Chapter 7

Landscape and Visual Impact Assessment

SCOTTISHPOWER RENEWABLES

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Landscape and Visual Impact Assessment

7.1 Introduction

1. This Chapter of the Hollandmey Renewable Energy Development (RED) (hereafter the' proposed Development') Environmental Impact Assessment (EIA) Report comprises the Landscape and Visual Impact Assessment (LVIA), which describes an assessment of the potential effects of the proposed Development on landscape character, views and visual amenity. The LVIA has been undertaken by Chartered Landscape Architects in RSK Environment Ltd (RSK).

2. The assessment of landscape effects considers direct or physical effects on landscape components and landscape character and effects on how the landscape is perceived. The assessment of visual effects considers the effects on views and visual amenity experienced by people in the study area. The potential cumulative landscape and visual effects arising from the addition of the proposed Development to existing and future wind energy development are also described.

3. This Chapter should be read in conjunction with the following Technical Appendices:

- **Technical Appendix 7.1: Landscape and Visual Impact Assessment Methodology**; and
- **Technical Appendix 7.2: Residential Visual Amenity Assessment (RVAA)**.

4. This Chapter is supported by Figures and Visualisations which are provided in **Volumes 3a** to **3c**:

- **Volume 3a: Map Figures to Support this Chapter**;
- **Volume 3b: NatureScot Visualisations – Viewpoints 1 to 23**; and
- **Volume 3c: The Highland Council Visualisations – Viewpoints 1 to 23**.

5. Landscape and visual aspects of site selection and design of the proposed Development are described in **Chapter 2: Site Description and Design Evolution**. Legislation and policy relevant to this Chapter is described in **Chapter 4: Renewable Energy and Planning Policy**.

7.2 Legislation, Policy and Guidance

7.2.1 Legislation

7.2.1.1 European Landscape Convention (ELC)

6. The UK is a signatory to the European Landscape Convention (ELC) which was ratified in 2006 and became binding in the UK from 1 March 2007. The ELC defines Landscape as "*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (Council of Europe, 2000)*. It further states that the ELC *"covers natural, rural, urban, and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes*."

7. The ELC requires "*landscape to be integrated into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as any other policies with possible direct or indirect impacts on landscape".*

8. There is no legislation specifically covering landscape character or visual amenity in the UK, but the spirit of the ELC is carried through in planning policy and government guidance. It provides a framework for NatureScot's (formerly Scottish Natural Heritage (SNH)[1]) policy and guidance on Scotland's landscapes.

7.2.2 National Planning Policy

9. Scotland's National Planning Framework 3, which was published in 2014 is the long-term strategy and spatial expression of the Government's long-term vision for development and investment in infrastructure. As part of this, the Scottish Planning Policy (SPP) was published in 2014 and sets out the national planning policies on the development and use of land in Scotland, including onshore windfarms. Specifically, the SPP document sets out the requirement for planning authorities to produce spatial frameworks for windfarm development that are based on the following:

- Group 1: Areas where windfarms will not be acceptable – National Parks and National Scenic Areas;
- Group 2: Areas of significant protection – nationally significant environmental assets (such as Wild Land Areas (WLA)) and community separation (2km from cities, towns and villages identified in Local Development Plans); and
- Group 3: Areas with potential for windfarm development – the resulting remaining areas after identification of Group 1 and Group 2.

10. The spatial frameworks provide the basis of the relevant local policy which is considered in **Section 7.2.3**.

7.2.3 Local Planning Policy

11. 'The Highland-wide Local Development Plan (HwLDP)' (2012) Policy 67: Renewable energy Development in relation to wind energy indicates that proposals will be supported if:

"they are located, sited and designed such that they will not be significantly detrimental overall, either individually or cumulatively with other developments … having regard in particular to any significant effects on the following:
- *natural, built and cultural heritage features; …*
- *visual impact and impact on the landscape character of the surrounding area (the design and location of the proposal should reflect the scale and character of the landscape and seek to minimise landscape and visual impact, subject to any other considerations);*
- *amenity at sensitive locations, including residential properties, work places and recognised visitor sites (in or outwith a settlement boundary);…"*

