

Appendix 13.1 Landscape and Visual Impact Assessment Methodology



Appendix 13.1 Landscape and Visual Impact Assessment Methodology

Introduction

- 13.1.1 The Landscape and Visual Impact Assessment method follows good practice guidance and advice on the assessment of the impacts of development on landscape and visual resources contained in the following documents:
 - Guidelines for Landscape and Visual Assessment (Landscape Institute and Institute of Environmental Assessment, 3rd Edition 2013) (GLVIA 3);
 - Landscape Character Assessment: Guidance for England and Scotland, The Countryside Agency and NatureScot, 2002;
 - Landscape Character Assessment Guidance for England and Scotland. Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity, The Countryside Agency and Scottish Natural Heritage, 2004; and
 - Scottish Planning Policy, 2014;
 - Visual Representation of Windfarms: Guidance, Version 2.2, NatureScot, 2017;
 - Working Draft 11 Guidance for Assessing the Effects on Special Landscape Qualities of National Scenic Areas, NatureScot, (November 2018); and
 - Visual Representation of Development Proposals, The Landscape Institute, Technical Guidance Note 09/19 (17th September 2019).
- 13.1.2 The general approach to the LVIA includes the following tasks:
 - Scoping;
 - Baseline Assessment (comprising desk study, field survey and reporting); and
 - Assessment and Reporting.
- 13.1.3 These tasks are described in detail below.

Scoping

13.1.4 The scope of the LVIA was agreed through written communication with NatureScot and Shetland Islands Council during 2020 including confirmation of the viewpoints to be included in the assessment (further details are provided in Chapter 13).

The Landscape and Visual Baseline

- 13.1.5 The first stage of the assessment reviews the existing landscape and visual resource of the Environmental Zone of Influence (EZI) in terms of its character, quality (i.e., the baseline condition) and establishes sensitivity of the resources/receptors. The baseline assessment forms the basis against which to assess the magnitude and significance of the predicted landscape and visual effects arising from the Proposed Project.
- 13.1.6 The EZI for the LVIA is defined by a 15 km radius offset from the centre of the launch site at Lamba Ness, as shown in Figure 13.1.1. This extent of EZI was determined as appropriate, given the heights of the separate elements of the Proposed Project, accepted best practice, and was agreed in consultation with NatureScot and Shetland Islands Council.
- 13.1.7 The baseline assessment has three elements:
 - Description the process of collecting and presenting information about landscape and visual resources in a systematic manner;



- Classification the more analytical activity whereby landscape and visual resources are refined into units of distinct and recognisable character; and
- Evaluation the process of attributing a sensitivity rating to a given landscape or visual resource, by reference to specified criteria.
- 13.1.8 In determining these elements, the baseline assessment process comprises three stages: desk study, field survey and analysis. These are described below.

Future Baseline

13.1.9 In the absence of the Proposed Project, the land within the application boundary is expected to remain in its current state. No other changes are expected to occur.

Desk Study

- 13.1.10 The location of the Proposed Project and the extent of the application boundary is shown in Figure 13.1.1. This is also detailed in Chapter 3 (Proposed Project). As part of the desk study, existing map and written data regarding the Proposed Project site and its environs were reviewed, including:
 - Scottish Planning Policy (SPP), 2014;
 - > The Shetland Local Development Plan (LDP) 2014;
 - Onshore Wind Energy, Supplementary Guidance, Shetland Local Development Plan, 2014 (Adopted February 2018);
 - Local Landscape Areas, Supplementary Guidance, Shetland Local Development Plan, Consultation Draft 2014
 - Shetland Coastal Character Assessment, NAFC Marine Centre, University of the Highlands and Islands, 2016;
 - An assessment of the sensitivity and capacity of the Scottish seascape in relation to offshore windfarms, Scottish Natural Heritage Commissioned Report No.103, 2005
 - Scottish Landscape Character Types Map and Descriptions (NatureScot, 2019)
 - Inventory of Historic Gardens and Designed Landscapes in Scotland, Historic Scotland; and
 - Ordnance Survey Maps.
- 13.1.11 The desk study enabled the definition of the baseline landscape and visual resource within the EZI and the main users of the area, key viewpoints and key features were identified (these were subsequently confirmed as part of the field studies).
- 13.1.12 The aim of the baseline visual assessment was to ensure that a representative range of viewpoints were included in the visual assessment in order to represent the identified receptors. The potential extent of visibility of the Proposed Project was identified by reference to Ordnance Survey map data, the draft zone of theoretical visibility mapping, and observations made in the field. Following this, potential visual receptors likely to be affected by the Proposed Project were identified.
- 13.1.13 The viewpoints were selected to ensure that the visual assessment included a representative range in relation to the following criteria:
 - Type of receptor including different landscape character areas if appropriate;
 - Distance of receptor from Proposed Project to a maximum distance of a 15 km radius offset from the launch site at Lamba Ness, as shown in Figure 13.1.1; and
 - Direction of receptor from Proposed Project, with the aim of achieving an even distribution from different compass points around the site.



13.1.14 The desk study provides the basis for subsequent field survey work. It informs the description of the Landscape, Seascape and Coastal Character Areas (LCAs, SCAs and CCAs) for the EZI, the definition of the potential extent of visibility and the identification of the principal viewpoints and receptors, which were subsequently confirmed during the field survey.

Field Survey

- 13.1.15 The baseline landscape assessment included field survey work, carried out to verify the landscape, seascape and coastal character areas identified within the EZI and gain a full appreciation of the relationship between the Proposed Project and the landscape.
- 13.1.16 Field survey work also verified the appropriateness of the proposed viewpoints. This involved checking the initial viewpoint selection on the ground, to ensure that there will be views of the Proposed Project from these locations. In some instances, this can be remedied by slight adjustments of the location, although this has to remain relevant to the particular receptor(s) for which the viewpoint was selected. It is also important to ensure that the selected viewpoints are a representative view, and demonstrate potential visibility of the Proposed Project for the selected location. The fieldwork was supported by analysis of Ordnance Survey maps, and observations were recorded with photographs.

Analysis and Reporting

- 13.1.17 Analysis and reporting of the baseline assessment took place after completion of the desk and field surveys. The baseline landscape assessment provided a description, classification and evaluation of the landscape, seascape and coastal character of the EZI from which to assess the potential landscape effects of the Proposed Project. The baseline visual assessment provided an initial list of viewpoints for the viewpoint assessment, with brief commentary on viewpoint location, distance from the Proposed Project, receptors and rationale for selection, from which to assess the potential visual effects of the Proposed Project.
- 13.1.18 The baseline assessment is supported by Figure 13.1.1, LVIA EZI, Figure 13.1.2, Landscape Designations (including National Cycle Routes), Figure 13.1.3, Landscape (Seascape and Coastal) Character Areas, Figure 13.1.4, Viewpoint Locations, Figures 13.2.1a 13.2.1b Zone of Theoretical Visibility (ZTV) maps.
- 13.1.19 The baseline assessment provided a description of the landscape and visual resource from which an assessment of the landscape and visual effects of the Proposed Project can be undertaken to determine the development's acceptability in principle and the appropriate mitigation measures.

Assessment of Landscape and Visual Effects

- 13.1.20 The assessment describes the changes in the character and quality of the landscape and visual resources that are expected to result from the Proposed Project.
- 13.1.21 In assessing landscape impacts, the potential direct effects on the fabric of the landscape are considered, together with the potential effects on the perception of landscape character. The latter depends on a number of factors:
 - the nature of the landscape area, including factors such as the nature of views and sense of enclosure;
 - the extent of the potential visibility of the Proposed Project (e.g., the number of potential viewpoints and extent of the Proposed Project seen);
 - the proportion of the character area with potential visibility; and
 - the distance to the Proposed Project.
- 13.1.22 The baseline landscape character assessment together with an assessment of the potential effects on each character area is included in the assessment, along with consideration of the extent of potential significant effects.



- 13.1.23 A viewpoint analysis has been carried out to identify and evaluate the potential effects on visual amenity arising from the Proposed Project at specific representative locations in the EZI. The viewpoints selected are considered to be representative of the spectrum of receptors in the EZI, located at different distances, directions and elevations relative to the Proposed Project. The viewpoints were identified and agreed through consultation with Shetland Islands Council and NatureScot.
- 13.1.24 The assessment involved the preparation of existing photographs and photomontages from representative viewpoints to illustrate existing views, to predict the extent of views of the Proposed Project and to assist, together with field work, in the assessment of effects. These are shown in Figures 13.3.1.1 13.3.3.2.

Assessment Criteria

13.1.25 The aim of the LVIA is to identify, predict and evaluate likely significant landscape and visual effects associated with a Proposed Project. Wherever reasonably possible, identified effects are quantified, however, the nature of LVIA requires an element of interpretation using professional judgement. In order to provide a level of consistency to the assessment, the prediction of magnitude and assessment of significance of the landscape and visual effects have been based on pre-defined criteria.

Sensitivity of the Landscape and Magnitude of Change

- 13.1.26 The capacity of the landscape to accommodate change of the type and scale involved in the formation of the Proposed Project is assessed. Part of this process involves an assessment of landscape sensitivity, and susceptibility to change, in the context of these proposals.
- 13.1.27 The sensitivity of the landscape is not absolute and varies according to the existing landscape, the nature of the Proposed Project and the type of change being considered. The determination of the sensitivity of the landscape resource to changes associated with the Proposed Project is defined as high, medium, low or negligible or intermediate bands between these. It is developed from guidance within GLVIA 3, and based on professional interpretation of a combination of parameters as follows:
 - Key landscape characteristics a professional evaluation informed by an understanding of the key characteristics of the landscape and existing character assessments, describing the elements that make up the landscape including:
 - o Landscape value, as reflected by local, regional or national landscape designation;
 - Landscape scale which is the relative size of the main landscape elements and components;
 - o Physical influences such as landform;
 - Land cover, including different types of vegetation; and
 - The nature of views whether open, closed, long or short distance, simple or diverse.
- 13.1.28 GLVIA 3 advises that the two components of 'value' and 'susceptibility' to change are taken into account in assigning sensitivity to change from the Proposed Project to landscape and visual receptors. The two factors are described and explained in greater detail below.

