environment by:

- *Controlling the location, scale and design of new development to respect, protect and conserve the natural and built environment;*
- *Minimising water, air and land pollution and waste generation;*
- *Considering all opportunities for the re-use of land and buildings;*
- *Avoiding hazards to health and safety.'*

Policy SP NE 1

'The Council will encourage developers and their professional advisers to produce a high standard of design, in terms of siting, scale, colour, materials and form, for all new developments (including roads and other engineering works) to ensure that new developments are sympathetic to the landscape and built environment of which they will form a part.'

Policy SP NE 2

'In the National Scenic Area the conservation and enhancement of the landscape will be given prime consideration in the determination of development proposals. The Shetland Local Plan will contain specific policies for its conservation and enhancement.'

Policy SP NE 9

'The Council will seek to protect and enhance the natural environment with local communities, the private sector and all appropriate agencies. The Shetland Local Plan will contain specific policies to achieve this.'

(b) Shetland Local Plan

The Local Plan works together with the adopted Structure Plan to pursue a strategy based on the principle of 'sustainable development'.

The Local Plan also states that the importance of Shetland's landscape heritage is recognised by the designation of the National Scenic Area (NSA) (see Figures 8.2.1 and 8.2.2 in Volume 3) and the designation of the entire island group as an Environmentally Sensitive Area.

Within the Local Plan the following policies have been considered in relation to landscape character:

Policy LP NE 10

'The Council will assess applications for planning permission for their impact on the environment. Applications for planning permission for the extraction and exploitation of natural resources will normally be permitted provided the proposal, by virtue of its location, scale or duration of operation, would not have an unacceptably significant adverse effect on the natural or built environment.'

'The Council will refuse development proposals that would have a significant adverse effect on the integrity or character, as appropriate, of the following designated sites...

- *...Historic gardens or designed landscapes.'*

Policy LP NE11 (Local Protection Areas)

'Where an area has been identified ... as a Local Protection Area, only applications ... which benefit the community as a whole, will be considered.'

Policy LP NE 15 (Protection of trees)

'The Council will protect trees, groups of trees and areas of woodland by making TPOs where this appears expedient in the interests of amenity. The Council will ensure that, through the development control process, adequate provision is made for the preservation of planting of trees.'

Policy LP ENG 6 (Energy Proposals)

'The general presumption in favour of renewable energy developments will in all cases be assessed in accordance with policy LP NE10.'

Shetland's topography, coastline and climate mean there is great potential for the renewable energy. However, 'despite all the obvious advantages of renewable energy, it is also important to ensure that the Shetland environment and the quality of life of its residents are not compromised.'

Policy LP ENG 8 (Energy Proposals Affecting Designated Environmental Sites)

‘Proposals for the commercial generation of power from renewable energy sources within or adjacent to designated or candidate European sites or notified Marine Consultation Areas, National Scenic Areas, or any notified or classified sites (e.g. SSSIs, SPAs) will be considered in accordance with the following criteria:

- *The development will not have a significant adverse effect on the underlying objectives and overall integrity of the notified area;*
- *No reasonable alternative site exists; and*
- *The proposal does not conflict with any other Structure Plan or Local Plan policy.’*

This policy recognises that ‘renewable energy projects are very desirable, but measures must also be put in place to protect Shetland’s unique environment...’

Policy LP MIN7 (Borrow Pits)

Policy LP MIN7 aims to control the size and number of borrow pits as the ‘proliferation of quarries and pits in the Shetland landscape is perceived as a problem.’

(c) Community Council Area Statements

As well as the Structure and Local Plans, Shetland Council also has a series of Community Council Area Statements. The Community Council areas that fall directly within the boundaries proposed for the wind farm development are:

- Delting;
- Nesting and Lunnasting;
- Sandsting and Aithsting; and
- Tingwall, Whiteness and Weisdale.

All have, as part of their statements, the environmental aims of conserving and enhancing the natural and built environment.

8.3.4 Scottish Natural Heritage

Established in 1992, Scottish Natural Heritage (SNH) is charged with the responsibility of advising the Scottish Parliament and local government on matters relating to natural heritage. It is a statutory consultee where development proposals are subject to environmental assessment in accordance with the EU Directive.

In response to these duties SNH has developed policies, guidelines, discussion documents and joint studies that define landscape values, quality, characteristics and interests. It has framed strategies targeted at conservation, enhancement and sustainable development within the Scottish landscape.

(a) Natural Heritage Futures

The Natural Heritage Futures series is a series of publications which SNH has prepared, setting out long term objectives to guide the future management of Scotland’s natural heritage towards 2025, within the wider context of sustainable development.

Both the local document covering Shetland and the detailed national objectives for 'Hills and Moors' are pertinent to this assessment for the wind farm proposals.

Natural Heritages Futures - Shetland

This document notes that *'a more sustainable future for the natural heritage of Shetland should build on the positive aspects of the past and present'* including *'developing renewable sources to meet most of Shetland's energy needs.'*

In so doing however, a strategic approach to siting development is required to minimise the effects on the environment and to maintain the character of the Shetland landscape.

Hills and Moors

Whilst recognising that exploiting sources of renewable energy is needed to help combat climate change, this document also notes that development for wind power is likely to be the most potent development change to Scotland's uplands in the near future. With careful location and a high quality of design and operation, some development can be accommodated without major adverse effects, but the strategic objective is to manage the integration of development whilst safeguarding the quality and character of the upland landscapes. Objectives include:

- Safeguarding the most important wild areas from development;
- placing the natural heritage and environmental values at the heart of land-use policies;
- securing improved diversity and good condition of Scotland's upland habitats.

Actions to achieve these objectives include:

- Ensuring that development on high or exposed sites is influenced by the feasibility of restoring damage due to construction or subsequent after use;
- development of strategic guidance to ensure that development does not transgress into nationally important landscapes;
- ensuring design, siting and implementation is wholly appropriate to their location.

(b) **Wild Land**

Wild land is described in NPPG 14: Natural Heritage as "uninhabited and often relatively inaccessible countryside where the influence of human activity on the character and quality of the environment has been minimal". SNH has also published Policy Statement No.02/03, 'Wildness in Scotland's Countryside' concerning the identification and definition of wild land. Map 3 of the statement entitled 'Search areas for wild land' is intended as a tool for local authorities and developers to target surveys with respect to wild land. It identifies the areas of Scotland that are likely to encompass the most significant and valued areas of wild land but does not identify any search areas for wild land in Shetland. Map 2 in the same publication indicates distances from public and private roads and there are some very small areas of land shown in the interior of three of the four quadrants of the proposals area which fall into the "2 to 5km from track" category. Closer inspection, however, both on the Ordnance Survey Plan and in the field reveals that the furthest away any point in these areas is from a road or track is approximately 2.5km.

However, the Statement does say that these maps are no more than a starting point for debate about where wild land may exist. The Statement does give physical and perceptual criteria to assist in determining whether or not an area could be considered as being “wild land” and states that it should be “...an extent of area sufficient to encompass (all) the physical attributes and to provide an appropriate scale of setting to evoke the full range of perceptual responses.” However, these interior areas highlighted above fail to comply with some of the most important physical criteria used to determine “wild land characteristics”, notably; they lack the extent sufficient to engender a sense of remoteness; and they are never very far from modern artefacts or structures. This is due to the sinuous and deep penetrating nature of the voes and sounds and their associated communications routes and settlement, which means that nowhere on Shetland is further than about 2.5-3 km from built development, farms, roads, tracks, transmission and distribution lines, fish farms and hilltop telecommunications masts and the visual envelope of these developments reduces any potential perceptual sense of “wild land” still further. This is probably the reason why this has not been raised as an issue at scoping stage by any of the consultees. For all these reasons, this topic is not considered further in this ES.

8.4 METHODOLOGY

8.4.1 Overview

The following paragraphs outline the method adopted for the landscape character assessment. The assessment has been prepared with reference to the Guidelines for Landscape and Visual Impact Assessment (GLVIA) published by the Landscape Institute and the Institute of Environmental Assessment in 2002. GLVIA relies on an appreciation of the existing landscape, a thorough understanding of the development proposals, evaluation of the magnitude of change predicted to result from the development, the sensitivity of the existing landscape to change and the potential to mitigate impacts.

Reference has also been made to the following guidelines issued by SNH, the Scottish Government and Shetland Islands Council:

- Guidelines on the Environmental Impacts of Windfarms & Small-Scale Hydroelectric Schemes (SNH February 2001);
- Assessment of Cumulative Landscape & Visual Impacts Arising from Wind Farm Developments (SNH March 2002);
- Guidance on Scoping Issues for EIA, 3rd draft (SNH November 2003);
- Landscape Character Assessment (The Countryside Agency and SNH 2002);
- Scottish Planning Policy 4 (SPP 4) Planning for Minerals (SE 2006);
- Scottish Planning Policy 6 (SPP 6) Renewable Energy Developments (SE 2007);
- National Planning Policy Guideline 14 (NPPG 14) Natural Heritage (SE 1999);
- Scottish Planning Policy 15 (SPP 15): Planning for Rural Development (SE 2005);
- Planning Advice Note 45 (revised 2002): Renewable Energy Technologies (SE 2002);

- Planning for Natural Heritage: Planning Advice Note 60 (SE 2000);
- Strategic Locational Guidance for onshore windfarms in respect of the Natural Heritage (SNH Policy Statement no 02/02, 2005);
- Wildness in the Scottish Countryside (SNH Policy Statement no 02/03, 2003);
- Visual Assessment of Windfarms: Best Practice (prepared by University of Newcastle for SNH, 2002);
- Visual Representation of Windfarms Good Practice Guidance (SNH October 2006); and
- Basic Principles of Landscape and Visual Impact Assessment for Sponsors of Development (Shetland Islands Council, 2006).

The assessment has involved six key stages:

- preliminary assessment and scoping;
- establishment of the baseline conditions relating to landscape character, quality and value and sensitivity to change of the existing landscape;
- evaluation of the potential impacts anticipated to result from the introduction of the development into the baseline context;
- assessment of the effects of the anticipated impacts based on magnitude and sensitivity to change. The assessment takes into account primary mitigation measures related to site selection and site planning; and
- description of the anticipated effects and their significance.

8.4.2 Baseline Assessment

(a) Desk surveys

The following specific desk-based tasks have been undertaken:

- A review of the Muckla Moor Wind Farm Environmental Scoping Report, May 2004 and the Viking Wind Farm Scoping Report, January 2008;
- consultation with the following organisations: Shetland Island Council and Scottish Natural Heritage;
- a review of the Shetland Isles Landscape Character Assessment 1998 (SNH Review No 93);
- analysis of existing and proposed land use data and policies from the Shetland Structure Plan 2001-2016;
- analysis of existing and proposed land use data and policies from the Shetland Local Plan;
- analysis of existing and proposed land use data and policies from Delting Community Council Area Statement;
- analysis of existing and proposed land use data and policies from Nesting and Lunnasting Community Council Area Statement;

- analysis of existing and proposed land use data and policies from Sandsting and Aithsting Community Council Area Statement;
- analysis of existing and proposed land use data and policies from Tingwall, Whiteness and Weisdale Community Council Area Statement;
- a review of the landscape designations;
- a review of the Inventory of Gardens and Designed Landscapes; and
- identification and site appraisal of landscape character and its key landscape, ecological and cultural elements. Site recording involved annotation of 1:50,000 Ordnance Survey plans supported by a photographic record of the area.

(b) **Field Survey Techniques**

A site appraisal of landscape character and its key landscape, ecological and cultural elements was carried out in September 2006 by a team of qualified and experienced landscape architects. The results of this survey were updated once the final design had been agreed and a further survey carried out, in August 2008.

8.4.3 Effects Evaluation

(a) **Landscape Character; General**

The aim of the landscape impact assessment is to identify, predict and evaluate potential key effects arising from the proposed development. The assessment of predicted impacts involves:

- An appreciation of the nature, form and features of the proposed development in the context of the baseline landscape character. Landscape character is a composite of physical, biological and cultural elements. Landform, hydrology, vegetation, land use pattern and cultural and historic features and associations combine to create a common ‘sense of place’ and identity which can be used to categorise the landscape into definable units (character areas). The level of detail and size of unit can be varied to reflect the scale of definition required. It can be applied at national, regional and local levels.
- An evaluation of the sensitivity to change of designated sites and landscape character in relation to changes arising from wind farm development. This is arrived at by a review of landscape value and scenic quality.
- An evaluation of the predicted magnitude of change experienced by designated sites and landscape character, assuming implementation of the proposed development. This is in the form of quantification and description of the direct or indirect impact on specific landscape components that make up the character of the various local landscape areas within the study area. Further, it includes explanation of the predicted change in the composite quality of the various areas related to such direct and indirect impacts, in combination with the compatibility of the proposed forms within, or neighbouring, the various landscape character areas.

- Assessment of the degree and significance of the impact of the proposals on the designated site or landscape character under consideration by relating the magnitude of change to the sensitivity to change.

(b) **Landscape Sensitivity to Change**

The methodology used in this assessment adopts the terminology within current best practice of assessing “Sensitivity to Change” (GLVIA, Landscape Institute and the Institute of Environmental Assessment, 2002). The assessment of the landscape sensitivity to change is specifically related to the type of proposal; in this case turbines, their associated structures, borrow pits and access tracks that make up a wind farm development.

The extent to which the landscape components and landscape areas could accommodate and tolerate change arising from wind farm development both during construction and during operation of the scheme is evaluated by consideration of the following factors:

- the compatibility of wind farm development with landscape components such as landform, landcover, hydrology, settlement and land use;
- the existence or absence of similar development and its prominence where present;
- the scenic quality of the landscape and the key determinants of that quality (see below); and
- the value of the landscape (see below).

The degree of sensitivity of landscapes to change arising from wind farm development will vary in accordance with the importance of the landscape concerned and the contribution it makes (positively or negatively) to the local, regional and national landscape.

To assist in this process, an evaluation of Scenic Quality has been carried out based on a five point scale, as follows:

- **High:** Highest Scenic Quality, with pleasing patterns, combinations of landscape features and important aesthetic or intangible factors, tranquil and unspoilt by intrusive / inharmonious development;
- **Medium-High:** Pleasing pattern or combinations of landscape features but slightly less tranquil / enclosed and some awareness of nearby development;
- **Medium:** May or may not be developed, harmonious and pleasing to the eye, with no discordant elements present;
- **Low-Medium:** Of neutral quality, neither pleasing nor discordant, but with some intrusive or disharmonious development;
- **Low:** Poor quality landscape with intrusive / inharmonious development predominating.