12. This policy is supported by Supplementary Guidance (SG) which is considered below. A key policy in relation to landscape and visual matters is:

13. Policy 61 Landscape: "*New developments should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue. The Council would wish to encourage those undertaking development to include measures to enhance the landscape characteristics of the area. This will apply particularly where the condition of the landscape characteristics has deteriorated to such an extent that there has been a loss of landscape quality or distinctive sense of place. In the assessment of new developments, the Council will take account of Landscape Character Assessments, Landscape Capacity Studies and its supplementary guidance on Siting and Design and Sustainable Design, together with any other relevant design guidance."*

14. The Local Plan identifies Special Landscape Areas, though there is no specific policy relating to these. The supporting text to Policy 61 notes that: "*Within these areas it will be particularly important for landscape change to relate to the key characteristics and special qualities of the designated area."*

7.2.4 Supplementary Guidance

15. The Highland Onshore Wind Energy SG was adopted in November 2016. It is based on SPP criteria and identifies the site as being and mix of Group 2: Areas of significant protection and Group 3: Areas with potential for windfarm development – this is

[1] SNH were renamed to NatureScot on 24 August 2020

assumed to be based on non-landscape criteria as the site is not within a WLA or Garden and Designed Landscape (GDL) designation, or within 2 km of a larger settlement.

16. The Site is included within the Caithness Strategic Capacity Study provided as addendum 2B to the SG, dated December 2017. This study sets out specific matters to be considered in relation to potential landscape and visual receptors, based on the host landscape types. This guidance is considered further in **Sections 7.5** to **7.9**.

7.3 Consultation

17. A direct scoping exercise was undertaken because a prior pre-application consultation exercise was completed in 2019 (**Technical Appendix 6.2: Pre-Application Advice 2019, Chapter 6: Scoping and Consultation**) in relation to the potential for a RED at Hollandmey The advice received as part of that process covered a lot of the information that would typically be contained in a formal scoping direction and was being taken into account when preparing the Project Factsheet and EIA Topic Information Sheets provided to consultees. The EIA Topic Information Sheets were produced by technical specialists and outlined the proposed methodology and approach for assessing effects.

18. A request for a Scoping Opinion was submitted directly to consultees and to the Scottish Government Energy Consents Unit (ECU) in July 2020. Consultee responses came directly to RSK from each consultee. Key information provided by consultees and the way in which the LVIA has responded is listed in **Table 7.2**.