Landscape Value

13.1.29 Establishing landscape value requires an understanding of how society values different Landscapes. This is used to inform judgements on the significance of effects. Value is most often expressed through designation; however, undesignated landscapes and components of individual landscapes also need to be examined. As part of the baseline the following factors are considered when developing an understanding of landscape value:



- Landscape quality/condition the physical state of the landscape;
- Scenic quality aspects of the landscape that appeal to the senses;
- Rarity presence of unusual or rare features;
- Recreation values particularly where landscape experience is important;
- Perceptual aspects value for particular experience such as tranquillity; and
- Cultural associations with people such as writers or artists, events, etc.
- 13.1.30 Information on landscape value is included in the baseline descriptions of landscape character, and in information included in the citations for designated landscapes. This information has been reviewed and refined through survey and analysis.

Susceptibility to Change

- 13.1.31 GLVIA 3 defines susceptibility to change as 'the ability of the landscape to accommodate the proposed project without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies.'
- 13.1.32 The degree to which a particular landscape type or area can accommodate change will vary with:
 - existing land use;
 - the pattern and scale of the landscape;
 - > visual enclosure/openness of views, and distribution of visual receptors; and
 - the scope for mitigation, which will be in character with the existing landscape.
- 13.1.33 Key characteristics likely to be affected by the Proposed Project are evaluated, taking into account 'quality, value, contribution to landscape character, and the degree to which the particular element or characteristic can be replaced or substituted'.

Landscape Sensitivity

- 13.1.34 In order to evaluate the sensitivity of the landscape receptor the criteria outlined in Table 13.1.1 below have been used, combining an understanding of the landscape value and susceptibility to change, based on GLVIA 3.
- 13.1.35 In some instances, a landscape with important components and high quality may be of a lower sensitivity as a result of its potential tolerance to change and opportunities for mitigation. Conversely a landscape with few features of interest may be of a higher sensitivity because it is vulnerable to change with little opportunity to mitigate change.
- 13.1.36 Having described the landscape resource and the key components that contribute to the character of the landscape character areas, and categorised the sensitivity of each landscape type to change, the probable magnitude of change sustained as a result of the Proposed Project is assessed. This change could be adverse, neutral or beneficial. The assessment of the magnitude of change is described below.



Table 13.1.1 - Landscape Sensitivity

Description	Sensitivity
Landscape with important components, usually of particularly distinctive character and high quality, susceptible to relatively small changes and for which mitigation will be difficult or not possible. Some less distinctive or lower quality landscapes may also fall into this category where characteristics are such that mitigation of negative changes will be difficult. Landscape is often recognised through designation.	High Sensitivity
Landscape with characteristics reasonably tolerant of changes or for which mitigation is likely to be possible. These landscapes may be of high quality or of distinctive character but will usually be relatively ordinary and moderately valued.	Medium Sensitivity
A less distinctive or relatively poor landscape with few features of quality or interest, potentially tolerant of substantial change and with scope for mitigation of any negative changes.	
Considerably modified or degraded landscape, with few/no features of quality or interest e.g. heavily industrialised landscapes.	Low Sensitivity

Magnitude of Change on Landscape Receptors

13.1.37 Each effect on landscape needs to be assessed in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility.

Size or Scale (including nature of influence on landscape character)

- 13.1.38 Judgements are made about the size or scale of the change in the landscape that are likely to be experienced as a result of the Proposed Project. The judgements take account of:
 - the extent to which landscape elements will be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape;
 - the degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or by addition of new ones; and
 - whether the effect changes the key characteristics of the landscape which are critical to its distinctive character.

Geographic Extent

- 13.1.39 The geographic extent over which landscape effects are considered to be distinct from size or scale, the extent of effects will vary according to the nature of the proposal. The effect of a development may have an influence at the following scales:
 - at site level, within the development site itself;
 - > at the level of the immediate setting of the site;
 - at the scale of the landscape character area within which the proposal lies; or
 - > at a larger scale influencing several landscape character areas.



Table 13.1.2 – Judgement on Magnitude

Level of Magnitude	Definition of Magnitude
Substantial	Total loss or major alteration to key elements/features/ characteristics of the baseline (pre-development) conditions such that post development character/composition of baseline will be fundamentally changed.
Moderate	Partial loss or alteration to one or more key elements/features/ characteristics of the baseline (pre-development) conditions such that post development character/ composition/ attributes of baseline will be partially changed.
Slight	Minor loss of or alteration to one or more key elements/features/ characteristics of the baseline (pre-development) conditions. Change arising from the loss/alteration will be discernible but underlying character/composition of the baseline condition will be similar to pre-development circumstances/patterns.
Negligible	Very minor loss or alteration to one or more key elements/features/characteristics of the baseline (pre-development) conditions. Change barely distinguishable, approximating to the "no change" situation.
None	No change.

Visual Receptor Sensitivity and Magnitude of Change

- 13.1.40 The sensitivity of visual receptors depends upon:
 - the location of the viewpoint;
 - the context of the view;
 - the activity of the receptor; and
 - > frequency and duration of the view.

Value attached to Views

- 13.1.41 Judgements are also made about the value attached to views experienced taking account of:
 - Recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations.
 - Indication of value attached to particular locations as a distinctive view through appearance in guide books, provision of formal facilities such as a car park and sign board, references in art and literature.

Susceptibility of Visual Receptors to Change

- 13.1.42 The susceptibility of different visual receptors to changes in views is a function of:
 - the occupation or activity of people experiencing the view at particular locations; and
 - the extent to which their attention or interest may therefore be focussed on the views and visual amenity they experience at particular locations.
- 13.1.43 Visual receptor susceptibility is defined as high, medium, or low, or a gradation of these, as set out in Table 13.1.3.



Table 13.1.3 – Judgement on Sensitivity

Level of Sensitivity	Definition of Visual Receptor Sensitivity
High	Users of outdoor recreational facilities including strategic recreational footpaths, cycle routes or rights of way, whose attention may be focused on the landscape; important landscape features with physical, cultural or historic attributes; views from principal settlements; visitors to beauty spots and picnic areas.
Medium	Other footpaths; people travelling through or past the landscape on roads, train lines, boats or other transport routes, views from minor settlements.
	People engaged in outdoor sports or recreation (other than appreciation of the landscape), those whose attention may be focused on their work or activity rather than the wider landscape.
Low	Views from heavily industrialised or densely built up areas.

Magnitude of Change on Visual Receptors

- 13.1.44 The magnitude of visual change arising from the Proposed Project is described as substantial, moderate, slight, or negligible/none based on the overall extent of visibility. For individual viewpoints it will depend upon:
 - distance of the viewpoint from the development;
 - duration of effect;
 - angle of view in relation to main receptor activity;
 - proportion of the field of view occupied by the development;
 - background to the development; and
 - > the extent of other built development visible, particularly vertical, elements.

Size or Scale

- 13.1.45 Judging magnitude of visual effects identified needs to take account of:
 - > The scale of change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the Proposed Project.
 - The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture.
 - The nature of the Proposed Project, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.

Geographical Extent

- 13.1.46 The geographical extent of a visual effect will vary with different viewpoints and is likely to reflect:
 - the angle of the view in relation to the main activity of the receptor;
 - the distance of the viewpoint from the Proposed Project; and
 - the extent of the area over which the changes would be visible.



Duration and Reversibility of Landscape Effects

13.1.47 The effects on the landscape will continue for the permitted life of the wind farm. Following this time period, in the absence of a renewed planning permission, the Proposed Project will be removed and the landscape reinstated with the majority of the proposed changes being fully reversible following de-commissioning.

Level and Significance of Effects

13.1.48 The significance of any identified landscape or visual effect has been assessed as major, moderate, minor or no effect. These categories have been determined by consideration of viewpoint sensitivity (combining susceptibility and value) and predicted magnitude of change (size, scale, geographical extent, duration) as described above, with the following matrix in Table 4 used as a guide to correlating sensitivity and magnitude to determine significance of effects.

Sensitivity **Magnitude of Change** Substantial Moderate Slight Negligible Moderate to Major to Moderate Major High Moderate Minor Moderate to Minor Moderate Major to Medium Minor Moderate Moderate Moderate to Minor Minor to None Low Minor Minor Minor to None Minor to None Moderate to Negligible Minor

Table13.1.4 - Significance of Effects on Landscape and Visual Receptors

- 13.1.49 This assessment has been calibrated such that the threshold of significance is major to moderate. In this assessment, moderate level effects, and those below this level are not considered to be significant. Where, for the purpose of this assessment, the landscape or visual effect has been classified as major or major/moderate, this is considered to be a significant effect in terms of the Guidance for the Assessment of Environmental Effects, 2021. It is recognised that in some landscape and visual assessment methodologies a moderate level may be considered to be significant, but this is due to assessors calibrating their scale of effects differently, rather than because the threshold has been set high here. Essentially in an assessment where moderate is considered significant, the level of effect will be broadly similar to that which is described as major/moderate here. The Guidelines for Landscape and Visual Impact Assessment require that each assessor develops and explains their methodology but do not set out a prescriptive approach. Variation between assessors is therefore common. It should be noted that effects are not always adverse and may also be beneficial, however this chapter assumes that the effect is adverse unless otherwise stated.
- 13.1.50 The table is not used as a prescriptive tool, and the methodology and analysis of potential effects at any particular location must make allowance for the exercise of professional judgement. Thus, in some instances, a particular parameter may be considered as having a determining effect on the analysis.



Supporting Graphics

Approach

13.1.51 The LVIA is supported by a range of figures including viewpoint photography. These have been prepared in adherence to the principles presented in the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Assessment, 3rd Edition 2013), the Landscape Institute's Advice Note Technical Guidance Note 06/19 Visualisation of Development Proposals, and the Visual Representation of Windfarms: Guidance, Version 2.2, NatureScot, 2017.