This has been mapped in Figure 8.1

It should be noted that areas of different landscape scenic quality do not necessarily correlate with landscape character areas.

Landscape value is frequently addressed by reference to international, national, regional and local designations, determined by statutory and planning agencies. Absence of such a

designation, however, does not necessarily infer a lack of quality or value. Factors such as accessibility and local scarcity can render areas of nationally unremarkable quality, highly valuable as a local resource.

Sensitivity to change arising from wind farm development and its impact on landscape character has been evaluated with reference to scenic quality and value and has been rated as being high, medium or low. This three-point scale uses the following criteria:

- **High Sensitivity:** a highly valued landscape of high, medium-high or medium scenic quality susceptible to change arising from wind farm development; for example, small scale, complex landforms and land cover characteristics with distinctive landscape features;
- **Medium Sensitivity:** a medium - valued landscape of medium-high, medium, or low-medium scenic quality, reasonably tolerant of change arising from wind farm development; medium, or large and small scale landforms and landcover in combination; occasional distinctive landscape features;
- **Low Sensitivity:** a low - valued landscape of medium, low-medium or low scenic quality, which is tolerant of change arising from wind farm development; for example, large scale, simple landforms and landcover characteristics with no distinctive landscape features.

(c) **Magnitude of Proposed Change**

Magnitude of change has been assessed as being high, medium or low. A fourth rating of negligible has been attributed to character areas where the change would be barely discernible. These criteria are described as follows:

- **High:** Very noticeable indirect change in landscape characteristics over an extensive area or direct change to landscape components/ character over a less extensive area;
- **Medium:** Noticeable indirect change in landscape characteristics over less extensive area or direct change to landscape components/ character over a localised area;
- **Low:** Perceptible indirect change in landscape characteristics over a localised area or direct change to landscape components/ character over a very localised area;
- **Negligible:** virtually imperceptible or no indirect change in landscape characteristics over a very localised area, or barely noticeable, or no, direct change to landscape components/ character.

Intervisibility has been considered in determining the magnitude of change. The degree to which the proposed development contributes, directly or indirectly, positively or negatively, to the landscape depends upon the extent to which it can be experienced, in whole or in part,. The potential extent of intervisibility is evaluated using the Zone of Theoretical Visibility (“ZTV”) or visual envelope. Figure 9.1 shows the ZTV for the proposal. The data set used in the generation of the ZTV is described in Chapter 9, Section 9.4.3(a). Wireframe diagrams and photomontages from viewpoint receptors have also been used as a tool to aid assessment (see Figures 9.3.1 – 9.3.43 inclusive).

(d) Impact significance

Using professional judgement and assisted by tools such as ZTVs, photomontages and wireframe diagrams, the assessment of impacts compares the magnitude of change experienced by a designated site or landscape character area to its sensitivity to change of the type proposed. It also takes into account direct impacts upon existing landscape elements, features and key characteristics and assesses whether these would be lost or their relationships modified, in the context of their importance in determining the existing sensitivity of the character area in question.

Anticipated impacts are reported in terms of a descriptive scale ranging from substantial - moderate - slight adverse through negligible to an ascending scale of slight - moderate - substantial beneficial.

The criteria adopted for the assessment of landscape effects are as follows:

- **Substantial Adverse (or Beneficial) Impact** : significant deterioration / improvement in the existing landscape;
- **Moderate Adverse (or Beneficial) Impact** : noticeable deterioration / improvement in the existing landscape;
- **Slight Adverse (or Beneficial) Impact**: barely noticeable deterioration / improvement in the existing landscape;
- **Negligible Impact**: no discernable deterioration / improvement in the existing landscape.

Impacts of moderate and above are considered in this assessment to be significant. Impacts of Slight to Moderate and below are considered not to be significant.

The predicted impacts have been considered in light of primary mitigation measures associated with site selection and site planning, culminating in a statement of the predicted effects and their overall significance to the landscape resource of the study area.

8.4.4 Limitations of Assessment and Assumptions

Although the total study area has been taken to be 35 km from the periphery of the proposed development in order to consider all likely landscape and visual impacts, after initial field reconnaissance, the detailed assessment of landscape character was limited to the inner 15km radius, as detailed above in paragraph 8.2.2, as it was considered that this area would encompass all likely significant landscape character impacts. Notwithstanding this, potential impacts to designated landscapes have, however, been assessed within the full 35km study area.

8.5 LANDSCAPE CHARACTER BASELINE CONDITIONS**8.5.1 Regional Context**

The Shetland archipelago comprises over one hundred islands and is located approximately 150km northeast of the Scottish mainland. The character of the landscape is heavily influenced by its exposed, northern, maritime location and the resultant constantly changing weather conditions and light. The sea has a primary influence on the landscape character of Shetland as virtually no point on land is more than 5km away from it. This

results in a mosaic of land and water and a long, intricate coastline. The landscape typically consists of long, complex sea inlets or “voes” leading into the island interior of rolling hills with expansive tracts of heather moorland or rough grassland and a relative absence of man-made features. The coastline is dotted with numerous islands ranging in size from large inhabited islands to rocky skerrays. The landscape is virtually treeless and often portrays an isolated, windswept feel. The few trees that exist are usually located within gardens. Although fairly uniform across the islands as a whole, character varies locally, for example the western Atlantic coastline exhibits more rugged characteristics.

Settlement is generally limited to the coastal fringes with the highest concentration in the main town of Lerwick. Other communities are small and scattered in character with their centres usually concentrated on small harbours and often dominated by larger, modern public buildings. Around the coastline, strings of houses and crofts are common, creating a managed landscape that is distinct from the moorland that dominates the interior. Often these houses are modern and ruined stone cottages are a common sight. The oil industry has resulted in much new development over recent years.

8.5.2 Site Description

The proposed development is located in the centre of the Mainland of Shetland in four distinct areas, referred to within this ES as ‘quadrants’. The two larger, southern quadrants are located on either side of the A970 road, in an area characterised by a distinct system of north-south ridges, typically between 100 and 200 metres in height, known as the Kames. The area is dissected by numerous burns, water bodies and lochs. The Moorland drops away to meet the irregular and varied coastline, with various voes and sounds penetrating into the development periphery. The area is exposed in nature and barren in appearance, with panoramic views across Shetland, in clear weather. Heather moorland and peat dominate the ground cover with man-made influences limited to peat cutting, sheep grazing and occasional masts and aerals. The northern quadrants of the proposed development are located in an area of similar elevated moorland character but without the distinct ridged landform. The village of Voe lies more or less in the centre of the proposed site whilst around the coast, within 3 to 4km of the development boundary, are the communities of Vidlin, Brae, Aith and Mossbank as well as other scattered houses and small communities. The Sullom Voe oil terminal lies approximately 3km to the north.

8.5.3 Landscape Scenic Quality

Scenic quality has been determined using the methodology detailed in Section 8.4.3. Landscape scenic quality is related to the contribution the landscape makes to the local landscape in terms of appeal and aesthetic factors. Scenic quality for the study area is shown in Figure 8.1.

In general the landscape of Shetland ranges from medium to high scenic quality as a result of the harmonious combinations of land, sea and sky and lack of incongruous features. Areas of highest scenic quality are generally coastal, where deep voes and inlets and numerous islands form a pleasing composition of contrasting land, sea and sky. Many of these areas have been designated as National Scenic Areas. Human development in these cases is often at a scale and form in harmony with the natural landscape. Inland areas are generally of medium quality as they tend to consist of uniform moorland with a more subtle mosaic of colour and texture which is less diverse than the coastal areas, with fewer features to draw the eye. Areas of lower scenic quality are related to obtrusive man made

developments which dominate the natural landscape such as the Sullom Voe oil terminal or the industrial areas of Lerwick.

8.5.4 Landscape Value

Landscape value has been determined using the methodology detailed in Section 8.4.3. Landscape value is related to the national, regional and local importance of the landscape and is discussed with relation to landscape designations in Section 8.5.5 and with relation to landscape character areas in Section 8.5.7.

8.5.5 Landscape Designations

Landscapes can be ascribed international, national, regional or local designations that recognise the significance of the landscape for its outstanding scenic interest or attractiveness. These statutory and non-statutory designations include National Scenic Areas, Areas of Great Landscape Value, Local Protection Areas and Gardens and Designed Landscapes. All areas within the study area so designated are shown on Figures 8.2.1 and 8.2.2.

(a) National Scenic Areas

National Scenic Areas (NSAs) are a national level designation and are applied to areas of land considered of nationally exceptional scenic value - the finest landscapes in Britain - on the basis of their outstanding scenic interest or unsurpassed attractiveness, which must be conserved as part of the country's natural heritage.

Shetland has one NSA which covers seven sections of the islands' coastline. Three of these seven sections are on the outer periphery of the archipelago and outwith the 35km study area. The four remaining sections within the study area are:

- The western flank of Dunrossness and the Deeps;
- Part of Muckle Roe;
- Esha Ness; and
- Uyea Isle and Fethaland.

These areas contribute a variety of contrasting landscapes to the NSA ranging from the sea cliffs, headlands, skerrays and stacks at Muckle Roe and Esha Ness to the fjord-like voes of Weisdale and Whiteness. The result is a seascape of strong character in which the constantly changing skies play an important part.

In view of its designated status and national importance the Shetland National Scenic Area is considered to be of **High** scenic quality and **High** landscape value.

(b) Environmentally Sensitive Area

Environmentally Sensitive Areas (ESAs) were designated by the Secretary of State following the Agriculture Act 1986. These are areas where landscape, wildlife or historic interest is considered of particular importance and where farmers and land users are given assistance in return for using methods which help to protect and maintain the landscape. The whole of the Shetland archipelago was designated an ESA in 1993 by The

Environmentally Sensitive Areas (Shetland Islands) Designation Order 1993 (as subsequently amended).

As the ESA is a designation covering the whole of the Shetland Archipelago and since its main concern is land use it has not been individually assessed for landscape impacts *per se*. However, the designation has been taken into account when forming decisions relating to landscape sensitivity and value.

(c) **Local Protection Areas**

Local Protection Areas (LPAs) are not generally protected by any statutory designation, but they are areas regarded by the local community as being worthy of protection for a variety of reasons e.g. a viewpoint, wildlife, wild flowers, local historic interest, open space. The aim is to maintain these areas free from development, except that which is for the benefit of the community as a whole. Although there are no LPAs within the boundary areas proposed for the wind farms, the following are within 3km of the proposed development areas:

- Brae north-west foreshore and Lower Voe (Delting Community Area)
- Lunna House and the Bod (Nesting and Lunnasting Community Area)
- Ling Ness and Loch of Linga (Nesting and Lunnasting Community Area)
- Broch on the Holm in the Loch of Benston (Nesting and Lunnasting Community Area)

These areas are very small in size and have therefore not been assessed for landscape impacts individually. However, their local importance and resultant high landscape value has been considered as a contributory factor when evaluating landscape value as a contributor to sensitivity during the assessment process.

(d) **Inventory of Gardens and Designed Landscapes**

The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance. Although inclusion in the Inventory does not constitute a statutory designation it represents a material consideration in the planning process.

Within the study area and within the Shetland Isles, as a whole, there are four entries:

- Belmont House;
- Brough Lodge;
- Gardie House; and
- Lunna House.

The Council is also proposing to investigate the possibility of the formal designation of an area of land around Lunna House as a Conservation Area.

Belmont House

Belmont House is located on the south west coast of Yell, some 32.5km north east of the proposed development. It is an 18th century formal landscape in the neo-classical style, but specifically adapted to suit the unique Shetland situation. It is based on a strong north-

south axis which runs through garden, house and outbuildings with a strong symmetrical layout of rectilinear gardens and parkland, bisected by paths.

The key landscape views follow the axis south from the elevated house, across the Wick of Belmont and beyond to Yell and other uninhabited islands. There are also important views westwards, across the Loch of Belmont. The house itself when viewed from the sea, in combination with its symmetrical layout of garden and parkland, is also an important feature of the Unst landscape, and is especially imposing when seen silhouetted against the sky.

The strong symmetrical composition of the garden in association with its axes and views gives the Belmont House Designed Landscape a **High** scenic quality. Its historical and archaeological importance and designated status also give it a **High** landscape value.

Brough Lodge

Brough Lodge Designed Landscape is located on the west coast of Fetlar, 26km north east of the proposed development. It is an early to mid 19th century design in the picturesque style, and is particularly unusual in the Shetland setting. It consists of a parkland setting, centred around a large and imposing gothic styled house with castellated detailing screen walls and outbuildings. East of the house is a series of walled gardens and beyond them, located on a small knoll on the site of an old Broch is a gothic styled tower, intended as an eye catcher. To the west of the house are the remains of a paved terrace and steps leading down to formal gardens.

The gothic tower and house are important features of views both from within the Designed Landscape and beyond its boundaries. The situation of the landscape also results in important views westwards, across the Colgrave Sound and to Hascosay and Yell.

The importance of the views within the landscape and the architectural features gives the Brough Lodge Designed Landscape a **High** scenic quality. Its historical significance, scenic quality and designated status also give it a **High** landscape value.

Gardie House

The Gardie House Designed Landscape is located on the west coast of Bressay, 14km south east of the proposed development. It consists of formal 18th century garden of walled enclosures and terraces, surrounding a small country house. This is set within a larger area of square enclosed parks with an accompanying 'model' miniature farm steading dating from the early 19th century. Both the parkland and garden are set on strong parallel axes running northeast to southwest and follow a very formal symmetrical pattern.

The Gardie House and gardens and the formal layout of the parkland are a prominent feature of views towards the island – particularly for those arriving on the Bressay Ferry. Views from the designed landscape and house follow the line of the axes in a south-easterly direction towards Lerwick and the hills beyond.

Scenic quality for the Gardie House Designed Landscape is reduced to some extent by the presence of the urban and industrial parts of Lerwick as the focus of the main views. Nevertheless the importance of the views within the landscape setting, and the designed landscape and house within views towards the island gives the designed landscape a **Medium to High** scenic quality. Given the landscape's designated status and its historical importance the landscape value is **High**.