Table 7.2: Key consultation overview

Consultee name	Consultee comments	Consultant comments / action
NatureScot scoping response dated 26 August 2020	We note that a wild land assessment has been scoped out due to the distance of the WLA from the proposed site. Impacts may be possible at distances greater than 20 km and we therefore advise on screening in a wild land assessment and we can provide further advice once we receive a ZTV.	Consultant emailed screening note to NatureScot on 27 August 2020 with a map of WLA overlaid with a tip height ZTV. NatureScot responded on 16 September 2020 to say they do not expect there to be significant effects arising on the qualities of WLAs and would not expect a wild land assessment. Should the turbines require lighting NatureScot requested that they be consulted regarding potential significant night-time effects.
NatureScot scoping response dated 26 August 2020	If the turbines are likely to require aviation lighting then we would be happy to discuss the scope of this assessment further with you.	Consultant liaised with the aviation technical specialist working on the project to discuss the requirement for lighting. It was concluded that the turbines would not require aviation obstacle lighting and any lighting required would use infra-red wavelength lighting that is not visible to the human eye.
NatureScot scoping response dated 26 August 2020	We note that this proposal may have potentially significant effects on North Hoy and West Mainland NSA. We advise that that a Special Landscape Qualities (SLQ) assessment for the NSA should be screened in and we can advise further once we see a ZTV.	Consultant emailed screening note to NatureScot on 27 August 2020 with a map of NSA overlaid with a tip height ZTV. Consultant emailed NatureScot with a wireline of a proposed viewpoint in the North Hoy and West Mainland NSA (Viewpoint 1, **Figure 7.14**) which would be used without a photograph for assessing potential effects on the NSA.
		NatureScot responded on 16 September 2020 agreeing that a full photomontage would not be required. An SLQ assessment has been undertaken in the LVIA.
THC scoping response dated 17 September 2020	The visual impact assessment must use images taken using a 35 mm format full frame sensor camera.	A 35 mm format full frame sensor camera was used.
THC scoping response dated 17 September 2020	Single frame images showing focal lengths of 50 mm and 75 mm must be included.	**Volumes 3b** and **3c** show images with equivalent focal length of 50 mm and 75 mm as per THC guidance.
THC scoping response dated 17 September 2020	Photomontages should follow the Council's Visualisation Standards.	The photomontages shown in the LVIA follow the Council's guidance and NatureScot guidance.
THC scoping response dated 17 September 2020	The assessment should include the impact of borrow pits, access tracks and all elements of the development.	The LVIA assesses the impact of the proposed Development which includes all components including access tracks, borrow pits etc.
THC scoping response dated 17 September 2020	The cumulative assessment study area should be 45 km and a minimum of 35 km.	The cumulative assessment includes windfarms within a 45 km study area with a focus on those sites within 30 km
THC scoping response dated 17 September 2020	Consultation with ECU to identify sites at scoping stage.	No sites at scoping identified.
THC scoping response dated 17 September 2020	Viewpoints must be agreed with THC in advance of preparing any visualisations.	Consultant emailed a ZTV showing viewpoint locations to the Council on 26 August 2020 and reached agreement regarding viewpoints on 16 September 2020.
THC scoping response dated 17 September 2020	The Council requested two additional viewpoints: one on the Far North Railway Line between Altnabreac Station and Olgrinmore and one on the A836 between Thurso and Dunnet to the east of Castletown.	The LVIA has included visualisations from these two viewpoints.
THC scoping response dated 17 September 2020	All core paths should be assessed, the National Cycle Route (NCN), long distance trails and the NC500 should also be assessed.	The LVIA assesses core paths within 5 km of the proposed Development. NCN route 1 (NCN1) is assessed. The NC500 is assessed where it passes through the study area. There are no long distance trails in the study area.
THC scoping response dated 17 September 2020	The Applicant should present images for presentation in the Council's Panoramic Digital Viewer.	Images have been provided to comply with the Council's Panoramic Digital Viewer.
THC scoping response dated 17 September 2020	The LVIA should use the NatureScot 2019 landscape character assessment.	The LVIA uses the NatureScot 2019 landscape character assessment.
THC scoping response dated 17 September 2020	All potentially affected WLAs should be assessed.	WLAs are scoped out of the LVIA in agreement with NatureScot.

Consultee name	Consultee comments	Consultant comments / action
THC scoping response dated 17 September 2020	The impacts on SLA should be assessed.	The LVIA assesses the impacts on those SLA likely to be affected by the proposed Development.
THC scoping response dated 17 September 2020	The LVIA should include an assessment of the proposed Development against the criteria included in the Council's OWESG.	The LVIA includes an assessment against the criteria in the Council's OWESG.
THC scoping response dated 17 September 2020	Residential visual amenity should be assessed in the LVIA.	An assessment of effects on residential visual amenity is included in **Technical Appendix 7.2**.
Orkney Islands Council (OIC) consultation response dated 17 September 2020.	OIC agreed that Viewpoint 1 North Hoy and West Mainland NSA and Viewpoint 2 Burwick, South Ronaldsay would be suitable as would Viewpoint 3 Gills Bay Ferry. OIC advised that an application for a windfarm on Hoy with turbines of a similar height to the proposed Development would be submitted within the week.	Viewpoints 1, 2 and 3 are included in the LVIA. Viewpoint 1 is included as a wireline only as agreed with NatureScot. The Hoy Windfarm is included in the cumulative assessment.