Photography

- 13.1.52 All photography was undertaken through the use of a full frame digital Single Lens Reflex (dSLR) (Canon EOS 5d) camera mounted with a 50 millimetre (mm) 'fixed' lens (Canon EF 50mm f/1.4 USM). The camera was mounted on a tripod with a panoramic head in order to obtain a stable platform for the single frame and panoramic views. The position of the tripod was recorded with a handheld GPS device. In addition to recording the location of the viewpoint, observations with regard to time of day, weather, cloud cover, and visibility were recorded.
- 13.1.53 Following completion of the fieldwork, the photography was reviewed, and the clearest images selected for the production of panoramic images. In some cases, small adjustments are made to the images through the use of Adobe Photoshop/CS3 software in order to improve clarity.
- 13.1.54 The panoramas were then prepared through the joining of two or more images (typically three) in Photoshop.

Visualisations

- 13.1.55 The visualisations supporting the LVIA have been presented in order to provide a view of the Proposed Project within its landscape context and assist the assessor in determining the change and resultant effect on the viewpoint location.
- 13.1.56 The photomontages have been prepared through the use of Adobe Photoshop and Resoft Windfarm software. Use of Windfarm allows the Proposed Project to be accurately positioned in the photograph/panorama and rendered so as to account for cloud cover, sun position and colour of the Proposed Project. While every effort is undertaken to render the Proposed Project to account for the prevailing lighting conditions, where the Proposed Project may appear indistinct to the background, manipulation of the rendering of the Proposed Project has been applied in order to make the Proposed Project appear more distinct.
- 13.1.57 The presentation of graphics material requires careful consideration in order to prepare a visualisation that provides an accurately scaled depiction of the Proposed Project for use at the viewpoint location. In this instance, where a photomontage has been prepared for a viewpoint, the photomontage has been presented at A3 height and A1 width. These comprise:
 - 1) Baseline panorama and matching photomontage. A panorama, using an angle of view of 90°, illustrating the existing view presented alongside an identically sized matching photomontage. The size of the image and matching wireframe is 820mm by 130mm, with a 90° horizontal field of view and a 14.2° vertical field of view. To accommodate the required field of view the image is presented as a cylindrical projection. This format shows the wider landscape context within which the Proposed Project will sit and allows direct comparison of the changes to be made in addition to providing a useful aid memoire. The recommended viewing distance for these visualisations is at a comfortable arm's length, as set out on the visualisation figure.
- 13.1.58 In views where a photomontage has not been prepared, a wireframe view has been submitted. As with the photomontages, the Proposed Project has been accurately positioned and the wireframe outputted so as to match the field of view to the panorama/photograph.



13.1.59 It should be noted that the LVIA has not been solely conducted on the visualisations presented within the ES but has included analysis of a range of wireframe views and other visualisations in addition to review of computer modelling of the site in addition to other materials not presented in this assessment.

Visibility Mapping

- 13.1.60 The visibility mapping or Zones of Theoretical Visibility (ZTVs) maps have been prepared through the use of Resoft's Windfarm computer software. The ZTV uses the Ordnance Survey's OS Terrain 5 digital terrain data which provides a representation of the bare-earth ground surface, in combination with a model of the tidal device. The terrain model does not account for areas of tall vegetation and buildings which may in actuality screen the development, and in this regard, the model may overstate visibility of the Proposed Project.
- 13.1.61 When calculating the extent of visibility, the software accounts for earth curvature and atmospheric refraction and provides the results in bands of colour. These are set to be clearly recognisable and distinct.
- 13.1.62 View height is also factored into the calculation, for the purposes of this assessment; the view height has been set at 1.5 m above ground level.
- 13.1.63 While the ZTV provides a useful indication of where visibility of the Proposed Project might be experienced, it should be noted that a very small portion of the Proposed Project model used in the modelling may give rise to the indication of visibility, i.e. visibility to a small component of the Proposed Project might indicate greater visibility. In some instances, it may be useful to confirm the nature of visibility with wireframe views as part of the analysis of the visibility mapping.





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Appendix 13.2 Landscape Character Areas within the EZI



Appendix 13.2 Landscape Character Types within the 15 km Environmental Zone of Influence

Introduction

- 13.1.1 Using accepted, systematic methods of landscape character assessment, the surrounding landscape has been subdivided into different landscape character types, each with a distinctive character based upon local patterns of geology, land form, land use, cultural and ecological features. These provide baseline information which can be used to guide landscape change and provide a baseline against which to make judgements on the likely effects of the Proposed Project upon landscape character.
- 13.1.2 Within the 15 km Environmental Zone of Influence (EZI), the relevant landscape character assessment is the NatureScot web-based dataset, the 2019 Landscape Character Type map and associated Landscape Character Type Descriptions.
- 13.1.3 This dataset provides an assessment of the landscape character of the area, and considers the likely pressures and opportunities for change in the landscape. The Landscape Character Types (LCTs) which fall within the 15 km radius EZI are illustrated in Figure 13.1.3 and listed below:
 - > 349. Major Uplands
 - 350. Peatland and Moorland
 - 352. Inland Valleys
 - 353. Farmed and Settled Lowlands and Coast
 - 354. Farmed and Settled Voes and Sounds
 - > 355. Coastal Edge

Landscape Character Area Descriptions

- 13.1.4 This section describes Landscape Character Areas that coincide with the 15 km radius study area. The descriptions and the assessment of sensitivity of the Landscape Character Areas form the baseline to the assessment of effects on Landscape Character.
- 13.1.5 There are six LCAs within the detailed EZI all of which would potentially be affected to some degree by the Development, as identified through analysis of the ZTV plans. The launch site is situated within the 'Coastal Edge' LCA, the section of new link road spans the Major Uplands and Farmed and Settled Voes and Sounds LCA, and the Launch/Range Control Building is located within the Farmed and Settled Voes and Sounds LCA.

Table 1 – Major Uplands

Key Characteristics

The Shetland Islands are generally low-lying, such that distinct areas of high land are more prominent. The landcover is dominated by peatland and heather moorland peaty mires.

- Rounded hills, occurring either in series connected by high level rounded ridges along a linear band, or as isolated single hills or hill groups.
- Often steep slopes at the coast, or cliff edges with dramatic natural coastal landforms.



Key Characteristics

- Mainly simple landcover of peat bog and heather moorland grading to rough grassland on some lower slopes, contrasting with the ordered fields of adjoining lowlands and the intricate coastline.
- Hill grazing and low-key peat cutting.
- Mainly uninhabited and often difficult to access on foot or by road, with roads mainly absent on higher land.
- In some areas tracks ascend to hillside or hilltop features such as masts, wind turbines, isolated farms and peat cuttings.
- Exposed high land with panoramic views, forming landmark features which themselves are often visible for miles.
- Relatively expansive, although scale is difficult to discern and reduced by the presence of manmade structures.
- A sense of remoteness and wild character in places.

Landscape Charac	Landscape Character Description	
Landform	Major Uplands consist of the highest land in Shetland which forms the main physical structure of the islands. They occur in long bands aligned with the main north-south fault lines. Here the metamorphic bedrock has been sliced into north-south strips by fault movements. Along these tracts a series of rounded hills, connected by high land or rounded ridges, rises up to 208 metres above sea level, above surrounding lower land. On Unst, the high points of Hermaness Hill and Saxa Vord provide important landmark features signalling the northernmost point of the Shetland Isles.	
Landcover	The main superficial deposits of the hills are boulder clay and other glacial deposits, and peat. The poor, peaty and often waterlogged soils give rise to landcover dominated by heather moorland and bog with occasional lochans. Rough grassland tends to occur on lower slopes in some areas and the coastal areas of Unst support maritime grasslands. Hermaness and Saxa Vord are both significant in respect of their colonies of sea birds and natural vegetation. Unimproved, unenclosed rough hill grazing is the main land-use, along with peat cutting. The lower margins of this type include inbye crofting land. Military uses occupy the strategic location at Saxa Vord in the north.	
Settlement	This Landscape Character Type is mainly uninhabited. The often-uneven ground of tussocky grass, bogs and peat hags is a barrier to foot access. Small crofting settlements sometimes occur on the edges of this type at low levels. Roads tend to skirt the hill land, following more amendable routes in adjoining valleys and farmed areas, crossing the type only where there is no alternative to passing over highland. Several masts and aerials are sited on these hills as the high land provides ideal locations with line of sight to many settlements and the islands' road network. Several of these structures have been abandoned and left standing. The RAF radar dome and aerials at Saxa Vord forms a distinctive landmark. "Vord" is an Old Norse word for a heap of stones, or cairn, which is often associated with watch towers or convenient lookout points on hills.	



Key Characteristics	
	Evidence of previous occupation includes cairns and abandoned military sites of prehistoric and historic dates. There is evidence of prehistoric settlement and land use in these areas. On Unst, the uplands have significant folkloric associations including stories relating to trows, creatures of Norse folklore,) and to two giants (Herman and Saxi).
Perception	The uniform texture and colour across most of these landscapes is apparent when viewed from a distance. The scattering of road and track scars, peat cuttings and quarries introduce detailed features and breaks up the expanse of moorland, reducing the sense of naturalness. Where many of these features occur together in one area, this results in a haphazard and jumbled appearance which undermines the simplicity of the landcover and landform. Hill tracks and roads usually present a functional appearance - they can be seen directly to connect with the point of destination and their reason for being built.
	These upland landscapes are exposed to the full force of Atlantic weather. They are relatively expansive, with sweeping slopes and hills, the sense of scale being enhanced by the contrast with adjoining farmed landscapes. The peatland, lochans and erosion scars provide a subtle interplay of texture, with muted colours. This contrasts with the more rich and varied colours and textures of ordered, green pastures of the lowlands and the intricate, coastline of voes and sounds and islands. The apparent scale of the landscape is sometimes difficult to discern due to the moorland vegetation with little diversity in colour or texture. Occasional manmade structures introduce an element of scale, and often make the hills appear smaller and less extensive.
	Wild character is reduced in the vicinity of manmade structures, particularly where these occur in clusters as they are often very prominent in the open moorland landscape.
Overall sensitivity to the Proposed Project	The landscape is large scale, with a generally simple skyline. The existing infrastructure visible at Saxa vord is a landmark feature in local views. Given the presence of existing development it has an overall High to Moderate sensitivity to the Proposed Project.