Lunna House

Lunna House is located in the north east of mainland Shetland, 6km north and east of the proposed development. The associated Designed Landscape is described in the Inventory as, ‘Probably the best surviving example of a formal designed landscape... in characteristic Shetland style...’ It consists of a collection of walled enclosures, eye catchers and buildings which together form an attractive composition of framed views.

The main view follows an axis southwest from the house, through the ‘Gothic Cottage,’ a 19th century built ruined cottage with a gothic styled west end wall, towards ‘Hunter’s Monument,’ a square tower with battlemented flanking walls sited on a hill opposite the house. Further views are obtained from the house looking west and south across West Lunna Voe and East Lunna Voe.

The set out views and composition of the landscape give the Lunna House Designed Landscape a **High** scenic quality. The landscape value is also **High** because of the historical significance of the landscape and the views.

In acknowledgement of its importance, turbines which would have impinged on the main axial views have been removed as part of the layout design exercise.

8.5.6 Landscape Character

SNH, in conjunction with partner Councils, has undertaken a detailed review and classification of various landscape areas and types of Scotland. The landscape of the study area is covered by the Landscape Assessment of the Shetland Isles (Scottish Natural Heritage Review No 93 – Gillespies 1998). This report provides a detailed assessment of the landscape character of Shetland. The Landscape Assessment divides the Shetland landscape into seven distinct Landscape Character Types (LCTs). The distribution of these LCTs within the study area is shown on Figures 8.3.1 and 8.3.2. Within the 15km detailed study area all seven of the landscape character types are represented:

- A - Major Uplands
- B - Peatland and Moorland
- C - Undulating Moorland with Lochs
- D - Inland Valleys
- E - Farmed and Settled Lowlands and Coast
- F - Farmed and Settled Voes and Sounds
- G - Coastal Edge

(a) **A - Major Uplands**

The Major Uplands are distinct from other parts of Shetland which are generally low-lying. They have a large scale, undeveloped quality and form an important backdrop to the lower peatlands, the settled coast and the voes and valleys. Groundcover is dominated by heather moorland and peaty mires. There is no tradition of settlement in these areas and human intervention is limited to access roads, peat cutting, sheep grazing and some mast/aerials. This character area is typically exposed in nature and provides panoramic views in clear weather.

Four distinct local character areas (LCAs) of this type are found within the study area:

- A1 - South Mainland Spine
- A2 - East and West Kames
- A3 - Ronas Hill
- A5 - Sandness Hill.

All LCAs are illustrated on Figure 8.4.

The key characteristics that occur within these LCAs are set out below:

A1 - South Mainland Spine

This area forms the backbone of the south mainland and consists of a series of exposed, gently rounded hills composed of peatland and heather moorland. This is a large scale, exposed, natural landscape, affected by the siting of various MOD and telecommunications structures and an existing wind farm. The subtle colour and elevated landscape forms a contrast to the more rich and varied colours of the surrounding landscapes.

Principal Positive Components:

- Large-scale, exposed, natural landscape with striking elevated views of surrounding lowlands and coast; and
- Natural and uninhabited character with subtle interplay of colours and textures provided by the exposed peat areas, rock, peaty mires, standing water and heather moorland.

Principal Negative Components:

- Natural and uninhabited character often marred by the MoD and telecommunications structures and existing wind turbines.

Landscape Scenic Quality – Generally **Medium**

Landscape Value – Although not within any designated area the spine forms an important back drop to other lower areas including the part of the NSA described as Dunrossness and the Deeps. However, this landscape type is not uncommon on Shetland and is already visually affected by masts, turbines etc, therefore the landscape value is assessed to be **Low to Medium**.

A2 – East and West Kame

This LCA takes the form of a distinct series of rounded north-south ridges located in the central part of the mainland. It is an uninhabited, large scale and inaccessible landscape, barren in nature, of peaty mires, standing water and heather moorland. There is a uniformity of colour and texture through the landscape which can lead to monotony. The open and exposed landscape character is affected by the siting of various MOD and telecommunications structures and the main north-south road, which is routed through the linear valleys defined by the ridges.

Principal Positive Components:

- Distinctive rounded north-south ridged landform; and
- Open, large scale character with expansive views over the ridges.

Principal Negative Components:

- Uniformity of colour and texture can lead to monotony;
- transport routes through valleys; and
- a number of telecommunication masts on prominent hills present man-made features in an otherwise uninhabited landscape.

Landscape Scenic Quality – Predominantly **Medium** with very localised and marginal areas of **Medium to High** and **Medium to Low**.

Landscape Value – This landscape is not covered by any designations and of a fairly common and unexceptional type within Shetland as a whole, although it does provide a backdrop for other more highly valued landscape types and therefore the landscape value is **Low**.

A3 – Ronas Hill

This is a large dome-shaped red granite hill located in the north east mainland, the top of which marks the highest point in Shetland. The lower slopes are vegetated with heather and rough grassland but the upper slopes are exposed and rock strewn with little vegetation. The hill has a rough texture with frost-shattered rocky outcrops and boulder fields. The red granite provides an interesting contrast with the more uniform muted colours of the heather and peatland.

Principal Positive Components:

- Smooth, domed red granite mass – highest point in Shetland representing an imposing landscape feature and landmark;
- muted colours of peat vegetation and rough grassland contrasts interestingly with the colour of the red granite;
- lower slopes descend to form a dramatic coastline to the west and steep angular north side to Ronas Voe; and
- expansive views of Shetland in clear weather.

Principal Negative Components:

- Derelict communications structures mar the otherwise uninhabited character.

Landscape Scenic Quality – Predominantly **Medium** with coastal areas **Medium to High**.

Landscape Value – Landscape value is **Medium to High** as although the area is not covered by any designations the hill has local importance as the highest point in Shetland.

A5 – Sandness Hill

This LCA lies only partly within the 15km detailed study area. It consists of a separate hill mass which forms an important landmark and is bordered by a dramatic coastline of sand stone cliffs supporting large colonies of birds. The coastline however is outwith the study area.

Principal Positive Components:

- Open, natural landscapes; and
- natural vegetation and dramatic coastal cliffs supporting large colonies of birds.

Principal Negative Components:

- Derelict and redundant structures mar the uninhabited character.

Landscape Scenic Quality – **Medium** with areas of **Medium to High**.

Landscape Value – Landscape value is **Medium** for the section within the study area as it is unexceptional within the wider Shetland landscape.

Landscape Guidelines

Relevant landscape guidelines for the Major Uplands LCT are as follows:

- *The landscape qualities of skyline, elevated landform, geology and landcover should be safeguarded. The generally uninterrupted outline of upland areas should be safeguarded;*
- *Measures should be prepared to monitor, control and reverse the erosion of natural vegetation;*
- *Important bird nesting and breeding habitats should be safeguarded;*
- *In some instances former infrastructure sites may be suitable for restoration and development as viewpoints for residents and visitors; and*
- *Any further MOD, telecommunication or general infrastructure requiring a skyline location should be the subject of a visual impact assessment.*

(b) **B - Peatland and Moorland**

This LCA is a subtle natural landscape with a small scale diversity in texture provided by a mixture of standing water and exposed peat and rock. The landscape is barren in appearance with an isolated, exposed character and muted colours and can present monotonous qualities with little to draw the eye. This is a traditionally unsettled landscape and the only human intervention is in the form of roads, electricity transmission lines, peat cutting and rough grazing.

Three LCAs, of this type are identified within the 15km detailed study area:

- B1 – Yell Peatland
- B2 – Rounded Moorland Hills
- B4 – South Mainland Coastal Moorland

B1 – Yell Peatland

This is an extensive, barren and open landscape located on the island of Yell, of gently rounded and undulating peatland and heather moorland. The muted colours and uniform texture form a distinct contrast to the richer colours and varying texture of the settled coast. The landscape is generally uninhabited and unenclosed and man-made features are limited to electricity transmission lines and peat cutting and those associated with the main road and the resultant modifications in vegetative cover associated with verges, cuttings etc. The rolling landform allows extensive views across the island.

Principal Positive Components:

- Uninhabited landscape with extensive views; and

- contrast between muted colours and textures and those of the settled coasts.

Principal Negative Components:

- Intrusive nature of road corridor with modified vegetative cover contrasting with the natural peatland and moorland vegetation; and
- electricity transmission lines and areas of peat cutting.

Landscape Scenic Quality – Predominantly **Medium** with areas of **Medium to High** on the east coast.

Landscape Value – This landscape type is fairly common in Shetland so landscape value is **Low to Medium**.

B2 – Rounded Moorland Hills

This consists of a number of areas of peatland and moorland, evenly dispersed across the north and east mainland, with a smooth hummocky landform of rounded hills. They are of even texture and muted colour and often form the backdrop to the cultivated enclosed lowlands. This is a barren and uninhabited landscape but the areas are of smaller extent than the Yell peatlands and their character is therefore more sensitive to development.

Principal Positive Components:

- Rounded hills/smooth hummocky landform covered by peatland or moorland vegetation;
- even texture and muted colours forming a backdrop to cultivated enclosed lowlands; and
- open and inaccessible landscape.

Principal Negative Components:

- Small areas, sensitive to development of any sort.

Landscape Scenic Quality – Generally **Medium** with localised areas of **Medium to High**.

Landscape Value – Landscape value for these areas is **Medium - High** because they are of a small extent and vulnerable to development and they form an important backdrop to other key landscapes.

B4 – South Mainland Coastal Moorland

These are small areas of moorland located on the eastern coastal strip of the south mainland. These areas form interruptions in the surrounding enclosed grazing land and scattered settlement and are in contrast to the generally densely settled coast. The only man made features are roads and electricity transmission lines. The muted colours and texture of the moorland contrast with the settled surroundings and create a link with the open and exposed areas of upland and the settled coastline.

Principal Positive Components:

- Muted colours and textures of peatland and heather moorland in contrast to surrounding settlement.

Principal Negative Components:

- Man-made elements such as roads and electricity transmission lines; and
- the small size and isolated nature makes areas sensitive to encroachment of development.

Landscape Scenic Quality – Medium

Landscape Value – Landscape Value is **Medium** as these areas are not covered by any landscape designation but form an important contrast with adjacent settled areas and a link to other areas of upland and moorland.

Landscape Guidelines

Landscape guidelines for the Peatland and Moorland LCT are as follows:

- *Peatlands and heather moorlands are sensitive to change. The open character of the landscape should be safeguarded;*
- *Peat cutting should be maintained at appropriate levels;*
- *A programme for monitoring change in the natural vegetation should be established; and*
- *Measures should be introduced for the regeneration, restoration and subsequent retention of the natural vegetation.*

(c) **C - Undulating Moorland with Lochs**

This LCA consists of a fine grain undulating, low lying landscape predominantly composed of heather moorland, rough grassland, rocky outcrops and numerous lochs and water bodies. The landscape is of a large scale with extensive views. Colours are muted but the varying textures of vegetation, rocky outcrops and water creates an interesting and attractive landscape mosaic. The main man-made elements are access roads and electricity transmission lines. All three of the LCAs of this type occur within the study area:

- C1 – West Mainland and Northmavine: Muckle Roe and Mangaster/Nibon Area;
- C2 – Uyea, Braewick, Tingon and North Roe; and
- C3 – Lunna Ness and Dragon Ness.

C1 – West Mainland and Northmavine: Muckle Roe and Mangaster/Nibon Area

This is an extensive area of heather moorland overlaying a landform of broad rounded hummocks, rocky outcrops and lochs of various sizes. The topography is irregular and undulating and offers expansive views from some parts while other lower areas are of an intimate character. Human influence consists of few roads and electricity lines and occasional croft house and areas of agricultural improvement. Overall the landscape has the character of a balanced and open, landscape.

Principal Positive Components:

- Varying experiences with intimate lower areas and extensive views from higher areas;

- complex interplay of heather moorland, rocky outcrops and numerous lochs and water bodies of various sizes; and
- attractive and balanced landscape.

Principal Negative Components:

- Roads and electricity transmission lines intrude into the landscape.

Landscape Scenic Quality – Predominantly **Medium to High** with localised areas of **Medium** and **High**.

Landscape Value – This is a fairly unexceptional landscape but forms a backdrop to other areas of greater value and therefore the landscape value is **Medium**.

C2 – Uyea, Braewick, Tingon and North Roe

This is an extensive exposed landscape of peatland and rocky outcrops with numerous lochs located on the extreme northwest mainland. It has a more upland quality than other areas of ‘Undulating Moorland with Lochs’ with extensive views to the surrounding dramatic coastal scenery.

Principal Positive Components:

- Varying upland landscape of moorland, peatland and lochs; and
- attractive open landscape with expansive views afforded to the surrounding dramatic coastal scenery.

Principal Negative Components:

- Exposed, lonely and barren character.

Landscape Scenic Quality – **Medium to High** with some areas of **High** and **Medium**.

Landscape Value – **Medium to High** because it provides a backdrop to the NSA and the attractive coastline.

C3 – Lunna Ness and Dragon Ness

These are several small areas located on the east mainland characterised by a rounded landform with rocky outcrops and colonised by heather moorland and rough grassland. These areas are located within a context of farmed and settled land and have a greater human influence consisting of roads and electricity lines, croft houses and small areas of agricultural improvement. It is a balanced and accessible landscape and on lower ground has an enclosed and intimate character.

Principal Positive Components:

- Less isolated and exposed character than similar moorland areas with an intimate sense of enclosure on lower ground.

Principal Negative Components:

- Areas of agricultural improvement contrasting sharply with the natural moorland colours; and
- Roads and electricity transmission lines.

Landscape Scenic Quality – Generally **Medium to High**.

Landscape Value – These areas are not covered by any landscape designation. Landscape value is **Medium**.

Landscape Guidelines

Landscape guidelines for the Undulating Moorland with Lochs LCT are as follows:

- *The landscape qualities of tranquil open moorland with standing water and dramatic coastal views should be safeguarded against physical disturbance and visual impact;*
- *Measures should be promoted to conserve, enhance or regenerate:-*
 - *moorland, wetland and water margins*
 - *unimproved grassland and coastal grassland; and*
- *Agricultural improvement of heather moorland for grazing should be discouraged.*

(d) **D - Inland Valleys**

This LCT consists of sheltered, enclosed inland valleys. They are unusual in the Shetland Isles as they have virtually no views to the sea as the landform restricts visibility. Of the four LCAs defined within this landscape type all are represented within the study area:

- D1 – Farmed and Settled Inland Valleys: Tingwall and Weisdale;
- D2 – Crofting and Grazing Inland Valleys: Cuckron;
- D3 – Crofting and Grazing Isolated Valleys: Wester Quarff and Dale; and
- D4 – Peatland and Moorland Inland Valleys.