7.4 Assessment Method

7.4.1 The Proposed Development

20. This LVIA is based on the proposed Development layout shown on **Figure 3.1** and described in **Chapter 3: Proposed Development**. The layout is indicative and wind turbines would have a hub height of 84 m, a rotor diameter of 132 m and a tip height of up to 149.9 m. The assessment refers to the effects of other components of the proposed Development, such as Site infrastructure, which are also described in **Chapter 3: Proposed Development**.

21. The application boundary and the proposed Development are in The Highland Council (THC) administrative area.

22. The wind turbines are below 150 m in height and are therefore not required to be fitted with visible aviation obstacle lighting as advised in CAA Policy and Guidelines on Wind Turbines. The scoping response from the Ministry of Defence indicates that infrared lighting should be fitted which is not visible to the naked eye. An assessment of night-time effects is therefore not included in this LVIA.

23. As mentioned in **Chapter 2**, the wind turbine layout has been informed by a series of design workshops and consideration of a number of key constraints including peat, noise and ecology in addition to landscape and visual matters. Generation capacity of the proposed Development has also been a consideration in design.

7.4.2 Study Area

24. Guidance published by SNH (Visual Representation of Wind Farms Version 2.2, 2017) recommends that the study area for wind turbines up to 150 m in height should be defined based on Zone of Theoretical Visibility (ZTV) mapping out to 45 km from the outer most wind turbine in the proposed Development. A preliminary study area of 45 km from the outermost wind turbines was used in this LVIA as the wind turbines, at 149.9 m in height are at the upper end of the scale recommended by SNH guidance. A smaller study area of 30 km from the outer most turbines is also shown and it is in this area that the LVIA has been focused, while still considering potential effects out to 45 km, as it is within a 30 km radius where effects of higher magnitude and potentially significant effects are more likely to occur.

25. Mapping of landscape character, landscape designations and wild land is focussed on the 30 km area. Viewpoints and visual receptors are shown in this area. Viewpoint locations have been agreed with consultees as described in **Table 7.2: Key consultation overview**.

7.4.3 Desk Study

26. A desk study of the Site and study area was undertaken to identify landscape and visual resources that have been analysed in further detail in the LVIA. The desk study has used publicly available information sources to inform an understanding of landscape designations (such as National Scenic Areas (NSA) and Special Landscape Areas (SLA)), landscape character, WLA, location and activity of key visual receptors such as NCN routes, tourist routes, roads, railways and settlements.

27. Mapping of landscape and visual resources using Geographic Information Systems (GIS) provides the basis for desk-based analysis of potential visibility of the proposed Development in Resoft WindFarm software. GIS and Resoft WindFarm were used to generate ZTV maps and wirelines, both of which provide an indication of which landscape and visual receptors would potentially be affected by the proposed Development.

28. Landscape character information has been obtained from Stanton, C. (1998) Caithness and Sutherland Landscape Character Assessment., SNH Review No 103, SNH digital map-based landscape character assessment (published in 2019).

7.4.4 Field Survey

29. Field survey is an essential step in LVIA process and provides the assessor with direct experience of the landscape and views at key locations that relate to both landscape and visual receptors. The purpose of the field survey was to confirm the findings of the desk study and to identify and assesses the sensitive landscape and visual (both static and sequential routes) receptors potentially affected by the proposed Development.

30. The findings were used to identify potential constraints and opportunities that have informed the design of the proposed Development.

31. Potential viewpoint locations identified through desk-based analysis and suggested by consultees during scoping were visited. During field surveys wireline drawings of a preliminary layout of the proposed Development were used to indicate scale and distance and how it would likely be perceived in views.

32. Travel throughout the study area provided an understanding of landscape character in addition to that gained from a review of published landscape character assessments. Field survey provided an understanding of the spatial distribution of existing and proposed cumulative windfarm development relative to the Site and an indication of the potential effects of the addition of the proposed Development.