Table 2 – Peatland and Moorland

Key Characteristics

The Peatland and Moorland Landscape Character Type on Shetland consist of lower-lying undulating ground dominated by low moorland vegetation, usually forming a backdrop to farmed and settled coasts.

- Broadly undulating moorlands with occasional small hills, some areas with smaller scale undulations.
- Expanses of smooth or hummocky heather moorland and boggy heather grassland.
- > Stony, rough textured heathland communities Unst and Fetlar.



- Rough, mainly unenclosed hill grazing.
- Mainly uninhabited, with few roads and man-made structures.
- Many visible archaeological relics indicating stages in historic land use.
- Prominent, linear stone dykes in places.
- Simple composition forms a contrasting backdrop to farmed lowlands, often marked by an abrupt boundary at the hill dyke.
- High land provides vantage points for views.
- Wild character in larger, remote areas.

Landscape Character Description

Landform

The areas of Peatland and Moorland on Shetland rise gently from the farmed coastal lowlands to between 20 and 150 metres above sea level. The location, geology and landform of this type vary, resulting in subtle differences in character. Peatland and Moorland occurs on a variety of sedimentary, metamorphic and igneous bedrock. The landform is mainly of low relief with gentle slopes, with local variation in the scale of undulations and surface texture. In the east of the northern islands the serpentine bedrock has an upper layer of shattered rock and glacial drift creating a broadly undulating landform. Small areas of standing water, rock, boulders and hummocky heather form a rough textured surface. Here, the drainage pattern radiates outwards from higher land in a relatively simple pattern. The landform tends to be of low, gently rounded hills, or hummocky with small scale undulations.

Landcover

Landcover is mainly heather moorland and grassland on peaty soils, varying in species composition according to the underlying substrate and local conditions. On Unst glacial deposits are more widespread and the underlying serpentine rocks are usually free of peat and give rise to a stony surface and base-rich soils which support an unusual hummocky heathland vegetation cover with grasslands. The features of this landscape are clearly exhibited at Keen of Hamar on Unst, where the surface is sorted into stone stripes, and thinner soils on lower slopes support rare heathland flower communities.

Land use consists mainly of rough grazing on hill land. Although this type usually lacks fences and recent stone walls, long drystane (dry stone) dykes are significant features on Unst, providing strong linear patterns across the natural landform. Mostly non-commercial peat cutting occurs on the edges of this type close to the surrounding crofts and settlements.

Settlement

These areas are mainly uninhabited. Roads and tracks are largely absent, and where present they are routed purposely through the landscape to connect coastal settlements which are separated by the moorland. Other manmade structures are limited to electricity poles and occasional communications masts and beacons. Several wind turbines are present, with more proposed, adding further built structures in this landscape.

The archaeology of these areas is mostly evident on the lower margins and consists of many abandoned and ruined structures such as crofts and planticrubs (traditional small stone enclosures for growing young plants, usually kale), earlier farms and enclosures, and several horizontal water mills, as well as prehistoric burnt mounds.



Perception	The low-relief landform and unvarying landcover in many areas of this type results in a relatively simple composition. In this subtle landscape of mainly muted colours, interest is provided by the small-scale diversity in texture provided by exposed rock. In some parts of Unst and Fetlar the texture is dominated by fractured stones and the special plant communities here create a distinct colour and texture. These moorlands usually form a simple, expansive back drop and contrast to the adjoining enclosed lowland pastures and cultivated fields. The boundary between these two landscape types is often abrupt, along the hill dyke, and emphasises the differences in scale, texture and colour. The more remote parts of this type have wild character due to the general lack of habitation and man-made structures, and their relative isolation from main settlements.
Overall sensitivity to the Proposed Project	This landscape includes areas of varied scale with a generally undulating landform and occasional man-made features. The smooth, convex land cover with a lack of structures, undifferentiated landcover and wide horizons lends a moderate to high sensitivity to the Proposed Project.

Table 3 - Inland Valleys

Key Characteristics

The Inland Valleys Landscape Character Type on Shetland consists of low lying, narrow channels cutting through Major Uplands, and often aligned with fault lines.

- Long, narrow channels cut through major uplands, mainly located inland and often associated with the erosion of fault lines.
- Relatively level valley floors and steep mid-slopes rising to concave upper slopes
- Fertile soils in lower, accessible areas with enclosed fields, contrasting with upper moorland slopes, the boundary usually abruptly delineated at the inbye/outbye boundary.
- Settled in accessible, lower areas with farms and crofts and connected by roads following the line of the valley.
- Abundant archaeological remains visible in the low ground cover.
- Enclosed views along the valley and up to skylines, occasionally opening to the sea and adjoining coastal farmland.
- Inland and enclosed larger valleys with few sea views.

Landscape Character Description Inland Valleys on Shetland consist of low-lying, narrow channels running between major uplands. The landform is mainly the result of erosion by ancient water courses. The valley and enclosing landforms are usually large scale and well defined. The slopes tend to be concave falling to convex and are relatively steep at the midpoint, particularly if within a major fault line. Valley floors are relatively flat or broadly undulating, and rise gently to



	merge with side slopes. In places there is an abrupt change of slope where the level valley floor surface meets the thrust of the side slope, for example on Unst. Drainage patterns consist of small tributary burns descending perpendicular to the side slopes into a central burn running the length of the valley, occasionally collecting in linear lochs and small lochans. Burns are often straightened in agricultural land.
Landcover	The valleys contain boulder clay drifts and alluvium, and peat deposits occur on slopes. The low-lying, sheltered areas with fertile soils support a landcover of mainly improved grass land, with rough grassland and heather moorland on higher ground. The valleys are dominated by extensive peat deposits and moorland vegetation. These areas are often associated with patches of standing water, eroded and exposed peat, peat slides, small inland lochs and wetlands. Here, the areas which have been improved to grassland contrast sharply with the surrounding moorland vegetation. The land use is mainly farming and clusters of crofts located in lower, sheltered and accessible areas. Domestic peat cutting occurs at lower levels near settlements. Hill land of rough grazing tends to dominate the larger.
	near settlements. Hill land of rough grazing tends to dominate the larger areas of this Landscape Character Type.
Settlement	The drier, lower land is settled with occasional farms and crofting settlements. Fields are mainly geometric pastures of different sizes which extend up the slopes of the valley. Individual fields are often difficult to discern due to the widespread use of stock proof fencing and the equal grazing levels across adjoining pastures. The inbye boundary is clearly defined by changes in grazing pressure and is sometimes bounded by a stone dyke.
	These long-settled, fertile areas contain many archaeological sites, including cairns and mounds, the ruins of townships and farmsteads, enclosures, planticrubs (traditional small stone enclosures for growing young plants, usually kale) and horizontal mills. At Petester there is an extensive and complex field system, of roughly rectangular enclosures and terraces.
Perception	There is often great diversity in colour and texture provided by the combination of improved land, heathland, rough grassland and water bodies. The muted colours and simple landcover of moorland contrast with the ordered landscape of crofting, emphasising the differences in intensity of land use between inbye and outbye land.
	These valleys are unusual in Shetland, being a mainly inland landscape with few views of the sea. Views are contained by the adjoining uplands and channelled along the valley or drawn up to nearby skylines. In a few areas, views extend to adjoining coastal farmland and to the sea. The more remote areas of this Landscape Character Type have a sense of isolation,



	enhanced by the simple moorland landscapes and the sense of historical time depth from the ruins of earlier occupation.
Overall sensitivity to the Proposed Project	This landscape is of a medium scale with a concave landform and simple predictable skylines. The relative absence of settlement lends this area a moderate sensitivity to the Proposed Project.

Table 4 - Farmed and Settled Lowlands and Coast

Key Characteristics

Much of Shetland's farmland lies in a narrow strip between the uplands and the coast. The Character Type is located in exposed parts of this strip. These landscapes are dominated by rough grassland and pasture resulting from long established crofting.

- Mainly narrow tracts of low lying, gently sloping or undulating landform adjoining the sea, with some areas of flat coastal plain and occasional small rounded hillocks.
- Natural and varied coastal edge with indented, low coastal cliffs and occasional beaches and bays.
- A variable patchwork of landcover mainly consisting of rough grassland, mixed with pastures, arable fields, heather and machair, occasional wetlands, beaches and dunes.
- > Predominantly farmed and settled with a high proportion of traditional croft land.
- A varying pattern of fields, crofts and farms according to location, landform, productivity, agricultural practices and the character of settlement and farm buildings.
- Many archaeological sites and historic buildings providing visible evidence of the history of settlement since prehistoric times.
- The field and settlement patterns from human intervention in some traditional crofting areas, enhanced by the contrasting coastal and upland setting.
- Open, windswept landscapes with little shelter and constant views of the coastline, and across voes and sounds to other land.