D1 – Farmed and Settled Inland Valleys: Tingwall and Weisdale

These are attractive long, linear valleys, characterised by their exploitation by man over centuries. Valleys are used for crofting and farming in their more sheltered parts resulting in great diversity of colour through the contrast in areas of improved land, water and rare areas of woodland, with rough grassland and heather on higher ground. Views are contained to east and west by the ridges of high ground but are extensive to north and south.

Principal Positive Components:

- Long, sheltered and fertile improved inland valleys in contrast to surrounding more common moorland and coast;
- diversity of colour and texture formed by different land uses and management techniques;
- rare areas of woodland on the Kergord Estate;
- Tingwall Valley includes the site of the former Norse parliament; and
- attractive, contained views north and south along valleys.

Principal Negative Components:

- No significant negative components.

Landscape Scenic Quality – Generally **Medium** with areas of **Medium to High**.

Landscape Value – Landscape value is **Medium to High** for this area because although it is not covered by any designations it is attractive and rare within the Shetland landscape.

D2 – Crofting and Grazing Inland Valleys: Cuckron

This is a long, linear north-south orientated valley, exploited in its more fertile and sheltered areas by crofting and grazing. This is a large scale, enclosed landscape with a distinct crofting character. There is a great diversity of colour and texture as a result of the contrast of land uses resulting in areas of improved land, rough grassland, the waters of the Loch of Strom and heather moorland on higher ground. This area engenders a feeling of tranquillity but there is also a quality of neglect due to the numbers of derelict croft houses.

Principal Positive Components:

- Sheltered and fertile inland valley with a distinct crofting character; and
- diversity of colour and texture provided by the contrast of improved land with the areas of rough grazing and the Loch of Strom.

Principal Negative Components:

- An air of neglect due to the number of derelict croft houses; and
- loss of landscape quality due to agricultural improvement.

Landscape Scenic Quality – **Medium**.

Landscape Value – This area is not located within any designated areas but it is valued for its distinct character within the Shetland landscape and therefore the landscape value is **Medium**.

D3 – Crofting and Grazing Isolated Valleys: Wester Quarff (South Mainland) and Dale (West Mainland)

These areas are largely enclosed valleys, bounded at one end by coastal waters. The character is influenced by the crofting practices which take place and there is a diversity of colour and texture brought about by the contrast of improved and unimproved lands. Views are contained within the valleys. Note that only Dale falls within the detailed study area.

Principal Positive Components:

- Enclosed valleys with attractive crofting character; and
- diversity of colour and texture brought about by contrast of different land uses and land management.

Principal Negative Components:

- Derelict structures and buildings at Laxobigging and Bordigarth.

Landscape Scenic Quality – **Medium** with isolated areas of **Medium to Low**.

Landscape Value – A very small section of this area at the seaward end of the Quarff valley is within the NSA. However, this is not an integral part of the NSA nor is it an integral part of the character area and therefore the landscape value is **Medium**.

D4 – Peatland and Moorland Inland Valleys

This is a large scale unenclosed landscape of inland valleys characterised by peatland and heather moorland. There is little diversity in colour and texture with variation provided by areas of standing water and small lochs and areas of eroded and exposed peatland. The few areas of improved land stand out sharply against the muted colours of the peatland. Extensive views are afforded along the valley, sometimes extending to settled areas or the coast. This is a generally uninhabited landscape with human influence limited to electricity transmission lines and roads.

Principal Positive Components:

- Large scale landscape with limited human influence and subtle colours and variations; and
- extensive views along the valley to the sea and coastal settlements.

Principal Negative Components:

- Little diversity in colour and texture;
- large scale, exposed landscape can be unsettling; and
- areas of improved grassland, roads and electricity transmission lines contrast with the surrounding natural vegetation.

Landscape Scenic Quality – Medium

Landscape Value – These areas do not fall within any landscape designated area and this landscape type is not uncommon within the Shetland context. They do, however, provide important landscape corridors and direct inland links between settlements and therefore the landscape value is **Medium**.

Landscape Guidelines

Selected landscape guidelines for the Inland Valleys LCT are as follows:

- *Traditional stone walls, field boundaries and hill dykes associated with crofting should be conserved and restored;*
- *Traditional crofting practices should be promoted;*
- *Wetland areas, water margin vegetation and herb rich grassland in the lower part of valleys should be safeguarded and measures for regeneration promoted;*
- *Retention and regeneration of heather moorland... should be encouraged on higher ground; and*
- *Planting of woodland, particularly of native species, should be encouraged on a small scale in sheltered areas such as along watercourses and within the curtilage of existing and new buildings.*

(e) **E - Farmed and Settled Lowlands and Coast**

This LCT consists of a narrow strip of land between the uplands and the coast which provides much of Shetland's productive land. These are areas characterised by their long history of settlement and the existing land use and management techniques which take place on them. Rough pasture is the dominant landcover with areas of arable land and

improved grassland. Different areas of character are distinguished by their settlement patterns, evidence of past and present agricultural practices and subtle changes in landform. The variety and richness of colour also plays a part in defining character.

Five of the six different LCAs are represented within the study area.

- E1 – Farmed Land
- E2 – South Mainland Scattered Settlement and Grazing Lands
- E3 – Coastal Crofting and Grazing Lands
- E4 – Unst and West Mainland Coastal Crofting
- E5 – West Mainland Lowland Crofting

E1 – Farmed Land

Area of intensively farmed land located within the study area in the area around Twatt in the west mainland. This consists of good quality grazing land and arable farming with scattered agricultural development and crofts. The mosaic of land types provides a rich and varied texture in contrast to surrounding uplands. Larger agricultural buildings and fields are a notable feature in the landscape.

Principal Positive Components:

- Rich mosaic of quality grazing land and arable fields giving rise to a range of colours and textures.

Principal Negative Components:

- Large agricultural buildings.

Landscape Scenic Quality – Medium.

Landscape Value – Medium - This area has some value as it is one of very few areas of quality agricultural land in Shetland. However, it is not a highly significant landscape within the wider area as it has few of the features for which the Shetland landscape is appreciated.

E2 – South Mainland Scattered Settlement and Grazing Lands

This LCA is a small area located on the eastern coastal strip of the south mainland south of Lerwick. It consists of scattered agricultural, crofting and suburban settlement. Much of this area is dominated by an incoherent pattern of recently constructed dwellings, obscuring the underlying crofting character and fragmenting grazing lands. The overall impression is of an unbalanced landscape where in many places the relationship between settlement and landscape has been lost. There is however a great variety in the landscape provided by the extent of the settlement with the backdrop of the uplands and open coastal outlook.

Principal Positive Components:

- Landscape variety provided by the extent of settlement with upland backdrop and coastal outlook.

Principal Negative Components:

- Incoherent housing development, obscuring the underlying traditional crofting character of the area and fragmenting grazing land; and
- loss of relationship between settlement and landscape.

Landscape Scenic Quality – **Medium**

Landscape Value – The highly developed, unplanned nature of this landscape gives it a **Low** landscape value.

E3 – Coastal Crofting and Grazing Lands

This area is found in several coastal locations throughout Shetland but most specifically, within the study area, on the east Mainland, Bressay and Whalsay. It takes the form of a relatively undeveloped area of grazing land, maintaining the traditional crofting pattern though many dwellings no longer function as traditional croft houses. Rough grazing land is the dominant land cover with many areas of degraded heather moorland and abandoned improved land. There are numerous derelict crofts, and the overall impression is of a relatively unmanaged coastal crofting landscape.

Principal Positive Components:

- Relatively undeveloped landscape maintaining the traditional pattern of crofting settlements; and
- subdued colours of the vegetation contrast with the seascape.

Principal Negative Components:

- Areas of degraded heather moorland, abandoned improved land and derelict crofts give a neglected feel to landscape.

Landscape Scenic Quality – Predominantly **Medium to High**.

Landscape Value – **Medium**.

E4 – Unst and West Mainland Coastal Crofting

This area is located on areas of Unst, Fetlar and the west mainland and is typified by crofting on low lying relatively fertile coastal ground. The crofting land consists of good quality grazing land, of a smooth texture and even, rich green colour scattered with croft houses. This contrasts with a backdrop of peatland and moorland on higher ground. The resultant landscape appears varied and distinctive.

Principal Positive Components:

- Croft houses located in the context of well managed, good quality grazing land with a fine smooth texture and even rich green colour; and
- contrast of ordered landscape with a generally open setting acting as a backdrop and seascape which creates a varied and distinct landscape.

Principal Negative Components:

- No significant negative components.

Landscape Scenic Quality – **Medium to High** with localised areas of **High**.

Landscape Value – Part of this area lies within the NSA. The landscape is unusually fertile in appearance and well managed and therefore the landscape value is **High**.

E5 – West Mainland Lowland Crofting

These are two expansive inland areas in the west mainland which are characterised by rolling grazing land with few scattered dwellings or crofts. Overall this is a simple landscape with a fairly uniform grass cover and open, broad, rolling character. Its rolling green character, which is distinct in the context of Shetland, arises as a result of the improvement of the grassland for sheep. Some small areas of crofting contrast with the expansive sheep grazing.

Principal Positive Components:

- Broad rolling grass covered landscape, distinct within the Shetland context;
- simple coherent landscape with few scattered dwellings; and
- small areas of crofting, contrasting with wider grazing landscape.

Principal Negative Components:

- Large scale fields, simple landscape with little variation.

Landscape Scenic Quality – Predominantly **Medium** with some areas of **Medium to High**.

Landscape Value – This area is not covered by any landscape designations but it is distinctive within the wider Shetland landscape and therefore the landscape value is **Medium to High**.

Landscape guidelines

Selected landscape guidelines for the Farmed and Settled Lowlands and Coast LCT are as follows:

- *Traditional crofting practices should be promoted;*
- *Traditional stone wall field boundaries and hill dykes... should be conserved and restored;*
- *Wetland areas, water margin vegetation, coastal grassland and dunes should be safeguarded and measures for regeneration promoted; and*
- *Archaeological features which reinforce the traditional and cultural significance of the area should be recorded, safeguarded and interpreted.*

(f) **F - Farmed and Settled Voes and Sounds**

This LCT comprises the landscape associated with Shetland's enclosed coastal waters. These areas consist chiefly of deep inlets and bays and sheltered waters enclosed by Shetland's many islands. These areas provide sheltered situations and safe harbours and have an important and unique character which epitomises the character and culture of Shetland. The lands surrounding these coastal waters have been farmed and settled for a long period and their character is a result of successive settlement and land use. Pasture and rough grazing are the dominant forms of landcover, although, there are areas of arable land and occasional trees in some of the more sheltered areas. This landscape type notably includes the majority of major settlements and development in Shetland. The

landscape character is greatly influenced by the nature of the relationship between the development and the land or sea, the balance satisfying and coherent in some and incongruous in other. The overall perception of this LCT is of a rich, varied and modified landscape.

Four of the five LCAs are represented within the study area:

- F1 – Developed Areas;
- F2 – Nucleated Settlements;
- F3 – Farmed Land; and
- F5 – Scattered Settlement/Crofting and Grazing Lands.

In addition to these areas, and for the purpose of this assessment, one further area has been defined at Dales Voe in view of its distinctive landform and characteristics. This further character area is:

- F6 – Dales Voe and Colla Firth

F1 – Developed Areas

These areas include the major administration centre and harbour at Lerwick and the large scale industrial development at Sullom Voe. They are dominated by large scale development where there is now little evidence of former vegetation or landscape character. The landscape is dominated by built elements and hard surfacing which define the landscape character.

Principal Positive Components:

- Attractive, cultural and historic buildings at Lerwick e.g. Fort Charlotte, old town and harbour.

Principal Negative Components:

- Dominance of large scale industrial development at Lerwick and Sullom Voe;
- incongruous nature of industrial developments in surrounding moorland and coastal landscapes; and
- sprawling nature of industrial and housing development on the outskirts of Lerwick.

Landscape Scenic Quality – **Medium to Low** but locally **Low**.

Landscape Value – **Low** but locally **High** in historic areas of Lerwick.

F2 – Nucleated Settlements

These areas are residential developments located throughout Shetland, usually centred around small harbours on sheltered sea inlets. Surrounding areas are enclosed and managed, usually rough grassland. A range of colours and textures is provided by the contrast of houses, harbours, boats and surrounding rough grassland and heather moorland. Some of the small settlements are dominated by large modern public buildings.

Principal Positive Components

- Range of colours and textures provided by the dwellings, harbours and boats and contrasting surrounding rough grassland and moorland.

Principal Negative Components

- Poorly sited or obtrusive recent development detracting from visual qualities of landscape.

Landscape Scenic Quality – Generally **Medium to High** but with localised areas of **Medium** or **Low to Medium**.

Landscape Value – As developed areas within a largely undeveloped landscape these areas are generally of a **Low to Medium** landscape value. However, some areas may be of a **Medium to High** landscape value where the settlement is a key feature within an overall highly valued landscape.

F3 – Farmed Land

This LCA consists of an area of more intensive agriculture located on the east central mainland, surrounding Lax Firth and up Tingwall Valley. The area is distinct as an area of improved agricultural land in such a coastal location. It forms a mosaic of grazing land and arable fields which provide a varying texture and colour scheme, contrasting with surrounding moorland and enclosed water. There are also a number of distinctive woodland blocks in the Tingwall Valley. There are a high number of new dwellings in this area, at times concentrated into nucleated settlement and an airport with associated sheds and hangars.

Principal Positive Components:

- Varied texture and range of colour provided by mosaic of grazing land and arable fields which contrast with surroundings of enclosed water and uplands; and
- distinctive woodland blocks in the Tingwall valley.

Principal Negative Components:

- High numbers of new dwellings; and
- an airport and associated buildings.

Landscape Scenic Quality – **Medium**.

Landscape Value – This area is not covered by any landscape designations. Its settled lowland character is distinctive within Shetland but is on the whole unexceptional. Landscape value is therefore **Medium**.

F5 – Scattered Settlements/Crofting and Grazing Land

These areas of scattered settlement and crofts are located on a mosaic of improved and unimproved grazing land with a subtle variation of colour and texture. These areas are located throughout Shetland on the fringes of voes and sounds. The overall impression is of a varied but well balanced, managed crofting landscape.