33. Photography at each agreed viewpoint was undertaken in June, August and September 2020. Additional assessment field surveys were undertaken in October and November 2020 after design freeze.

7.4.5 Assessment Method

34. The assessment method is described in detail in **Technical Appendix 7.1**. The main purpose of the LVIA is to identify and describe potential effects on landscape and visual resources arising from construction and operation of the proposed Development.

35. The assessment of effects considers the following:

- physical effects on components of the landscape e.g. woodland, trees, walls;
- effects on landscape character including landscape related designations;
- effects on views and visual amenity; and
- cumulative effects on landscape and visual resources.

36. The effects of activities occurring during construction and operation are assessed. During construction physical effects, effects on landscape character and effects on views and visual amenity would occur as a result of:

- presence and movement of construction plant;
- temporary site compounds and facilities;

- presence of construction cranes;
- excavation activities at borrow pit locations; and
- construction of onsite substation and ancillary development and infrastructure.

37. Most of the effects during construction would be temporary. There would be some permanent physical effects on landscape components resulting from removal of vegetation and changes to ground cover which would endure beyond the construction stage.

38. During operation effects would occur on landscape character, views and visual amenity as a result of:

- wind turbines and meteorological mast;
- solar array, control building, substation and battery storage; and
- access tracks and restored borrow pits.

39. Effects would be of long duration for the lifetime of the proposed Development. There is no proposal to limit the lifetime of the proposed Development and the application is for consent in perpetuity. Any effects arising from decommissioning of individual components of the proposed Development are considered to be less than the effects of constructing the whole Development. The effects of decommissioning are therefore scoped out of this LVIA.

7.4.5.1 Sensitivity of Landscape and Visual Receptors

40. Sensitivity is about the potential for the receptor to absorb change resulting from the proposed Development. It is evaluated by combining judgements about value of the receptor and it's susceptibility to the type of change resulting from the proposed Development. Sensitivity is evaluated as **'High'**, **'Medium-High'**, **'Medium'**, **'Low-Medium'** and '**Low'**.

7.4.5.2 Magnitude of Effect

41. Magnitude of effects is primarily about the scale and geographical extent of change brought about by the proposed Development in addition to duration and reversibility of the change. Visibility of the proposed Development is a key factor to consider when evaluating magnitude of effect. Distance to the proposed Development and topography are important in understanding the nature of effects. Magnitude of effect is evaluated as **'High'**, **'Medium-High'**, **'Medium'**, **'Low-Medium'**, **'Low'** and **'Negligible'**.

7.4.5.3 Cumulative Effects

42. This LVIA assesses the cumulative effects arising from the addition of the proposed Development to the cumulative baseline of operational windfarms and those under construction in the area, with those which are consented and those for which a valid planning application has been made. In other words, it is the incremental effects arising from the introduction of the proposed Development that is assessed as opposed to the collective effects of all windfarm development of which the proposed Development is one.

7.4.5.4 Significance of Effect

Significance of effect is evaluated through a combination of sensitivity of receptor and magnitude of change. The method described in **Technical Appendix 7.1** uses a narrative approach to describing significance of effects with judgements clearly and concisely explained relative to the baseline. Effects are assessed as either **'Significant'** or **'Not Significant'**. **Table 7.1: Significance of effects evaluation guide** shows how sensitivity to change and magnitude of effect combine to give a judgement of **'Significant'** or **'Not Significant'**. **Table 7.1** is not prescriptive and the LVIA method is not reliant upon it to make judgements.