Landform The Farmed and Settled Lowland and Coast - Shetland Landscape Character Type occurs as many mainly narrow tracts of productive land, usually adjacent to the coast, generally consisting of low-lying land, usually under 50 metres above sea level, with a gently sloping or undulating landform, and some areas of flat coastal plain. Occasional very small, rounded hillocks rise to around 90 metres above sea level. The coastal edge consists mainly of low, deeply indented, rocky cliffs and headlands, with occasional sandy or pebbly bays. Variations in this Landscape Character Type reflect subtle differences in landform, landcover and land use. The productivity, management and



	agricultural practices undertaken, the character and pattern of settlement, the artefacts of past and present agricultural practices all strongly influence character. Subtle landform variations interact with a number of other factors to influence character. Larger areas of flat land are often associated with the good calcareous soils, greener pastures and larger more intensively farmed fields with an open character, close to broader bays. The presence of occasional low hills tends to be linked to heather moorland, and this higher ground provides a measure of enclosure and allows for elevated views. The shape of the coastal edge may be abrupt, rocky and exposed, as along the indented low cliffs, or gently sloping flat and relatively sheltered next to inlets and beaches.
Landcover	These landscapes occur on a variety of soils, derived from blown sand, peat, and glacial drift materials. The sloping land assists with surface water drainage, and areas of peat bog are relatively uncommon except in lowland basins. The nature of the vegetative cover varies according to the relative productivity of the land, its underlying geology and soils, and the management practices undertaken. Trees and woodlands are absent from these exposed landscapes. Rough pasture is the dominant landcover overall, which is mixed with varying amounts of arable land, improved grassland, maritime grassland, and occasionally machair in more productive areas, and heather moorland on less productive land, usually associated with higher elevations. At the coast natural features include sand dunes, slacks and marshland. This mix of vegetation cover occurs as an integrated patchwork within each tract. Differences in the proportion and balance of vegetation types between tracts lead to variation of character.
Settlement	These areas have generally been farmed and settled for a long period and their character is a result of successive settlement and land use in the same area. Agriculture is the main land use consisting predominantly of grazing and small areas of arable land, mainly under a crofting system. Crofted lands vary from broad areas of well-managed traditional fields of good quality grazing on fertile ground, to more exposed, narrow and marginal areas of abandoned fields and degraded heather moorland. These areas are some of the most settled rural landscapes in Shetland. The balance between settlement and farmland, and the style and pattern of development, vary. Overall, settlement patterns are mainly sparsely scattered individual crofts and dwellings, crofting townships and occasional small nucleated settlements. In more intensively farmed areas small, distinct, nucleated settlements occur on elevated ground, avoiding the best growing land, and include larger farms with associated large agricultural buildings.



	This landscape character type has been densely occupied for thousands of years, and typically has visible sites and buildings of all periods of prehistory and history.
Perception	The overall perception of these landscapes varies according to several factors such as the level of land management and productivity, settlement pattern and new development, and the location and setting. The pattern of human intervention in some traditional crofting areas reflects the strong relationship between landform, settlement and land use, and is enhanced by the contrasting coastal and upland setting. This contrasts with areas characterised by derelict crofts, abandoned fields, and degraded moorland, and other areas of intensive use with larger scale field sizes and large scale farm buildings. Elsewhere the style and pattern of new development does not reflect the character of the landscape, and sometimes leaves fields as left over space between scattered developments.
	The variety and richness of colour and texture varies according to the level of productivity and land management. Areas of arable land and improved or maritime grassland can be particularly rich in colour contrasting strongly with areas of rough pasture or moorland and natural coastlines. Similarly, texture can vary greatly from the coarse nature of rough pasture to close cropped improved grassland or the fine texture and seasonal flowers of machair.
	Most of this Landscape Character Type consists of narrow coastal tracts which are strongly influenced by the coastline and sea.
	The coastal location of this Landscape Character Type results in a mainly open landscape and constant but ever-changing views of the coastline, and across voes and sounds to other land.
	Areas, such as coastal crofts on Unst, are characterised by the striking contrast between the ordered fields of well managed traditional grazings and the natural coastal scenery.
Overall sensitivity to the Proposed Project	This landscape is of a small scale with occasional settlements maintaining the traditional pattern of crofting settlement. There is a strong association with the coastal fringe and significant historic interest. Overall, the LCA has a medium sensitivity to development.

Table 5 – Farmed and Settled Voes and Sounds

Key Characteristics

The Farmed and Settled Voes and Sounds Landscape Character Type, dominated by pasture and rough grassland resulting from long established farming, occurs around the enclosed coastal waters.



- Narrow, low lying coastal strips of gently sloping or undulating land around enclosed waters.
- Complex, indented coastline which provides shelter.
- Mainly agricultural land use on improved and unimproved pastures with heathland, wetland and wet pastures which add variety.
- Unusual grassland and heathland on base-rich soils on Unst.
- Scarce broadleaf tree cover found in very small remnant woodland patches and recent plantations.
- Mostly traditional crofting in linear or scattered patterns, with some estates.
- > Larger settlements around harbours with historic built heritage.
- Mainly inland, minor road network with branches to beaches and harbours.
- Abundant archaeology across all periods of human settlement.
- Rural areas provide a contrasting backdrop and setting for settlements.
- Rural areas and settlements contrast with the surrounding, large scale hill land.
- Views are ever-changing due to the complex coastline and interlocking landforms.
- Remote settlements have a strong sense of isolation and tranquillity.

Landscape Character Description

Farmed and Settled Voes and Sounds are found around Shetland's enclosed and sheltered coastal waters, occurring as many, mainly narrow, coastal bands of productive land and some larger nucleated settlements. These areas are usually less than 150 metres above sea level. The low, complex coastal edge consists of many inlets with rocky headlands, low cliffs and small sandy or shingle bays.

Landform

The landform is often gently sloping towards the sea or gently undulating, with few areas of open water. Small burns usually fall directly to the coast. Flatter, wetter land is often found at the head of voes.

Boulder clay is usually found in valleys with peat deposits on higher ground. In Unst and Fetlar, magnesian gley soils are formed over serpentine rocks.

Landcover

Landcover varies according to the relative productivity of the land, the underlying geology, management practices undertaken and the degree of shelter afforded by location. The species mixes of heath and grassland cover vary according to soil types, exposure to salt spray and the degree of management, and subtly alters their colour and texture. The dominant forms of landcover are improved pastures, which highlight the location of better soils, and rough grassland. This grazed land is interspersed with patches of wetland and flush vegetation. There are some areas of arable land, and small numbers of wind-blown trees and shrubs beside some of the more sheltered voes and sounds, usually planted close to buildings.



As a result of the favourable conditions, there is a long history of successive periods of settlement and agricultural land use. Consequently, the character, pattern and extent of settlement and farming in these areas are the major factors influencing landscape character.

Settlement patterns are related to agricultural land use, which has been practised over many centuries. There is extensive evidence of medieval and post-medieval agriculture in most settled voes. Subtle differences in geology, soils and agricultural practices affect the character of rural areas. Settlement usually consists of scattered crofts and dwellings in sheltered locations, associated with an ordered landscape of improved and unimproved grazing land. Fields are usually geometric and divided by

Settlement

On Unst and Fetlar the underlying geology of serpentine rocks, magnesium rich soils, exposure to salt spray and heavy grazing produce a mosaic of herb rich heaths and sedge patches with a characteristic patchwork appearance. This remote area is relatively undeveloped and maintains a strong traditional pattern of crofting.

fencing, although this varies.

The character of the Farmed and Settled Voes and Sounds is greatly influenced by the relationship between the development and the land or sea. Harbour areas relate to the depth of sea, shape of the coastline and shelter provided by the landform. Crofted landscapes tend to be located away from the coast, except near beaches, and fields run down slope terminating abruptly at the coastal edge where there are often signs of the crofters' use of marine resources in the form of boat nousts and kelp kilns. The road network links settlements and often travels inland to avoid the indentations of the coastline, branching off to harbours and beaches. Most roads are minor and follow the slope or undulations of the land.

For many of the crofting landscapes within this Landscape Character Type there is a rational relationship between the main elements of dwellings, grazing land and landform which reflect traditional crofting practices and requirements for shelter and better soils, with a clear distinction between inbye and outbye.

Perception

In rural areas the mosaic of improved and unimproved grasslands and wetlands creates a subtle variation of colour and texture. The small-scale landscapes of traditional crofting patterns and clusters of buildings around harbours are in sharp contrast to the adjoining uninhabited expanses of rough grazing, heather moorland and natural coastal scenery. Human activity in farmed landscapes and the busy nature of settlements, particularly harbours and ferry terminals, emphasises these differences.

The indented coastline creates a strong sense of enclosure in many areas, either around a narrow voe or within a series of indented bays and headlands. The rough, natural features and organic shapes of the coastline provide a contrasting fringe to the smooth green pastures. Moving through



	this landscape there is a constant change in orientation and composition of views, as headlands overlap and interlock with voes, sounds and the open sea.
Overall sensitivity to the Proposed Project	This landscape is of a small scale with occasional settlements maintaining the traditional pattern of crofting settlement. There is a strong association with the coastal fringe and significant historic interest, lending a higher degree of sensitivity to the Proposed Project.

Table 6 - Coastal Edge

Key Characteristics

The dramatic Coastal Edge Landscape Character Type occurs in several narrow strips around the exposed, mainly rocky coastline of Shetland. It forms the edge of upland and lowland Landscape Character Types, and includes dramatic coastal features, including towering sea cliffs, stacks and natural arches.

- Narrow, indented coastal edge of rocky headlands, inlets and promontories on exposed parts of the coast.
- Mainly high to moderately high cliffs with frequent features of coastal erosion including stacks, arches, blowholes, caves and storm beaches.
- Diversity of colour and rock forms derived from the wide variety of bedrock.
- Short, colourful swards of maritime heath and grasslands on cliff tops and some sheltered cliffs, with bare, scoured rock in exposed locations.
- Undeveloped and uninhabited, and mostly inaccessible by road.
- Modern man-made structures limited to a few lighthouses and a radar station.
- Many prehistoric and wartime archaeological relics revealed in short grassy landcover.
- Diverse and dramatic coastal scenery with a variety of coastal views.
- Remote, exposed, open and highly natural landscape with wild character.