Principal Positive Components:

- Varied land management creates a subtle mosaic of colours and textures;

- attractive coastal views; and
- coherent relationship between landscape elements forming varied, well balanced landscape.

Principal Negative Components:

- No key negative components.

Landscape Scenic Quality – Predominantly **Medium to High** with localised areas of **Medium** or **High**.

Landscape Value – This area has value as a fertile, settled area in contrast with inland moors and peatland. Some parts are within the NSA or provide a backdrop to other highly valued areas and therefore the value is **Medium to High**.

F6 – Dales Voe and Colla Firth

This is an additional LCA to those identified in the SNH Landscape Character Assessment, covering the area surrounding Dales Voe and Colla Firth which has been identified as being distinct from the rest of LCA F5, Scattered Settlements/Crofting and Grazing Land. The key feature of this LCA is two long fjord-like voes enclosed by high steep-sided slopes and separated by a steep, narrow peninsula 150m high. A number of properties are scattered along the base and the western end of the valley, nestled in the angle at the bottom of the steep side-slopes. Other new properties have been built further up the slopes, sometimes located in an unsympathetic random manner. Inland, at the heads of the voes the landscape is well managed with a patchwork of green fields which contrast strongly with the muted brown colours of the adjacent side slopes. This LCA has a strong and slightly threatening feel of enclosure and is visually distinct from all other areas.

Principal Positive Components:

- Well managed patchwork of green fields at inland points of the voes contrasting with muted browns of the adjacent steep side slopes;
- dramatic views associated with combinations of long inland voes and steep, high side slopes, visually distinct from all other areas.

Principal Negative Components:

- Occasional random and unsympathetic siting of new properties;
- sometimes threatening feel of enclosure; and
- disused crofts above Colla Firth giving a slightly melancholy and lonely air to this part of the LCA.

Landscape Scenic Quality – **Medium to High** or **High**.

Landscape Value – This area is not located within any areas covered by landscape designation. However, the dramatic scenery and high scenic quality give it a **Medium to High** landscape value.

Landscape Guidelines

Selected landscape guidelines for the Farmed and Settled Voes and Sounds LCT are as follows:

- *Traditional stone walls, field boundaries and hill dykes associated with crofting should be conserved and restored;*
- *Traditional voe head settlements and small harbours should be conserved;*
- *Traditional crofting practices should be promoted;*
- *Wetland areas, water margin vegetation and herb rich grassland in the lower part of valleys should be safeguarded and measures for regeneration promoted; and*
- *Planting of woodland, particularly of native species, should be encouraged on a small scale in sheltered areas such as along watercourses and within the curtilage of existing and new buildings.*

(g) **Coastal Edge**

This LCT is located along several sections of the Shetland coast but more often on the western edges and outer extremities. These areas consist of a dramatic variety of coastal features including cliffs, sea stacks, natural arches and sandy beaches. These features in combination with the sea birds, marine life and the colour and movement of the sea create a distinct and inspiring landscape.

This LCT has not been separated into distinct LCAs.

Principal Positive Components:

- *Dramatic variety of coastal features including cliffs, sea stacks, natural arches and sandy beaches;*
- *inspiring landscape formed by combination of coastal features and sea and complemented by sea birds and marine life.*

Principal Negative Components:

- *No significant negative components.*

Landscape Scenic Quality – **Medium to High** or **High**.

Landscape Value –The rich combination of sea, cliffs, beaches, sea stacks and bird life is reflected in the designation of parts of this landscape as a National Scenic Area and consequently the landscape value is considered to be **High**.

Landscape Guidance

Landscape guidance for the coastal edge LCA includes the following:

- *Retention of the existing dramatic scenic qualities, landforms, wildlife, vegetation and geology;*
- *A program for monitoring change in the natural vegetation and landforms should be established; and*
- *Features which form part of the coastal edge should be recorded, safeguarded and interpreted.*

8.6 CHARACTER IMPACT ASSESSMENT

8.6.1 Basis of Assessment

(a) Development Characteristics

The key elements and characteristics of the proposed wind farm development which may give rise to landscape or visual impacts are shown on figures 4.1.1 and 4.1.2 and are as follows:

- Turbines (150 turbines at an assumed height of 90m to hub with 110m diameter blades – 145m overall height:
- access tracks;
- anemometers;
- borrow pits;
- control buildings; and
- decommissioning.

(b) Assumed Design and Management Proposals

The following elements and activities associated with the construction phase of the proposed development have the potential to result in impacts on the landscape and visual amenity of the study area:

- Upgrade of existing access and construction of new site access tracks;
- borrow pit excavations; (N.B. worst case scenario has been assumed; i.e. complete excavation of all borrowpit search areas identified in this ES);
- erection of turbines and anemometry masts;
- construction of control buildings and substations;
- lay-down areas;
- temporary site compound incorporating site offices and concrete batching plant;
- excavation and construction of turbine foundations and crane pads;
- excavations for underground cables;
- HGV and abnormal load deliveries to site and movement of vehicles on site; and
- reinstatement work, including removal of temporary accommodation.

The nature of the work proposed is described in Chapter 4, Development Description.

The location and management of these components have been carefully considered to minimise environmental effects including potential landscape and visual effects during the construction stage.

The first four items on the above list would result in development components that would also be present for the duration of the operational stage of the wind farm, and related impacts on landscape and visual amenity are considered in the assessment which follows. It has been assumed that on completion of the construction phase, borrowpits will be

partially infilled and then revegetated with native groundcover vegetation; nevertheless it is anticipated that depressions created will still be noticeable in the landscape during operation. The other components of the construction works would all give rise to temporary impacts on landscape and visual amenity.

Consideration has been given to the potential landscape and visual impacts during this stage of the development. The relatively limited extent of disturbance together with the short duration of the effects and related reinstatement of working areas would ensure that the effects of the construction phase on the landscape and visual amenity of the locality are limited.

The operational life of the wind farm would be approximately twenty-five years. The operational elements with the potential to affect the landscape and visual amenity of the study area are:

- Wind turbine generators and anemometer masts;
- access tracks;
- anemometers;
- restored anemometers;
- borrow pits; and
- control buildings and substations.

The nature of these components during operation is described in detail in Chapter 4, Development Description.

The visual effects of the introduction of the operational elements are considered in further detail within Chapter 9 and the landscape effects are considered below.

The decommissioning phase of the development would be of similar duration to the construction phase, with the dismantling of all above ground structures and reinstatement of disturbed ground, as described in Chapter 4. Below ground structures would be left in place to avoid further disturbance.

There would therefore be a temporary impact from the activities on site to remove structures, but this would be of relatively short duration. Accordingly, the decommissioning phase is considered to have a minimal effect on the landscape and visual amenity of the locality, and has not been assessed in any further detail.

The site selection rationale, the iterative design process employed and wind farm development proposed are described in Chapters 3 and 4. These chapters include a number of planning, design and construction proposals to safeguard landscape and visual interests and mitigate potential impacts. A detailed description of the different design approaches and the optimal solution is provided in Chapter 4.

8.6.2 Identification of Sensitivity to Change, Magnitude of Change and Impact Assessment

The assessment of the sensitivity to change, magnitude of change and impact experienced by the designated sites and landscape character areas is detailed below in Tables 8.4.1 to 8.6.25 inclusive. Sensitivity to change arising from wind farm development for each Landscape Character Area is presented in figure 8.6.

In respect of both designated sites and the local character areas, the tables review the extent falling within the detailed 15km study area and approximate area directly or indirectly impacted by the proposals (as indicated by reference to the ZTV). There follows a summary of relevant landscape characteristics, scenic quality and value, magnitude and nature of changes, sensitivity to the change proposed and assessment of impacts, whether direct or indirect and finally their significance. This is based upon the methodology described above in Section 8.4.3.

8.6.3 Designated Areas (within 35km of proposed development)

(a) Shetland National Scenic Area

Table 8.4.1: Shetland National Scenic Area – Dunrossness and the Deeps Area

| Area | Dunrossness and the Deeps |
|--|--|
| Status | National Scenic Area |
| Total Area | 207km ² |
| Extent within 35km of proposals | Approximately 185km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However, many parts within the study area would potentially be indirectly affected. The more northerly parts, particularly the peninsulas of White Ness and Strom Ness, an area around Raewick and the smaller isles around Hildasay, Papa and Oxna would potentially experience greater indirect changes. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Key features within the NSA, including long Fjord-like voes; and • impressive coastal composition of islands and skerrays, rocky coastline, sea and sky. |
| Scenic Quality | Generally High; Medium to High north of Burra |
| Value | Generally High; Medium north of Burra |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this NSA is generally High because of its high scenic quality and extensive views. Existing development within the central and southern part of the NSA tends to be at a scale and of a nature in keeping with the landscape. However, sensitivity to the proposals in the northern area is reduced to Medium to High due to the presence of the nearby Burradale wind farm, Scord Quarry and more extensive voe – side settlement compared to the south. |
| Magnitude of changes | Changes to this landscape are relatively widespread but are indirect. These changes are likely to be noticeable in northern areas of this NSA, such as at White Ness, The Deeps, and the small uninhabited islands of Hildasay and Oxna. However, the overall scale of the change to the character of this area is low. Magnitude of change –Locally Low in the north, elsewhere Negligible to Low |
| Impact Assessment | Slight to Moderate and Indirect for northern parts of the NSA intervisible with the proposals but overall Slight and Indirect as the proposed development would be unlikely to affect the key defining features or the integrity of the designation, with focal views directed primarily to the south and west rather than inland towards the proposals. (NOT SIGNIFICANT) |

Table 8.4.2: Shetland National Scenic Area – Muckle Roe

| | |
|---|---|
| Area | Muckle Roe |
| Status | National Scenic Area |
| Total Area | 22km ² |
| Extent within 35km of proposals | 22km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. A number of small areas of elevated coastal land at the northern and southern extremities of the NSA and an area in the sea to the west of Muckle Roe (which falls within the NSA boundary) are likely to be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Impressive rocky coastline and cliffs in wider context of St Magnus bay. |
| Scenic Quality | High |
| Value | High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this NSA is High because of its high scenic quality and extensive views, with little or no evidence of major human development. |
| Magnitude of changes | Changes to this landscape as a result of the proposals would be indirect and would be limited to only a few small areas, including from West Hill of Ham, Muckla Field and Black Hill. From these areas changes are likely to be minor as the proposals form only a small part in the wider landscape. Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.4.3: Shetland National Scenic Area – Esha Ness

| | |
|---|--|
| Area | Esha Ness |
| Status | National Scenic Area |
| Total Area | 38km ² |
| Extent within 35km of proposals | 38km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However most of the area of this NSA would potentially be indirectly affected. Areas around West Heogaland, Tangwick and the southern point of Baa Taing are likely to receive the most noticeable change. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Impressive rocky coastline including dramatic cliffs, skerries and stacks. |
| Scenic Quality | High |
| Value | High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this NSA is High because of its high scenic quality, with little evidence of human influence. |
| Magnitude of changes | Changes to this landscape would be relatively widespread, although indirect, focussed on the areas around Stenness, The Neap, Tangwick and West Heogaland. However, the proposals would be relatively distant (beyond 10km) and would be a minor element in the wider landscape, therefore reducing the magnitude of change. Magnitude of change – Low |

| | |
|--------------------------|--|
| Impact Assessment | Slight to Slight to moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |
|--------------------------|--|

Table 8.4.4: Shetland National Scenic Area – Uyea isle and Fethaland

| | |
|---|--|
| Area | Uyea Isle and Fethaland |
| Status | National Scenic Area |
| Total Area | 61km ² |
| Extent within 35km of proposals | 61km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However some parts in the eastern half of this area would potentially be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Impressive rocky coastline including dramatic cliffs, skerries and stacks. |
| Scenic Quality | High |
| Value | High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this NSA is High because of its high scenic quality and extensive views, with little or no evidence of human influence. |
| Magnitude of changes | Changes to this landscape would be limited and would be indirect. The majority of the area is unlikely to be affected by the proposed development. However south facing slopes and high points in the eastern half of this NSA, such as Burnt Hill are likely to experience an indirect change. Due to the distance from the proposed development (beyond 16km) any potential change would be minimal and would comprise only a very small element in the wider landscape. The coastline of this area, which has been identified as a key feature of this landscape, is unlikely to experience change as a result of the proposed development. Magnitude of change would be Negligible |
| Impact Assessment | Negligible and Indirect during construction and operation. (NOT SIGNIFICANT) |

(b) **Shetland Gardens and Designed Landscapes****Table 8.5.1: Shetland Gardens and Designed Landscapes – Belmont House**

| | |
|---|---|
| Area | Belmont House |
| Status | Listed in the Inventory of Gardens and Designed Landscapes |
| Total Area | 0.24 km ² |
| Extent within 35km of proposals | 0.24 km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However, most parts would potentially be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Designed vista orientated along a south facing axis from the elevated house, across the Wick of Belmont and beyond to Yell and other uninhabited islands; and • Important views westwards, across the Loch of Belmont. |
| Scenic Quality | High |
| Value | High. |

| | |
|---------------------------------------|---|
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this landscape is Medium to High because although it has a high scenic quality and extensive views, these views include ferry terminals and other industrial buildings. |
| Magnitude of changes | Changes to this landscape would be relatively widespread although indirect. Due to the distance from the proposed development (beyond 30km) these changes are likely to be virtually imperceptible. Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect both during construction and operation. (NOT SIGNIFICANT) |

Table 8.5.2: Shetland Gardens and Designed Landscapes – Brough Lodge

| | |
|---|--|
| Area | Brough Lodge |
| Status | Listed in the Inventory of Gardens and Designed Landscapes |
| Total Area | 0.28 km ² |
| Extent within 35km of proposals | 0.28 km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However, most parts would potentially be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • The gothic tower and house are important features both from within the Designed Landscape and beyond its boundaries; and • important views westwards, across the Colgrave Sound and to Hascosay and Yell. |
| Scenic Quality | High |
| Value | High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this designed landscape is High because of its high scenic quality and extensive views. |
| Magnitude of changes | Due to the distance from the proposed development (beyond 25km) indirect changes are likely to be virtually imperceptible. .Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect both during construction and operation. (NOT SIGNIFICANT) |

Table 8.5.3: Shetland Gardens and Designed Landscapes – Gardie House

| | |
|---|--|
| Area | Gardie House |
| Status | Listed in the Inventory of Gardens and Designed Landscapes |
| Total Area | 0.34 km ² |
| Extent within 35km of proposals | 0.34 km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However, part of the area would potentially be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • The parkland and garden are set on strong parallel axis running northeast to southwest and follow a very formal symmetrical pattern. |
| Scenic Quality | Medium to High |
| Value | High. |

| | |
|---------------------------------------|---|
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this designed landscape is Medium because although it has a medium to high scenic quality and a relatively extensive outlook, this is generally focused towards Lerwick, the close proximity to which, including the industrial harbour area, reduces the potential sensitivity. |
| Magnitude of changes | Changes to this landscape would be indirect and would affect approximately half of the area. The distance from the proposed development (15km) reduces the perceived level of change. Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect both during construction and operation. (NOT SIGNIFICANT) |

Table 8.5.4: Shetland Gardens and Designed Landscapes – Lunna House

| | |
|---|--|
| Area | Lunna House |
| Status | Listed in the Inventory of Gardens and Designed Landscapes |
| Total Area | 0.61 km ² |
| Extent within 35km of proposals | 0.61 km ² |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposed development. However, most parts would potentially be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Designed landscape views following a south west facing axis from the house to a series of eye catchers on the hill in front; and • a collection of walled enclosures, eye catchers and buildings. |
| Scenic Quality | High |
| Value | High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this designed landscape is High because of its high scenic quality and extensive views. |
| Magnitude of changes | Changes to this landscape would be relatively widespread although indirect. Lunna House was identified as a key landscape and visual receptor and as a result has influenced the layout design of the proposed development. This has lead to reduced visibility of the proposed development along the main axial view and therefore reduced levels of change to the key landscape features. Magnitude of change – Low to Medium |
| Impact Assessment | Slight to Moderate and Indirect both during construction and operation. (NOT SIGNIFICANT) |

8.6.4 Landscape Character Areas (within 15km of proposed development)

Table 8.6.1: A1 - South Mainland Spine

| | |
|---|---|
| Local Character Area | A1 - South Mainland Spine |
| Extent within 15km of proposals | Approximately 25km ² of this LCA lies within the 15km detailed study area. |
| Approximate area impacted by proposals | This LCA would not be directly affected by the proposed development in terms of turbine location and associated infrastructure. However, approximately 50% of the area is likely to be indirectly affected. |
| Relevant landscape | Key characteristics likely to be influenced by the proposals include: |

| | |
|------------------------------|---|
| characteristics | <ul style="list-style-type: none"> • Large scale, exposed and open landscape with striking elevated views; and • natural, uninhabited character. |
| Scenic Quality | Medium |
| Value | Low to Medium |
| Sensitivity to change | Sensitivity to change of the type proposed for this LCA is Medium because it is already affected by a wind farm and some MOD and telecommunications structures and adjacent extensive settlement areas. |
| Magnitude of changes | Changes to this LCA would be indirect and would generally only affect the elevated areas and north facing slopes. Less elevated and south facing slopes are unlikely to be unaffected. The changes are likely to be perceived as only a small element within the wider landscape. Magnitude of change; Low. |
| Impact Assessment | Slight and Indirect both during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.2: A2 – East and West Kame

| | |
|---|--|
| Local Character Area | A2 - East and West Kame |
| Extent within 15km of proposals | Approximately 150km ² of this LCA lies within the 15km detailed study area. |
| Approximate area impacted by proposals | The majority of the proposed development would be located within this LCA resulting in direct impacts. In addition there would be indirect impacts as the proposal would be a feature throughout the LCA. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Large scale landscape with expansive views; • uninhabited character; and • north- south trending rounded landform. |
| Scenic Quality | Predominantly Medium |
| Value | Low to Medium |
| Sensitivity to change | Sensitivity to change of the type proposed is Low because of the open, large-scale landscape character with few distinctive features and areas on the periphery influenced by existing development on the lowlands and coasts. |
| Magnitude of changes | Magnitude of change where direct impacts occur would be High. The introduction of large wind turbines, tracks and borrow pits into the upland landscape would be a significant change, and would dominate the open character of the large scale landscape. Parts of this LCA which would receive indirect change would be likely to have a slightly reduced magnitude of Medium to High. |
| Impact Assessment | This low sensitivity, large-scale and relatively featureless landscape would nevertheless experience a high degree of change. Impacts would therefore be Moderate to Substantial where impacts are direct and Moderate where impacts are indirect. (SIGNIFICANT) |

Table 8.6.3: A3 – Ronas Hill

| | |
|--|---|
| Local Character Area | A3 – Ronas Hill |
| Extent within 15km of proposals | Approximately 20km ² of this LCA lies within the 15km detailed study area. |
| Approximate area | This LCA would receive only indirect impacts as a result of the proposal. |

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| impacted by proposals | Elevated and south facing slopes, consisting of around half of the area, are likely to be the most significantly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Broad intervisibility with adjacent landscapes; and • open, large-scale character. |
| Scenic Quality | Predominantly Medium |
| Value | Medium to High |
| Sensitivity to change | Sensitivity to change of the type proposed is Medium because this is an elevated although unremarkable landscape feature which has a few peripheral signs of human influence. |
| Magnitude of changes | Changes to this landscape would be fairly widespread, although indirect. The distance from the proposed development (over 12km) means that a large part of this LCA would be indirectly affected by the turbines. However, these would be distant – at least 12km away – and would feature in only a small part of the overall landscape. As such the magnitude of change would be Low. |
| Impact Assessment | Slight to Moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.4: A5 – Sandness Hill

| | |
|---|--|
| Local Character Area | A5 – Sandness Hill |
| Extent within 15km of proposals | Approximately 10km ² of this LCA lies within the 15km detailed study area. |
| Approximate area impacted by proposals | No part of this area would be directly affected by the proposed development. However, most parts would potentially be indirectly affected |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Broad intervisibility with adjacent landscapes; and • open, large-scale character. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change | Sensitivity to change of the type proposed is Medium because this is an elevated although unremarkable landscape feature which has some signs of human influence on the periphery. |
| Magnitude of changes | Most of this LCA would be indirectly affected by the proposed development, which is located approximately 12 – 15km to the east. However, due to the distance, the degree of change to the character of this area would be much reduced. Magnitude of change would be Low to Medium. |
| Impact Assessment | Slight and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.5: B1 – Yell Peatland

| | |
|---|---|
| Local Character Area | B1 – Yell Peatland |
| Extent within 15km of proposals | Approximately 35km ² of this LCA lies within the 15km detailed study area. |
| Approximate area impacted by proposals | This LCA would receive only indirect impacts from the proposed development. This would be limited to the western part of the LCA with approximately 75% of the area within the study area receiving potential |

| | |
|---|---|
| | indirect impacts. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Broad intervisibility with adjacent landscapes; and • open and large-scale character. |
| Scenic Quality | Medium |
| Value | Low to Medium |
| Sensitivity to change | Sensitivity to change of the type proposed is Low because of the open and barren nature of the landscape with human influences towards the periphery. |
| Magnitude of changes | Approximately 75% of the part of this LCA within the study area would be affected by indirect changes. However, the proposals would be fairly distant and would be perceived as only a small element within the overall landscape. They would be unlikely to impact upon the uninhabited peatland character of this LCA which is large in scale. Magnitude of change would be Low. |
| Impact Assessment | Negligible to Slight and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.6: B2 – Rounded Moorland Hills

| | |
|---|---|
| Local Character Area | B2 – Rounded Moorland Hills |
| Extent within 15km of proposals | Approximately 90km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected by the proposed development. However, around 50 – 75% would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Large-scale landscape character. |
| Scenic Quality | Medium, locally Medium to High |
| Value | Medium to High |
| Sensitivity to change | Sensitivity to change of the type proposed is Low to Medium because these are medium scale areas with some influence from nearby voe – side or valley development. |
| Magnitude of changes | In general, although some parts of this LCA would be potentially close to the proposed wind farm, the potential indirect changes would be lessened by the hummocky nature of the landform. However, isolated areas of higher ground would potentially receive more noticeable changes, particularly those areas to the east and southeast of the proposals. Changes would usually constitute a small element within the wider landscape. Magnitude of change would be Low. |
| Impact Assessment | Slight overall, locally Slight to Moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.7: B4 – South Mainland Coastal Moorland

| | |
|---|--|
| Local Character Area | B4 – South Mainland Coastal Moorland |
| Extent within 15km of proposals | Approximately 2km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected by the proposed development and only a very small part, approximately 50% of that within the study area would potentially be indirectly affected. |

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|---|--|
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Large-scale landscape with impressions of openness. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change | Sensitivity to change of the type proposed is Medium. This LCA contributes areas of currently uninhabited character but these are depleted by the indirect effects of nearby development. |
| Magnitude of changes | Only a very small part of this LCA would be indirectly affected by the proposals which are located approximately 15km to the north. Indirect changes are likely to be minor and would be only a very small element within the wider landscape. Magnitude of change would be Negligible. |
| Impact Assessment | Negligible and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.8: C1 – West Mainland and Northmavine: Muckle Roe and Mangaster/Nibon

| | |
|---|--|
| Local Character Area | C1 – West Mainland and Northmavine: Muckle Roe and Mangaster/Nibon Area |
| Extent within 15km of proposals | Approximately 100km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposals but elevated areas and east facing slopes may be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Broad intervisibility from higher areas; and • open, large-scale, natural character. |
| Scenic Quality | Predominantly Medium to High |
| Value | Medium |
| Sensitivity to change | The irregular topography of this LCA reduces its sensitivity; there is some peripheral development and occasional distinctive features. Sensitivity is therefore Medium. |
| Magnitude of changes | The irregular topography of this LCA would mean that indirect changes would be limited to areas of elevated ground. In general these changes would be limited, and the proposals would appear as only a small element in the wider landscape. As such their influence on the landscape character would be unlikely to be significant for the majority of the area. However there may be some isolated areas of higher ground which would receive increased levels of change. Magnitude of change would generally be Low, however. |
| Impact Assessment | Slight to Moderate overall, locally Moderate on areas of higher ground facing proposals, and Indirect during construction and operation. (GENERALLY NOT SIGNIFICANT; LOCALLY SIGNIFICANT) |

Table 8.6.9: C2 – Uyea, Braewick, Tingon and North Roe

| | |
|---|--|
| Local Character Area | C2 – Uyea, Braewick, Tingon and North Roe |
| Extent within 15km of proposals | Approximately 15km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposals but 50% of the area within the study area would potentially be indirectly affected. |

| | |
|---|--|
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Broad intervisibility from higher areas; and • open, natural character. |
| Scenic Quality Value | Predominantly Medium to High with localised areas of High Medium to High |
| Sensitivity to change | Sensitivity to change of the type proposed for this LCA is Medium because of large and small scale landforms and landcover in combination and some peripheral development. |
| Magnitude of changes | Change to this landscape would be indirect and relatively distant (12 – 15km), therefore the proposals would comprise only a very small element within the wider landscape and would be unlikely to be a major feature within the landscape, which is predominantly focused towards the more dramatic scenery of the coast. Magnitude of change would therefore be Low. |
| Impact Assessment | Slight to Moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.10: C3 – Lunna Ness and Dragon Ness

| | |
|---|---|
| Local Character Area | C3 – Lunna Ness and Dragon Ness |
| Extent within 15km of proposals | Approximately 25km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this area would be directly affected by the proposals but almost all areas would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Less exposed character area with intimate sense of enclosure on lower ground; • intervisibility from higher ground and west facing slopes; and • attractive small scale crofting landscape. |
| Scenic Quality Value | Medium to High Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed is Medium to High because of the small scale and sometimes complex character . |
| Magnitude of changes | Change to this landscape would be fairly widespread although indirect. The area closest to the proposal would be at South Nesting, resulting in a locally increased degree of change. In general the change is likely to have an indirect influence on the key characteristics of this landscape area. Magnitude of change would generally be Medium; Medium-High in South Nesting area. |
| Impact Assessment | Generally Moderate but locally Moderate to Substantial in the South Nesting Area and Indirect , during both construction and operation. (SIGNIFICANT) |

Table 8.6.11: D1 (A) – Farmed and Settled Inland Valleys: Weisdale

| | |
|--|--|
| Local Character Area | D1(A) – Farmed and Settled Inland Valleys: Weisdale |
| Extent within 15km of proposals | Approximately 3km ² of this LCA lies within the 15km detailed study area. |

| | |
|---|--|
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected by the proposed development. However, the majority of this LCA would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Sheltered and fertile improved inland valleys contrasting with surrounding moorland; and • attractive contained views north and south along valleys. |
| Scenic Quality Value | Medium with areas of Medium to High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is High because of the relatively small scale complex nature of the LCA. |
| Magnitude of changes | Weisdale valley would potentially receive greater levels of change, largely due to the close proximity of the proposals, which are as little as 1km distant. Linear views up the valley could become dominated by turbines, weakening the contrast between moorland and improved land which is a key characteristic of this LCA. Magnitude of change would therefore be Medium to High. |
| Impact Assessment | Moderate to Substantial and Indirect during construction and Moderate and Indirect during operation (SIGNIFICANT) |

Table 8.6.12: D1 (B) – Farmed and Settled Inland Valleys: Tingwall

| | |
|---|--|
| Local Character Area | D1(B) – Farmed and Settled Inland Valleys: Tingwall |
| Extent within 15km of proposals | Approximately 3km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected by the proposed development. However, some of this LCA would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Sheltered and fertile improved inland valleys contrasting with surrounding moorland; and • attractive contained views north and south along valleys. |
| Scenic Quality Value | Medium with areas of Medium to High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is High because of the related small scale complex nature of the LCA. |
| Magnitude of changes | The main part of the Tingwall valley would be affected by indirect change, although this is likely to be fairly small in scale and at a minimum distance of approximately 11km. Due to the existing turbines on the hills above the Tingwall valley and the distance to the proposals, this area of the LCA is unlikely to be significantly affected. Magnitude of change would therefore be Low |
| Impact Assessment | Slight to Moderate and Indirect during operation. (NOT SIGNIFICANT) |