Landscape Character Description	
Landform	The Coastal Edge Landscape Character Type forms the narrow coastal edge of adjoining upland and lowland Landscape Character Types on Shetland. The height of coastline varies from high cliffs to low beaches and inlets. The majority of the coastline is of high to moderately high indented rocky headlands, with inlets and promontories, and occasional small beaches and rocky bays. The underlying bedrock consists of granites, schists and gneiss. This varied geology sits on some of the most exposed coasts of Britain, and has been eroded to form a highly fractured coastline consisting of towering sea cliffs, stacks, geos (clefts), gloups (blow holes), caves, natural arches, skerries (small rocky islands), wave scoured platforms and waterfalls. The underlying bedrock influences the height, texture and colour of exposed rock and the type of feature formed. The coastline of Burrafirth, Unst is impressive, with cliffs of ochre-coloured metamorphic rock. At Unst, the western edge of the ridge



	has cliffs and stacks terminating to the north with Hermaness Hill and out to the sloping, pointed rocks of Muckle Flugga.
Landcover	Landcover in these narrow coastal strips relates to the surrounding inland character type and varies from heather moorland to closely grazed pastures. At the coast, the soils and vegetation are influenced by sea spray, and support short swards of maritime grasslands and heath. The colourful, diverse flora includes fine grasses, Spring Squill and Sea Pink, which are protected from grazing on cliffs. Exposed cliff edges are stripped of soil and vegetation by wave action and sea spray.
Settlement	These exposed landscapes are mainly uninhabited and most of the coastline is undeveloped. Much of the coastline is inaccessible by road, except at small bays and inlets. The coastal features are popular with visitors and for scientific study, and some parts of the coastline have interpretation signs and parking facilities. Man-made structures are rare, and include wartime defences and occasional lighthouses. 20th Century defence sites include radio and radar stations at Saxa Vord, Skaw and Unst.
Perception	The diversity of coastal scenery allows for a wide variety of coastal views of distant horizons, nearby islands and shore lines. Coastal features are often best seen from opposite coastlines or promontories. The undulating land and lack of coastal roads often results in the coastal edge being hidden from view or difficult to access. Having approached through heathland or farmland, when coastal features come into view their dramatic form is surprising and invites further exploration. A few cliff top paths provide intimate views of coastal features, revealing their detailed structure and true scale. These extensive, complex coastal areas with the variety of outstanding and dramatic natural features, birds and marine life, together with the colour of maritime flora and movement of the sea combine to create a highly natural landscape. There is a strong sense of openness and exposure, and the sea is rarely calm. The sight, sound and smell of the sea, lack of man-made structures and difficulty of access create a strong wild character. Adding to this experience, the cliffs provide vantage points for observing migrating whales, passing dolphins and harbour porpoises.
Overall sensitivity to the Proposed Project	This landscape has a rugged and irregular landform made up of complex coastal features. There is an absence of settlement and modern development that lends a higher degree of sensitivity. However locally at Skaw and Lambaness the presence of disused radar and defence infrastructure it has a locally low to moderate sensitivity to the Proposed Project.



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Appendix 13.3 Coastal Character Areas within the EZI



Appendix 13.3 Coastal Character Areas within the 15km Environmental Zone of Influence

Introduction

- 13.1.1 The Shetland Coastal Character Assessment (CCA) was prepared by the NAFC Marine Centre (NAFC) in 2016 with guidance from NatureScot, as part of the development of the Shetland Island's Marine Spatial Plan.
- 13.1.2 It provides information about the various coastal character types (CCTs) found around Shetland, the experiences the coast currently offers to local people and visitors and identifies sensitivity to development.
- 13.1.3 The report identifies and maps different coastal character types, describes the key features and character of each area and identifies any areas around the coast which are considered to be sensitive to onshore and/or offshore development. The report was developed so that it relates to the Shetland Landscape Character Assessment.
- 13.1.4 The four Coastal Character Areas (CCAs) which fall within the 15 km Environmental Zone of Influence (EZI) are illustrated in Figure 13.1.3 Volume III and listed below:
 - 13. Burrafirth
 - > 16. East Unst
 - 19. Hermaness
 - > 20. Skaw

Coastal Character Area Descriptions

- 13.1.5 This section describes Coastal Character Areas that coincide with the 15km radius EZI. The descriptions and the assessment of sensitivity of the Landscape Character Areas form the baseline to the assessment of effects on Landscape Character.
- 13.1.6 There are two CCAs within the detailed EZI all which would be affected by the Proposed Project, as identified through analysis of the ZTV plans. The launch site is surrounded to the north by the within the 'Skaw' CCA, and the to the south by the 'East Unst' CCA.
- 13.1.7 A short description of each of the CCAs, taken from the Shetland Coastal Character Assessment, is provided in the baseline assessment tables below. These describe the main features, key characteristics and sensitivity of the coastal character area to the Proposed Project.

Table 13.3.1 - East Unst CCA

Key Characteristics

The East Unst Coastal Character Area runs from Lamba Ness in the north to Mu Ness in the south. There is some aquaculture in the area confined to Basta Voe. It is also a busy fishing area and shipping area. The landscape is characterised by moorland ending in cliffs and steep terrain along the coast. There are a few areas of special interest such as the Keen of Hamar.

- Large sandy bays
- Historic landscapes such as Sand Wick
- Busy shipping area
- Low levels of aquaculture



Coastal Character Description		
Coastal Experience	The East Unst CCC is an interesting area with a rich history. To the north the attractive Norwick beach is a popular area in summer. Various tourist attractions can be found around Haroldswick and Baltasound. The Keen of Hamar has an almost other worldly feel, being compared to a lunar landscape. Sand Wick is another appealing area with a large sandy beach and Muness Castle has a commanding view over the Ham of Muness.	
Overall sensitivity to the Proposed Project	Much of the East Unst CCA is devoid of modern development and many areas are important internationally. The coast is of high sensitivity to the Proposed Project.	

Table 13.3.2 – Skaw CCA

Key Characteristics

The Skaw Coastal Character Area runs from the Noup to Lamba Ness characterised by a rocky exposed coastline with small bays. The landscape is mainly heather moorland ending in cliffs.

- Cliff scenery
- Small beaches
- Most northerly house in Britain

Coastal Character Description		
Coastal Experience	The Skaw CCA is a dramatic coastline with panoramic views. It has a remote feel with the remains of the Radar Station which reflect the strategic importance of the coastline during the second world war. The beach at the Wick of Skaw is secluded, one of the only places in Shetland where the oyster plant can be found. There are dramatic views from the point of Lamba Ness looking back across Saxa Vord and the tall sea cliffs.	
Overall sensitivity to the Proposed Project	The Skaw CCA is valued for its scenic qualities. The coast is of high sensitivity to the Proposed Project.	



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Appendix 13.4 Seascape Character Areas within the EZI



Appendix 13.4 Seascape Character Areas within the 15 km Environmental Zone of Influence

Introduction

- 13.1.1 The NatureScot commissioned report 103, Commissioned Report No. 103, An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms, 2005, provides baseline information relevant to the EZI. It was prepared to assess the seascape issues with regard to offshore wind energy developments, and a request for the inclusion of seascape units from this document was made in the scoping response received from Shetland Islands Council.
- 13.1.2 The report defines seascape character around the Scottish Coastline. Seascape character is made up of physical characteristics of hinterland, coast and sea plus a range of perceptual responses to the seascape, as well as visual aspects. Seascape sensitivity is defined as 'the measure of how vulnerable or robust seascape character is to change'.
- 13.1.3 One Seascape Character Area (SCA) falls within the 15 km EZI, Seascape Area 33, Shetland. The seascape area, which is described below, includes two Seascape Types as illustrated on Figure 13.1.3 Volume III and listed below:
 - Seascape Character Type 1: Remote High Cliffs
 - Seascape Character Type 13 D: Islands, Sounds and Voes

Seascape Character Area Descriptions

- 13.1.4 This section describes the Seascape Character Area and the Seascape Types that coincide with the 15km radius EZI. The descriptions and the assessment of sensitivity of the Seascape Character Areas form the baseline to the assessment of effects on Seascape Character.
- 13.1.5 The following table sets out the main features, key characteristics and sensitivity of the Shetland Seascape Character Area to development of the type proposed. Short descriptions of the Seascape Character types are also set out below.

Table 13.4.1 - Area 33: Shetland

Key Characteristics

- indented coastline of fragmented islands, skerries, sounds and voes;
- generally low, often rocky, edge with landscape often appearing 'submerged' but with some high cliffs, over 200m, tall in places;
- voes and Sounds form sheltered narrow channels of coastal waters with open sloping hinterland of pasture, rough grazing and scattered crofting;
- views over small islands to open sea are a feature;
- > a dramatic, exposed seascape.

Coastal Character Description		
Scale and Openness	Undulating landform can often contain views and the indented nature of the coastline reduces scale. Overall scale is large however, outwith voes and sounds, due to openness of landscape and close presence of sea.	
Form	A very fragmented landform with numerous islands and deeply indented coastline of voes and headlands. Some dramatic high cliffs on exposed coasts. Landform is	



	generally simple, with smooth broadly rounded low hills and often insignificant rocky coastline and has some vertical emphasis.
Settlement	Generally, sparsely settled, with the main settlement of Lerwick on the coast. Buildings tend to be small and low. Sullom Voe Oil Terminal only large-scale industrial feature present. Aquaculture has a significant visual impact in many sheltered areas with most voes now containing some form of fish farm development.
Lighting	Very low levels of lighting due to sparse settlement although the Sullom Voe oil terminal and commercial part of Lerwick harbour are illuminated.
Modification/ Remoteness/ Sense of Naturalness	Modified to some extent by small scale farming/crofting often in narrow strip along sheltered coasts. Keen sense of remoteness on many outlying islands and unsettled coasts. Perception is of a generally undeveloped area with a strong sense of history and distinctive culture although the oil industry is also associated with Shetland.
Overall sensitivity to the Proposed Project	Development may affect the intricate land/sea relationship and views of outlying islands and the appreciation of the vertical scale of high cliffs where these are present. The perception of remoteness and wildland qualities of some coastal areas and the highly natural character of the outlying islands may also be affected by development. The coast is of high sensitivity to the Proposed Project.