Table 8.6.13: D2 – Crofting and Grazing Inland Valleys: Cuckron/Unst

| | |
|--|---|
| Local Character Area | D2 – Crofting and Grazing Inland Valleys |
| Extent within 15km of proposals | Approximately 4km ² of this LCA lies within the 15km detailed study area; this is the Cuckron area and hence the Unst area is not considered further in this assessment. |

| | |
|---|---|
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected However the majority of the Cuckron area would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Sheltered and fertile improved inland valley with distinct crofting character. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | Sensitivity to change for this LCA would be High because of the open, small scale rural nature of the LCA, likely to be dominated by new development. |
| Magnitude of changes | This LCA would experience potential indirect changes as a result of the proposed development which is at a minimum distance of approximately 4km to the north. The change would appear as a minor element within the wider landscape. However the orientation and outlook of this landscape is generally focused to the north and south by landform therefore increasing the degree of change. especially for northern and more elevated parts of the character area and within the open moorland where the scale of the proposals may reduce the effect of the contrast between this and the character area. Magnitude of change – Medium to High. |
| Impact Assessment | Moderate to Substantial and Indirect during construction and operation. (SIGNIFICANT) |

Table 8.6.14: D3 – Crofting and Grazing Isolated Valleys: Wester Quarff and Dale

| | |
|---|---|
| Local Character Area | D3 – Crofting and Grazing Isolated Valleys: Wester Quarff and Dale |
| Extent within 15km of proposals | Approximately 2.5km ² of this LCA, the Dale area near Mossbank, is within the 15km detailed study area. The Wester Quarff area of this LCA is outwith the detailed study area and is not considered further in this assessment. |
| Extent of area potentially affected by proposals | None of the LCA would be directly affected by the proposed wind farm but all parts of the Dale area may be indirectly affected |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Small scale diversity of colour and texture as a result of different land uses and land management techniques. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | Because of the open, small scale rural nature of this LCA, it would be potentially dominated by the new development. However the close proximity of Sullom Voe Oil terminal and other industrial components and land uses adjacent to this area reduces the sensitivity to change of the type proposed. Sensitivity to change would therefore be Medium. |
| Magnitude of changes | Change to the Dale section of this landscape character area would be widespread, although indirect. The proposed development is in close proximity to this LCA, (approximately 1km at its closest) and therefore indirect change is likely to be very influential. The scale of the turbines would be important in the smaller scale of the character area. Magnitude of change – Medium. |
| Impact Assessment | Moderate and Indirect in construction and operation. (SIGNIFICANT) |

Table 8.6.15: D4 (A) – Peatland and Moorland Inland Valleys; Kergord and Petta Dale

| | |
|---|--|
| Local Character Area | D4 (A)– Peatland and Moorland Inland Valleys; Kergord and Petta Dale |
| Extent within 15km of proposals | This area consists of two parallel valleys; Kergord and Petta Dale; separated by the Mid-Kame Ridge. Approximately 30km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | Both the valleys would potentially be directly and indirectly affected by the proposed development as turbines are proposed along the Mid-Kame Ridge and immediately to the east and west. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Large scale landscape with subtle colours and variations; • Mid-Kame Ridge; and • extensive views along valleys but with few significant features. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Low to Medium because of the open and large-scale character. Sensitivity is reduced slightly because of the main roads present within these valleys. |
| Magnitude of changes | The turbines would be very noticeable on the Mid - Kame Ridge, creating a linear landscape feature in its own right. Further turbines to the east and west within adjacent character areas would give rise to indirect change. Beyond the construction compound and very short section of track to the north the peripheral areas would be indirectly affected by turbines and tracks in the distance from some elevated parts. Magnitude of change – High |
| Impact Assessment | Substantial and both Direct and Indirect during construction and operation. (SIGNIFICANT) |

Table 8.6.16: D4 (B) – Peatland and Moorland Inland Valleys; Veensgarth and Housetter

| | |
|---|---|
| Local Character Area | D4 (B)– Peatland and Moorland Inland Valleys; Veensgarth and Housetter |
| Extent within 15km of proposals | This area consists of two small valleys on the periphery of the detailed study area; Veensgarth and Housetter. Approximately 5km ² of this LCA lies within the 15km detailed study area. |
| Extent of area potentially affected by proposals | Both the valleys would potentially be directly and indirectly affected by the proposed development as turbines are proposed along the Mid-Kame Ridge and immediately to the east and west. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Large scale landscape with subtle colours and variations; and • extensive views along valleys towards the sea but with few significant features. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Low to Medium because of the open and large-scale character of the valleys and the main roads present within them. |
| Magnitude of changes | Indirect impacts from a distance upon some elevated parts of the valleys. Magnitude of change – Negligible to Low. |
| Impact Assessment | Slight and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.17: E1 – Farmed Land

| | |
|---|---|
| Local Character Area | E1 – Farmed Land |
| Extent within 15km of proposals | Approximately 5km ² of this LCA is within the 15km detailed study area, to the south of Aith. |
| Extent of area potentially affected by proposals | This area would not be directly affected by the proposals. However much of the area would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Rich mosaic of quality grazing land and arable fields giving rise to a range of colours and textures. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | This is a relatively small scale, populated and working landscape. Sensitivity to change of the type proposed for this LCA would therefore be Medium. |
| Magnitude of changes | Change to this LCA would be fairly widespread, although indirect. The proposed development is fairly close to this LCA. Magnitude of change – Medium |
| Impact Assessment | Moderate and Indirect during construction and operation. (SIGNIFICANT) |

Table 8.6.18: E2 – South Mainland Scattered Settlement and Grazing Lands

| | |
|---|---|
| Local Character Area | E2 – South Mainland Scattered Settlement and Grazing Lands |
| Extent within 15km of proposals | Approximately 2.5km ² of this LCA is within the 15km detailed study area. |
| Extent of area potentially affected by proposals | This area would not be directly affected by the proposal but there may be very limited, isolated areas of higher ground that would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Varying landscape with extensive settlement, upland backdrop and coastal outlook. |
| Scenic Quality | Medium |
| Value | Low |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Low to Medium as it embodies small scale landscape features with extensive rural residences. |
| Magnitude of changes | Only very small isolated areas at the extreme north of this character area would potentially be indirectly affected by the proposed development. Indirect changes to these areas are likely to be limited and distant (approximately 15km) and therefore appear as only a very small element in the overall landscape. As such magnitude of change for this area as a whole would be minimal. Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.19: E3 – Coastal Crofting and Grazing Lands

| | |
|---|---|
| Local Character Area | E3 – Coastal Crofting and Grazing Lands |
| Extent within 15km of proposals | This LCA is scattered in numerous coastal locations around the Shetland archipelago. Approximately 25km ² in total is located within the 15km detailed study area, to the east of the proposals, predominantly on Bressay, Whalsay and the eastern coast of the Nesting area. |
| Extent of area potentially affected by proposals | Only one small area where an access track and borrow pit are proposed would be directly affected. Most other areas of this LCA within the 15km boundary would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Relatively undeveloped landscape maintaining the traditional pattern of crofting settlements; and • subdued colours of vegetation contrasting with seascape. |
| Scenic Quality | Medium to High |
| Value | Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is High because of the small scale, rural settlement pattern, not in keeping with large scale development. |
| Magnitude of changes | A small section of one area (adjacent to Hill of Skellister) would be crossed by an access track, of approximately 500m in length and may include a borrow pit. These have been located in an existing valley to minimise their impact on the wider area. Beyond this small section impacts would be indirect. Elevated and west facing coasts and slopes would be likely to receive increased indirect change. Western and northern parts of Bressay and Whalsay are likely to receive the most noticeable changes. Areas at Nesting would be closer to the proposed development but would be likely to receive lesser change as a result of interim landform. The main focus of this landscape is towards the coast, away from the proposals and therefore level of change would be lessened. Magnitude of change – Low. |
| Impact Assessment | Moderate and Indirect during construction and operation. (SIGNIFICANT) |

Table 8.6.20: E4 – Unst and West Mainland Coastal Crofting

| | |
|---|---|
| Local Character Area | E4 – Unst and West Mainland Coastal Crofting |
| Extent within 15km of proposals | Approximately 10km ² of this LCA, the areas in the West Mainland, lies within the 15km boundary. Unst is outwith the detailed study area. |
| Extent of area potentially affected by proposals | No part of the area within the 15km detailed study area would be directly affected by the proposals but around half may be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Well managed good quality grazing land with a fine smooth texture and even rich green colour; and • contrast of ordered landscape with an open, uniform backdrop and seascape. |
| Scenic Quality | Medium to High |
| Value | High |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Medium to High because of the smaller scale rolling nature of the landscape. |

| | |
|-----------------------------|---|
| Magnitude of changes | Changes to this LCA would be indirect and would generally be limited to eastern and northern facing slopes and isolated areas of high ground. The proposed development would be distant, between 10km and 15km from this LCA, and would therefore appear as only a small element within the wider landscape. Furthermore the landscape focus is predominantly coastal in aspect, orientated towards the NSA. Magnitude of change – Low |
| Impact Assessment | Slight and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.21: E5 – West Mainland Lowland Crofting

| | |
|---|--|
| Local Character Area | E5 – West Mainland Lowland Crofting |
| Extent within 15km of proposals | Approximately 20km² of this LCA lies within the 15km boundary. |
| Extent of area potentially affected by proposals | None of the areas within the 15km boundary would be directly affected by the proposals. However, around half of the area would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Distinctive broad rolling, grass covered landscape; • simple coherent landscape with few scattered dwellings; and • small areas of crofting, contrasting with wider grazing landscape. |
| Scenic Quality | Medium or Medium to High |
| Value | Medium to High |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Medium to High because it is rural and open in character with extensive views from elevated areas. |
| Magnitude of changes | No part of the landscape would be directly affected by the proposals and in general indirect changes would be limited to elevated areas and eastern facing slopes.. Elevated areas around Effirth and Sefster would receive greater levels of change, although the proposals would appear as only a small element in the wider landscape. In general change would be unlikely to affect the key landscape characteristics. Magnitude of change –Low |
| Impact Assessment | Slight to Moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.22: F1 – Developed Areas

| | |
|---|--|
| Local Character Area | F1 – Developed Areas |
| Extent within 15km of proposals | Approximately 10km ² of this LCA is located within the 15km detailed study area; the main port and commercial area of Lerwick and the area surrounding the Sullom Voe oil terminal. |
| Extent of area potentially affected by proposals | Neither of the areas would be directly affected by the proposal. All of the Sullom Voe area and around a quarter of the Lerwick area would be likely to be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Attractive historical and cultural areas of Lerwick. |
| Scenic Quality | Low to Medium – locally Low |
| Value | Low – locally High in historic areas of Lerwick |

| | |
|---------------------------------------|---|
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Low because of the low scenic quality and value, the developed, sometimes industrial nature of the LCA which can more easily accommodate change associated with further development. |
| Magnitude of changes | Neither of the two areas would be directly affected by the proposals but both would receive indirect impacts. Changes to the Lerwick area would be very limited due to distance from the proposals and interim landform. The historic areas would be largely unaffected. The Sullom Voe area would potentially receive more significant change largely due to the close proximity of the development (approximately 1km). Magnitude of change – Medium |
| Impact Assessment | Slight and Indirect during construction and operation (NOT SIGNIFICANT) |

Table 8.6.23: F2 – Nucleated Settlements

| Local Character Area | F2 – Nucleated Settlements |
|---|---|
| Extent within 15km of proposals | This LCA is found in a number of places scattered throughout the archipelago where population and development are concentrated into small settlements. Approximately 30km ² of the total area is within the 15km detailed study area. |
| Extent of area potentially affected by proposals | None of the areas within the 15km detailed study area would be directly affected. However, almost all areas would be indirectly affected to some degree. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Range of colours and textures provided by dwellings, harbours and boats and contrasting surrounding grassland and moorland; small scale; complex. |
| Scenic Quality Value | Medium to High with localised areas of Medium or Low to Medium Low to Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is generally Medium because despite the small scale and complex nature of the LCA, frequent foreground detracting development, (e.g., poor quality and disused buildings, garages, shops etc.) reduce potential sensitivity, with the exception of the old part of Voe which is High sensitivity (although subject to a low degree of change). |
| Magnitude of changes | In general these are low coastal areas and indirect change would be limited. The exception to this would be the Mulla, Tagon, and Hillside areas north of Voe and the northern part of Bressay and some other isolated and elevated areas in individual settlements where there would be more extensive change. Voe is likely to be the most significant of these areas with the proposed development being located on three sides. However, this area is relatively enclosed by landform reducing potential change. Magnitude of change – Generally Low, locally Medium in areas referred to above. |
| Impact Assessment | Slight to Moderate and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.24: F3 – Farmed Land

| | |
|---|--|
| Local Character Area | F3 – Farmed Land |
| Extent within 15km of proposals | Approximately 8km ² of this LCA is located within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this LCA would be directly affected by the proposal. However, most of the area would be potentially affected indirectly. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Varied texture and range of colour provided by mosaic of grazing land and arable fields which contrast with surroundings of enclosed water and uplands. |
| Scenic Quality | Medium |
| Value | Medium |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Medium. This LCA is a more small scale, populated area with a greater level of development and human activity than that of the surrounding moorland LCAs. |
| Magnitude of changes | Changes to this LCA would be relatively widespread, although indirect. In general changes would be limited and fairly distant (approximately 8km) and for most areas the proposals would not be a feature of the main focus of views. The key distinctive characteristics of the landscape would not be significantly changed. Magnitude of change –Low |
| Impact Assessment | Slight and Indirect during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.25: F5 – Scattered Settlements/Crofting and Grazing Land

| | |
|---|--|
| Local Character Area | F5 – Scattered Settlements/Crofting and Grazing Land |
| Extent within 15km of proposals | This LCA is located in numerous coastal locations throughout the Shetland Isles. In total approximately 80km ² of this LCA is located within the 15km detailed study area. |
| Extent of area potentially affected by proposals | One turbine and a short section of track may be located within this LCA, directly affecting the area of North Nesting, close to Laxfirth and the south west point of Dury Voe. Most other areas would receive potential indirect impacts. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Subtle mosaic of colours and textures; • attractive coastal views; and • coherent relationship between landscape elements forming varied, well balanced landscape. |
| Scenic Quality | Medium to High – locally High or Medium |
| Value | Medium to High. |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is Medium to High because this is an open and attractive rural landscape with extensive views across water which are a key feature of the LCA. |

| | |
|-----------------------------|--|
| Magnitude of changes | Changes to this LCA would predominantly be indirect. In one location changes would consist of the introduction and construction of a turbine and a section of track to a small scale landscape. Due to the scattered nature of this LCA, in numerous different locations, the extent of the change would vary considerably. Many areas, particularly on the outer extremities of the islands such as the southwest mainland, northwest mainland and eastern coast of Yell, would receive only distant, sporadic indirect change, generally limited to higher ground. Other areas, particularly on inward facing coasts, would be affected by more extensive change. The greatest level of change would be potentially obtained from areas near Haggriester and Sullom, the eastern facing coast of Muckle Roe, the southern shore of Yell and the area between Hamera Head and Laxo. Magnitude of change – varies according to location, between Low to Medium – Medium- Medium to High |
| Impact Assessment | Generally Moderate and Indirect but for selected areas detailed above Moderate to Substantial and both Direct and Indirect during construction and operation. (SIGNIFICANT) |