Table 13.4.2 - Seascape Character Type 1: Remote High Cliffs

Physical Characteristics

High cliffs, often over 200 m tall, with occasional small sandy or stony bays at their base, contained by rocky headlands. Stacks, caves and collapsed cliffs are often features of this coastline. There is a strong contrast of line and form arising between the sheer verticality of cliffs and wide horizontal expanse of the sea.

This type usually has a high moorland, or occasionally, mountainous, hinterland where semi-natural heathland is the dominant landcover. Settlement is generally absent although occasional small villages can be found tucked in bays and inlets or extensive crofting on tops within Highland areas. Light houses can be prominent features on headlands. This type has a remote, wild character due to the absence of roads and settlement.

Access and views to the coast from the hinterland are restricted due to the cliffs. Wide elevated views are directed along the coast and out to open sea. Views of rigs or boats can be a focus within the maritime component of this type. The Northern quality of light often gives intense clarity in views.

Experiential Qualities

The Atlantic coast of Shetland coast has a particularly exposed character and are physically remote from settlement. The coast is difficult to access, and the water's edge is often blocked by impassable steep cliffs. These are exhilarating and awe-inspiring coastlines due to the great height of cliffs giving elevated and distant views and being particularly dramatic when the sea is turbulent. The noise of sea birds nesting on cliffs and waves add to the attraction and excitement of this seascape type.



Table 13.4.3 - Seascape Character Type 13D: Low, rocky island coasts - Islands, sounds and voes

Physical Characteristics

Generally low rocky coastline, rising to cliffs in places. Moorland, either rocky, 'Stepped' or boggy, tends to back a narrow sparsely settled open coastal fringe, usually some crofting and few settlements. Views of open Atlantic Ocean in the main.

This sub type comprises the farmed and settled coastal lowlands of Shetland where a deeply indented coastline creates sounds and voes with fragmented islands. This sub type generally has an insignificant low, hard coastal edge, often appearing smooth and 'submerged'. Voes and sounds form sheltered narrow channels of coastal waters with open, gently sloping hinterland of pasture, rough grazing and scattered crofting. Views over small islands to open sea are often a feature.

Experiential Qualities

These island seascapes can feel very remote due to the sparse settlement, moorland or low-key crofting hinterland and exposure to open sea. Strong sense of being on an island due to close proximity of sea often with 'all round' views and little distance from the sea.



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Appendix 13.5 Special Landscape Qualities Assessment



Appendix 13.5 Special Landscape Qualities Assessment – Shetland National Scenic Areas

Introduction

13.1.1 This appendix provides a detailed assessment of effects on the Special Landscape Qualities of the Shetland National Scenic Area. The assessment is based on emerging guidance prepared by NatureScot on assessing how special landscape qualities may be affected by development proposals.

Policy Context

- 13.1.2 National Scenic Area (NSA) is a conservation designation used in Scotland and administered by NatureScot. The designation's purpose is to identify areas of exceptional scenery and to protect them from inappropriate development. NSAs were first established in 1980, under planning legislation, by order of the Secretary of State. Part 10 of the Planning etc. (Scotland) Act 2006 gave NSAs a statutory basis. The Town and Country Planning (National Scenic Areas) (Scotland) Designation Directions 2010 then brought this into force. In December 2010, NSAs were designated under this new legislation.
- 13.1.3 Scottish Planning Policy (SPP) is a statement of Scottish Government policy on how nationally important land use planning matters should be addressed. With regard to National Designations, SPP states that:

"Development that affects a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve should only be permitted where:

the objectives of designation and the overall integrity of the area will not be compromised; or

any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance."

(paragraph 212, emphasis added).

Methodology

- 13.1.4 The assessment is based on the following draft NatureScot methodology: Working Draft 11 Guidance for Assessing the Effects on Special Landscape Qualities (November 2018), including the parameters for levels of effect.
- 13.1.5 The guidance advocates a narrative approach, to provide transparency when drawing conclusions and making judgements of effect on experiential and perceptual qualities, taking four steps as summarised in the following bullets.
 - > Step 1 The Proposal Gain as full an understanding of the proposal as possible.
 - Step 2 Define the Study Area and Scope of the Assessment identifying the area likely to be affected.
 - Step 3 The Analysis of Impacts and Effects on SLQs.
 - Step 4 Summary of Impacts on the SLQs, implications for the NSA and possible future effects on SLQs and recommendations for mitigation.
- 13.1.6 The aim of the assessment is to understand the effects of Proposed Project on the NSA's defined special landscape qualities and to determine whether these effects will compromise the overall integrity of the NSA, or undermine the objectives of designation.



Shetland NSA – identification of relevant special landscape qualities

- 13.1.7 The following text sets out the overall special landscape qualities of the Shetland NSA and those special landscape qualities identified for the relevant constituent sub units, which will be indirectly influenced by the Proposed Project.
- 13.1.8 The Shetland NSA includes seven separate small areas of coastal landscape, which have been identified as being of outstanding scenic interest. Of these, the Hermaness sub-area falls into the zone of theoretical visibility within 15km of the Proposed Project. This area, situated in the north Unst, is the focus of the assessment.
- 13.1.9 The overall special qualities of the Shetland NSA are described within The Special Qualities of the NSAs, SNH commissioned report, 2010, as:
 - "The stunning variety of the extensive coastline;
 - Coastal views both close and distant;
 - Coastal settlement and fertility within a large hinterland of unsettled moorland and coast;
 - The hidden coasts;
 - The effects and co-existence of wind and shelter;
 - > A sense of remoteness, solitude and tranquillity;
 - The notable and memorable coastal stacks, promontories and cliffs;
 - The distinctive cultural landmarks; and
 - Northern light."
- 13.1.10 Some special qualities are generic to all the identified NSA areas, whereas others are specific to sub areas within the NSA. For the Hermaness sub area of the NSA "a sense of remoteness, solitude and tranquillity" special quality is highlighted, as discussed below.

Hermaness sub area of the Shetland NSA

- 13.1.11 The Hermaness sub area of the Shetland NSA includes the following specific special qualities, which are described within the SNH report:
 - > "At Hermaness on Unst, the coastal topography varies from the 175m high cliffs at the Neap, to the sandy beach and machair at the head of the narrow Burrafirth.
 - Cultural landmarks include the western edge of the Hermaness area which contains the northerly military installations in the British Isles at Saxa Vord."
- 13.1.12 Figures 13.2.1a to 13.2.2b illustrate the extent of theoretical visibility of the Proposed Project, indicating a small area of visibility at the summit of Saxa Vord Hill over a distance of 2.5 km and partial visibility to the extended lightning masts only on Launch Pad Three from the headland to the north of Saxa Vord Hill at a distance of 4.7 km. Viewpoint 1.8, Headland to the north of Saxa Vord radar station, Figure 13.3.1.8 illustrates the very limited visibility from the headland to the north of Saxa Vord Hill, within the NSA; and Viewpoint 1.9, Hermaness Hill, Figure 13.3.19 illustrates the absence of visibility from the headland at Hermaness.

Assessment of Effects on the Shetland National Scenic Area

13.1.13 The following staged assessment follows the draft SNH guidance set out in the following document: Working Draft 11 – Guidance for Assessing the Effects on Special Landscape Qualities (November 2018).

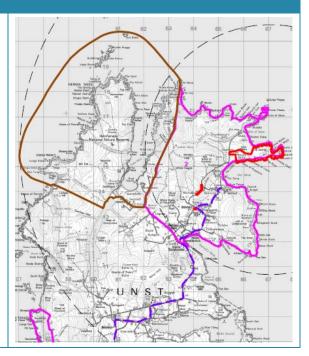


Step 1: The Proposal

Table 13.5.1 Assessment of Effects on the Shetland National Scenic Area – Step 1: The Proposal

The Proposed Project

The Proposed Project comprises three seprate components: The Launch Site between Inner Skaw and Lamba Ness peninsula to the north east of Unst; a new section of link Road at Northdale, Unst; and the conversion of the former Valhalla Brewery at Saxa Vord Resort to the Launch Control Centre. A detailed description of the Proposed Project is set out in Chapter 3:. The site is located within the north eastern part of the island of Unst. The Shetland NSA includes seven designated areas. Of these the Hermaness sub-area falls into the very edge of the zone of theoretical visibility within 2.5 km of the Proposed Project. The adjacent plan extract from Figure 13.1.2 illustrates the position of the Proposed Project and the Hermaness sub area of the NSA to the north east and the Fethaland sub unit of the NSA to the south west, denoted with the brown boundary line.



Step 2: Define the Study Area and Scope of the Assessment identifying the area likely to be affected

- 13.1.14 The following extracts from Figure 13.2.1 illustrates visibility of the Launch Site ZTV overlaid with the Hermaness NSA sub unit. Only c.200m² of the Hill summit at Saxa Vord Hill indicates visibility to the Launch Site and a similar extent of the headland to the north of Saxa Vord Hill indicates visibility to the extended lightning masts on Launch Pad Three.
- 13.1.15 The boundaries of the component landscape character units/coastal character units are indicated on these plan extracts.



Table 13.5.2 Hermaness Sub Area of the Shetland NSA: Theoretical Visibility of the Launch Site

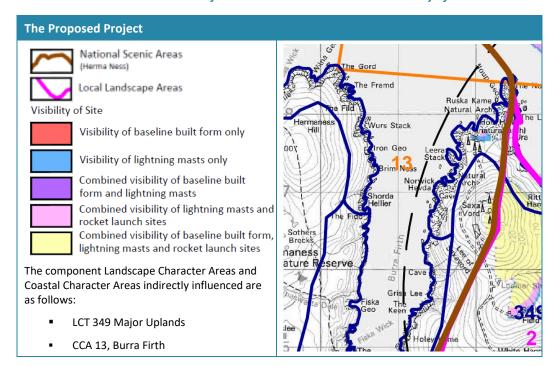


Table 13.5.3 Assessment of Effects on the Shetland National Scenic Area: how the area is used by people

How the area is used and experienced by people

Hermaness Sub Area

Crofting settlement with associated pastures lie at the head of Burra Firth. To the north east, the hill at Saxa Vord is the location of the Saxa Vord radar station, housed within distinctive spherical radar domes.