Table 8.6.26: F6 – Dales Voe and Colla Firth

| | |
|---|--|
| Local Character Area | F6 – Dales Voe and Colla Firth |
| Extent within 15km of proposals | This LCA is located to the east and north of the proposals on the north east mainland. Approximately 10km ² of the character area is within the 15km detailed study area. |
| Extent of area potentially affected by proposals | No part of this character area would be directly affected by the proposals. However, west-facing slopes and more elevated sections to the south of Dales Voe would be indirectly affected. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Well managed patchwork of green fields at inland points of the voes contrasting with muted browns of the adjacent steep side slopes; and • dramatic views associated with combinations of long inland voes and steep, high side slopes, visually distinct from all other areas. |
| Scenic Quality Value | Medium to High or High |
| Sensitivity to change proposed | Sensitivity to change of the type proposed is High due to the distinctive and dramatic fjord-like landscape combined with contrasting smaller- scale valley floor features. |
| Magnitude of changes | Changes to this landscape would be indirect. The nature of this landscape, with steep sided valleys combined with reduced exposure due to primary mitigation results in reduced influence from potential indirect change. Further to this the focus of the landscape is likely to be more commonly funnelled seaward by the dramatic landform. Magnitude of change – Low |
| Impact Assessment | Slight to Moderate and Indirect both during construction and operation. (NOT SIGNIFICANT) |

Table 8.6.27: G – Coastal Edge

| | |
|--|---|
| Local Character Area | G – Coastal Edge |
| Extent within 15km of proposals | This LCA is scattered throughout the Shetland archipelago on the outer coastal extremities. Approximately 12km ² of this LCA is located within the 15km detailed study area. |

| | |
|---|--|
| Extent of area potentially affected by proposals | None of these areas would be directly affected by the proposals and very few areas would have the potential to be indirectly affected as they are all located on the outermost extremities of the islands and generally screened from the proposals by landform. |
| Relevant landscape characteristics | Key characteristics likely to be influenced by the proposals include: <ul style="list-style-type: none"> • Dramatic variety of coastal features including cliffs, sea stacks, natural arches and sandy beaches; and • inspiring landscape formed by combination of coastal features and sea. |
| Scenic Quality Value | Medium to High or High |
| Sensitivity to change proposed | Sensitivity to change of the type proposed for this LCA is High as this is a highly scenic area with little existing human influence or man made features. |
| Magnitude of changes | Indirect changes to this landscape would be very limited as a result of screening provided by interim landform. Occasional elevated areas would potentially receive indirect change but are distant from the proposals resulting in a further reduction of the degree of change. Magnitude of change – Negligible |
| Impact Assessment | Negligible and Indirect in construction and operation. (NOT SIGNIFICANT) |

8.7 MITIGATION

Key landscape and visual constraints and development principles were identified at an early stage of the project. These were utilised at the design stage to help reduce and minimise potential impacts on the landscape character and visual amenity of the study area and are referred to in this Chapter as primary mitigation and these measures have been taken account of in the landscape and visual assessments. It is also the intention, in due course, to implement a strategy of landscape management and habitat creation to help reduce and offset potential impacts. These secondary mitigation measures are dependant on permission and co-operation of local landowners, crofters and tenants. See Chapter 4 for details of design development (primary mitigation) and Chapter 9 for a description of potential secondary Landscape and Visual mitigation. As secondary mitigation measures have yet to be finalised and agreed they have not been included within this assessment.

8.8 SUMMARY AND CONCLUSIONS; LANDSCAPE CHARACTER

The impacts on designated sites and local landscape character areas are summarised in tables 8.7 and 8.8 below. Significant impacts are considered to be those assessed as moderate and above.

TABLE 8.7 Summary of assessment of impacts on designated sites

| CHARACTER ZONE | CONSTRUCTION | | | | | | OPERATION | | | | | | | |
|---|--------------|--------------------|--------|------------------|----------|-----------------------|-------------|------------|--------------------|--------|------------------|----------|-----------------------|-------------|
| | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial |
| National Scenic Areas | | | | | | | | | | | | | | |
| Dunrossness and the Deeps | | | X | X | | | | | | X | X | | | |
| Muckle Roe | X | | | | | | | X | | | | | | |
| Esha Ness | | | X | X | | | | | | X | X | | | |
| Uyea Isle and Fethaland | X | | | | | | | X | | | | | | |
| Inventory of Gardens and Designed Landscapes | | | | | | | | | | | | | | |
| Belmont House | X | | | | | | | X | | | | | | |
| Brough Lodge | X | | | | | | | X | | | | | | |
| Gardie House | X | | | | | | | X | | | | | | |
| Lunna House | | | | X | | | | | | | X | | | |

TABLE 8.8 Summary of assessment of impacts on local character zones

| CHARACTER ZONE | CONSTRUCTION | | | | | | OPERATION | | | | | | | |
|--|--------------|--------------------|--------|------------------|----------|-----------------------|-------------|------------|--------------------|--------|------------------|----------|-----------------------|-------------|
| | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial |
| (within the detailed study area) | | | | | | | | | | | | | | |
| A1 South Mainland Spine | | | X | | | | | | | X | | | | |
| A2 East and West Kame | | | | | | X | | | | | | | X | |
| A3 Ronas Hill | | | | X | | | | | | | X | | | |
| A5 Sandness Hill & Ward of Bressay/Noss | | | X | | | | | | | X | | | | |
| B1 Yell Peatland | | X | | | | | | | X | | | | | |

| CHARACTER ZONE (within the detailed study area) | CONSTRUCTION | | | | | | OPERATION | | | | | | | |
|---|--------------|--------------------|--------|------------------|----------|-----------------------|-------------|------------|--------------------|--------|------------------|----------|-----------------------|-------------|
| | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial |
| B2 Rounded Moorland Hills | | | X | X | | | | | | X | X | | | |
| B4 South Mainland Coastal Moorland | X | | | | | | | X | | | | | | |
| C1 West Mainland & Northmavine: Muckle Roe & Mangaster/Nibon Areas | | | | X | X | | | | | | X | X | | |
| C2 Uyea, Braewick, Tingon & North Roe | | | | X | | | | | | | X | | | |
| C3 Lunna Ness & Dragon Ness | | | | | X | X | | | | | | X | X | |
| D1a Farmed & Settled Inland Valleys: Weisdale | | | | | | X | | | | | | X | | |
| D1b Farmed & Settled Inland Valleys: Tingwall | | | | X | | | | | | | X | | | |
| D2 Crofting & Grazing Inland Valleys: Cuckron | | | | | | X | | | | | | | X | |
| D3 Crofting & Grazing Isolated Valleys: (Wester Quarff) and Dale | | | | | X | | | | | | | X | | |
| D4a Peatland & Moorland Inland Valleys: Kergord and Petta Dale | | | | | | | X | | | | | | | X |
| D4b Peatland & Moorland Inland Valleys: Veensgarth and Housetter | | | X | | | | | | | X | | | | |
| E1 Farmed Land | | | | | X | | | | | | | X | | |
| E2 South Mainland Scattered Settlement & Grazing Lands | X | | | | | | | X | | | | | | |
| E3 Coastal Crofting & Grazing Lands | | | | | X | | | | | | | X | | |
| E4 West Mainland Coastal Crofting | | | X | | | | | | | X | | | | |
| E5 West Mainland Lowland Crofting | | | | X | | | | | | | X | | | |
| F1 Developed Areas | | | X | | | | | | | X | | | | |

| CHARACTER ZONE (within the detailed study area) | CONSTRUCTION | | | | | | OPERATION | | | | | | | |
|---|--------------|--------------------|--------|------------------|----------|-----------------------|-------------|------------|--------------------|--------|------------------|----------|-----------------------|-------------|
| | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial | Negligible | Negligible/ Slight | Slight | Slight/ Moderate | Moderate | Moderate/ Substantial | Substantial |
| F2 Nucleated Settlements | | | | X | | | | | | | X | | | |
| F3 Farmed Land | | | X | | | | | | X | | | | | |
| F5 Scattered Settlements/Crofting & Grazing Land | | | | | X | X | | | | | | X | X | |
| F6 Dales Voe and Colla Firth | | | | X | | | | | | | X | | | |
| G Coastal Edge | X | | | | | | | X | | | | | | |

The impacts of the proposed development upon the landscape character of the study area can be summarised as follows:

- **No Significant Impact** on designated sites such as the National Scenic Areas or Gardens and Designed Landscapes.
- **Significant Impact** on a number of local landscape character areas within 15km of the proposed development. In the East and West Kame landscape area, where a majority of the proposals would be situated,(despite their low sensitivity to development of this nature), the magnitude of direct change would be such that moderate to substantial adverse landscape impacts would be experienced. Where impacts are indirect, impacts in this character area would be reduced to moderate, but nevertheless still significant. Significant impacts would also be experienced by the part of the Peatland and Moorland Inland Valleys landscape character area where the proposed development would be located (Pettadale and Kergord).Sensitivity to change here would be low to moderate, but again, the degree of change would be high, resulting in both direct and indirect substantial impacts. Elsewhere in the detailed study area: moderate direct and indirect adverse landscape impacts would be experienced by Coastal Crofting and Grazing Lands and the Scattered Settlements/ Crofting and Grazing Land landscape character areas; and indirect adverse landscape impacts ranging from moderate to moderate - substantial would be experienced in the Lunna Ness and Dragon Ness, part of the Farmed and Settled Inland Valleys (Weisdale), the Crofting and Grazing Inland Valleys: Cuckron, the Crofting and Grazing Isolated Valleys: Wester Quarff and Dale (Dale), and the Farmed Land (E1), local character areas. There would also be localised areas of moderate and therefore significant, impact upon West Mainland and Northmavine: Muckle Roe and Mangaster/Nibon landscape character area.

- **No Significant Impact** on just under two-thirds of the local landscape character areas within the detailed study area.

The above table and summary confirms that moderate to substantial and therefore significant landscape impacts would result from direct change, through the introduction of turbines, tracks and borrow pits, primarily within the East and West Kame landscape character area (LCA), the largest LCA of the study area. Some of the Peatland and Moorland Inland Valleys LCA where the proposed development would be located (Pettadale and Kergord) would also receive some direct, substantial and therefore significant, impacts. In addition, the coastal Crofting and Grazing Lands and the Scattered Settlements/ Crofting and Grazing Land LCAs would receive some very limited direct and significant impacts.

In addition to those areas receiving significant direct impacts a number of LCAs would receive significant indirect impacts as a result of intervisibility with the proposed development. These significant indirect impacts are generally limited to those areas in close proximity to the proposed development where intervisibility has the potential to have a greater effect on the setting and hence character, of a landscape.

However, there are a number of areas which, although in close proximity to the proposed development, have a reduced sensitivity to change and/or a reduced magnitude of change, due to the nature and context of the local landscape and landform, resulting in a reduced level of impact. This is particularly evident in the Developed Areas LCA, where the presence of existing development such as Sullom Voe Oil terminal reduces the sensitivity of the landscape to change of the type proposed and in a number of LCAs in the western mainland, where the partial screening effect of the foreground landform reduces magnitude of change and hence reduces and limits indirect impacts.

To conclude, all significant landscape effects would be found where direct change or large scale indirect changes (generally within 15km of the proposals) are predicted. The wider study area beyond 15km from the periphery of the proposals and all designated/ historic and designed landscapes would not receive any significant landscape effects, either during construction or operation.

8.9 REFERENCES

Countryside Agency and Scottish Natural Heritage (2002) *Landscape Character Assessment Guidance*.

Gillespies (1998) *A Landscape Character Assessment of The Shetland Isles*. Scottish Natural Heritage.

Horner + MacLennan and Envision (2006) *Visual Representation of Windfarms, Good Practice Guidance*. Scottish Natural Heritage

Landscape Institute and the Institute of Environmental Assessment (2002) *Guidance for Landscape and Visual Impact Assessment, second edition*. Spon Press

Scottish and Southern energy (2004) *Muckla Moor Wind Farm Environmental scoping Report*.

Scottish Executive (1999) *National Planning and Policy Guidance 14: Natural Heritage*.

Scottish Executive (2006) *Scottish Planning Policy 4: Planning for Minerals*.

- Scottish Executive (2007) *Scottish Planning Policy 6: Renewable Energy*.
- Scottish Executive (2005) *Scottish Planning Policy 15: Planning for Rural Development*.
- Shetland Islands Council (2006) *Basic Principles of Landscape and Visual Impact Assessment for Sponsors of Development*.
- Shetland Islands Council (2004) *Shetland Local Plan*.
- Shetland Islands Council (2001) *Shetland Structure Plan*.
- Scottish Natural Heritage (2002) *Assessment of Cumulative Landscape and Visual Impacts Arising from Wind Farm Developments*.
- Scottish Natural Heritage (2003) *Guidance on Scoping Issue for EIA, 3rd Draft*.
- Scottish Natural Heritage (2001) *Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric Schemes*.
- Scottish Natural Heritage (2005) *Policy Statement no 02/02: Strategic Locational Guidance for Onshore Wind farms in respect of the Natural Heritage*.
- Scottish Natural Heritage (2003) *Policy Statement 02/03: Wildness in Scotland's Countryside*.
- Scottish Natural Heritage (2002) *Natural Heritage Futures – Hills and Moors*.
- Scottish Natural Heritage (2002) *Natural Heritage Futures – Shetland*.
- University of Newcastle (2002) *Visual Assessment of Windfarms: Best Practice*. Scottish Natural Heritage
- Viking Energy Partnership (2008) *Viking Wind Farm Scoping Report*.