Hermaness is home to the Hermaness National Nature Reserve, a haven for thousands of populations of seabirds during the breeding season. As such the area is frequently visited by tourists and ornithologists. Hermaness Hill is also the most northerly headland of the Shetland Islands. The car parking at Burrafirth provides access to the core path network which leads to Hermaness Hill, facilitating access to the dramatic coastal scenery.

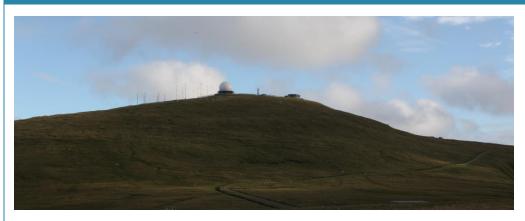
The seaward area of the NSA attracts people engaged in recreational sailing and a trip along the eastern coast of Unst can be included as part of a multi-day trip for the experienced sea kayaker in good conditions. However, fast tidal movement, tidal races, overfalls and ocean swell limit activity. There are no ferry routes passing through this area though fishing vessels, cruise ships and other shipping will pass close to the NSA.

Permanent settlement is limited to the Lighthouse Station, Upper and Lower Sotland, Sanfield and Buddabrake at the southern extent of Burrafirth. Residents of this scattered settlement will not experience views to the Proposed Project. Hermaness is a popular focus for walking and ornithology with access formalised along a route leading from Burra Firth via Winnswarta Dale to the north west coastline at Humlataes and on to Herma Ness and Hermaness Hill.



Table 13.5.4 Hermaness Sub Unit – Typical Views

Hermaness Sub Unit



View to Saxa Vord Radar Radome and access road, grid reference 462970, 1217656



View to the headland at Virdik and the Holm of Skaw, grid reference 462970, 1217656



View towards Baltasound from Hermaness Hill, grid reference 460648, 1217592





View towards the cliffs at Tonga and to Valla Field to the south from Hermaness Hill, grid reference 460648, 1217592

Step 3: Effects on the Special Landscape Qualities

- 13.1.16 The following table sets out the special landscape qualities (SLQs) relevant to the NSA sub unit at Hermaness and considers the effect of the Proposed Project on the key characteristics and SLQs.
- 13.1.17 It should be noted that the Proposed Project is not located within the NSA and effects will be indirect, with only a visual influence, and no direct physical effects.
- 13.1.18 The Proposed Project will be experienced against a baseline which is already influenced by human activity and development, for example the existing settlement pattern and road network, the prominently sited radar facilities at Saxa Vord and the lighthouse at Muckle Flagga and the associated (former) shore station in Burrafirth.

Table 13.5.5 Assessment of Effects on the Shetland National Scenic Area – Step 3: The Assessment

Assessment of effect and risk Effects of the Proposed Project on key SLQs identified at scoping and refined during subsequent study, including detailed SLQ characteristics and SLQs descriptions / underpinning landscape characteristics Generic Special Landscape Quality: "The stunning The Proposed Project would not have had a direct variety of the extensive coastline" effect on the "stunning variety of the extensive coastline" of the NSA because the Proposed "Shetland's long, extensive coastline is highly Project is not located in the NSA, being located at varied: from fissured and fragmented hard rock coasts, to gentler formations of accumulated a distance beyond 2.5 km from the closest NSA gravels, sands, spits and bars; from remarkably boundary. steep cliffs to sloping bays; from long, sheltered The limited areas with visibility within the voes to cliffs exposed to the full fury of the Atlantic Ocean." Hermaness sub unit of the NSA include: the summit area of Saxa Vord Hill within the "The landscape is an intimate mix of sea and land. dominating influence of the Saxa Vord Radar The sea reaches far inland by way of voes, firths

Station Radome and associated infrastructure;

with a further small area of partial visibility to the

extend lightning masts only on Launch Pad Three,

from a small area of the headland to the north of

and sounds, an inland coast in marked contrast to

'oceanscapes'. Here the land reaches into the open

the dynamic outer coast of wild Atlantic

sea on many points and promontories."



Assessment of effect and risk

"This huge variety has arisen from the interaction between geology, glaciation and sea level changes, and results in the dramatic coastal scenery as encapsulated within the seven areas of the NSA." Saxa Vord Hill, seen in the context of dismantled radar equipment and broken fencing.

The influence of the Proposed Project will be well separated from the foreground intensity of the coastal experience and the special qualities of the sub areas of the NSA would not be affected.

Risk of damage / loss to SLQ:

No Change to SLQ

Generic Special Landscape Quality: "Coastal settlement and fertility within a large hinterland of unsettled moorland and coast"

"Thousands of years of human occupation has given the landscape a rich archaeological heritage, including ancient brochs and modern crofts."

"Settlement has always been constrained by the nature of the land, largely confined to strips of ground rarely out of sight of the sea. Houses are concentrated at the heads of voes or in sheltered bays, well placed to make use of the sea and coastal resources."

"The green, inbye land of the crofts and farms contrasts with the common grazings of wild, unimproved and uninhabited moorland and bog. There are also long lengths of remote and uninhabited coast."

Settlement within Hermaness sub area is set within the sheltered setting of Burra Firth. The surrounding landform prevents any inter-visibility with the Proposed Project.

Risk of damage / loss to SLQ:

No Change to SLQ

Generic Special Landscape Quality: "The hidden coasts"

"Because the land is undulating, markedly so in the western mainland, the actual brink of the coastal edge may be hidden or difficult of access. This brings an element of surprise when caves, geos and gloups are suddenly encountered, inviting further exploration." The immediate coastlines of Hermaness are predominantly inaccessible, with walking access restricted to the coastal path above the cliffs. Routes follow closely around the indented terrain, and the foreground changes constantly. The SLQ relates to the immediate coastline of the NSA and the Proposed Project would only have indirect effects on wider views and visibility is extremely limited.

Risk of damage / loss to SLQ:

No Change to SLQ

Generic Special Quality: "The effects and coexistence of wind and shelter"

"The wind appears ever-present and the absence of trees, or even shrubs, gives an open and exposed feel to much of the landscape. The frequent gales can be awe-inspiring, and in high seas fröde (sea-foam) can fleck the coastal grasslands, well-inland from the coastal edge."

"Weather, skies and light are rarely static, with continual movement of clouds, waves, sea-spray The Proposed Project would not have a significant influence on "the effects and co-existence of wind and shelter".

Risk of damage / loss to SLQ:

No Change to SLQ



Assessment of effect and risk

and grasses. The interplay of light and shade moving across the sea, the coastal grasslands or the interior moorland adds a special dynamism."

"With wind a determining force, so the presence of shelter is acutely perceived. Hence, an awareness of both wind and shelter is a particular quality of these areas. There may be the distant sound of stormy seas pounding the mouth of a bay or voe, while inland waters or a sheltered hollow remain still and calm."

Generic Special Landscape Quality: "A sense of remoteness, solitude and tranquillity"

"The feeling of being at the northern limits of the British Isles is marked. The Shetland Isles are remote in themselves, and within the archipelago there are also degrees of remoteness."

"Most of the coastline is undeveloped and natural, and long-stretches can be traversed without seeing anyone or any human influence."

"Hence solitude and tranquillity underpin much of the NSA coast, and it is easy to wander with only the seabirds for company. However, tranquillity can give way to alarm as the wind picks up, the rain begins and an Atlantic storm sets in."

"Muckle Flugga, within the Hermaness section of the NSA, is further from the Scottish/English border than Lands End." The Proposed Project would not have a direct effect on "A sense of remoteness, solitude and tranquillity". However, the presence of the Proposed Project in distant views would have an indirect effect owing to the very slight (occasional) increase presence of man-made artefacts in views.

The landscape remains very exposed, wild and dynamic and the "sense of remoteness, solitude and tranquillity" will remain intact.

Risk of damage / loss to SLQ:

Negligible, limited to indirect effects.

Generic Special Landscape Quality: "The notable and memorable coastal stacks, promontories and cliffs."

"Where open to the full fury of the Atlantic Ocean, the sea has carved impressive cliffs, forming spectacular, towering, vertical scenery, varying greatly in colour according to the complex geology."

"The coast also contains many distinctive stacks, promontories and other features that form memorable images. Within the NSA these include:"

- "Muckle Flugga with its distinctive sloping, pointed rocks"
- "The imposing cliffs of Hermaness itself, with its nesting seabirds."

The Proposed Project will not have a direct effect on "the notable and memorable coastal stacks, promontories and cliffs." as it is located in a geographically separate area.

The Proposed Project is set back from the distinctive "coastal stacks, promontories and cliffs" of the NSA and would not interrupt direct views to these features.

Risk of damage / loss to SLQ:

Negligible, limited to indirect effects.



Step 4: Summary of Effects on the SLQs

Table 13.5.6 Assessment of Effects on the Shetland National Scenic Area – Step 3: The Assessment

Assessment of effect and risk

The Proposed Project is located beyond the Shetland NSA, however, the Proposed Project has a minor indirect influence on the Hermaness sub area on north Unst.

The Proposed Project will be visible from the summit area of Saxa Vord Hill in the context of the dominating influence of the Saxa Vord Radar Radome. A further small area of visibility is recorded on the remote headland to the north of Saxa Vord Hill, across a very small area, with visibility of the extended lightning masts on Launch Pad 3 appearing a distant minor element visible in the context of coastal views, set back from foreground coastal features. Many of the SLQs relate to the physical attributes of the NSA and the experience of these from within the NSA and the Proposed Project will only affect the wider setting of the NSA. As such the Special Landscape Qualities of the Hermaness sub-unit of the Shetland NSA will not be at risk or compromised by the Proposed Project and the overall integrity and objectives of the Shetland NSA will be maintained.



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