Table 7.1: Significance of effects evaluation guide

		Magnitude of effect					
		High	**Medium-High**	**Medium**	**Low-Medium**	**Low**	**Negligible**
Sensitivity	**High**	Significant	Significant	Significant	Significant / Not Significant	Significant / Not Significant	Not Significant
	Medium-High	Significant	Significant	Significant / Not Significant	Significant / Not Significant	Significant / Not Significant	Not Significant
	Medium	Significant	Significant / Not Significant	Significant / Not Significant	Not Significant	Not Significant	Not Significant
	Low-Medium	Significant / Not Significant	Significant / Not Significant	Significant / Not Significant	Not Significant	Not Significant	Not Significant
	Low	Significant / Not Significant	Significant / Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

43. A **'Significant'** effect is more likely to occur where the proposed Development becomes the defining feature of the landscape or view. A **'Not Significant'** effect is more likely to occur where the defining characteristics of baseline landscape character and views endure and are not compromised by the introduction of the proposed Development.

7.4.6 Assumptions and Limitations

7.4.6.1 Zone of Theoretical Visibility

44. ZTV mapping is used in the preliminary stages of the LVIA to assist in the identification of areas of potential visibility and to assist in the identification of viewpoints. ZTV maps are also used to inform the assessment of effects in conjunction with field surveys and viewpoint analysis. It is important to understand the limitations of ZTV maps when interpreting them and using them in LVIA:

- ZTV maps are generated using a digital terrain model (DTM) which is a three dimensional (3D) computer model of the Earth's surface. The ZTV is generated based on 'line of sight' between points on the map representing the proposed Development and points on the map in the surrounding area. The DTM is 'bare Earth' i.e. the model does not include buildings, trees, woodland and other features that may interrupt or reduce the line of sight;
- A ZTV indicates areas on a map from which a part of the proposed Development is theoretically visible. It does not show how much of the proposed Development would be visible. For example, a blade tip ZTV will indicate visibility where any part of a wind turbine blade is theoretically visible which could be the entire blade length or the end of the blade tip; and
- A ZTV does not show the effect of increasing distance from the proposed Development. With increasing distance, the proposed Development occupies a smaller proportion of the view. This is apparent in the visualisations included in **Volumes 3b** and **3c** of this LVIA.

45. It is therefore important not to base judgements on ZTV maps alone. It is necessary to use field surveys and wireline viewpoints in addition to ZTV maps to inform judgements on the assessment of effects.

7.4.6.2 Visualisations

46. The LVIA is supported by two sets of visualisations comprising of baseline photography, wireline drawings and photomontages. One set has been prepared in accordance with SNH guidance (Visual Representation of Wind Farms, Version 2.2) and one set in accordance with THC guidance (Visualisation Standards for Wind Energy Development). The purpose of the visualisations is to provide an indication of what the proposed Development would look like in the landscape and in the views. The visualisations are not intended to show exactly what the proposed Development would look like after it has been constructed. SNH guidance advises of the following limitations to visualisations which should be considered when using them to assess effects or to form a judgement on a windfarm proposal:

- *"A visualisation can never show exactly what the wind farm will look like in reality due to factors such as: different lighting, weather and seasonal conditions which vary through time and the resolution of the image;*
- *The images provided give a reasonable impression of the scale of the turbines and the distance to the turbines, but can never be 100% accurate;*
- *A static image cannot convey turbine movement, or flicker or reflection from the sun on the turbine blades as they move;*
- *The viewpoints illustrated are representative of views in the area, but cannot represent visibility at all locations;*
- *To form the best impression of the impacts of the wind farm proposal these images are best viewed at the viewpoint location shown;*
- *The images must be printed at the right size to be viewed properly (260mm by 820mm);*
- *You should hold the images flat at a comfortable arm's length. If viewing these images on a wall or board at an exhibition, you should stand at arm's length from the image presented to gain the best impression."*

7.4.6.3 Distances

47. Where distances are stated in the assessment, this is to the nearest turbine, unless stated otherwise.

7.5 Baseline Conditions

7.5.1 Introduction

48. This Section describes the existing landscape and visual resource in the study area and focusses upon those aspects that have the potential to be Significantly affected by the proposed Development. The landscape and visual baseline description should be read in conjunction with **Chapter 3: Proposed Development** and **Volume 3a Map Figures** which supports the LVIA text.

49. In particular, the baseline description is informed by the components of the proposed Development and their potential to affect landscape and visual resources, the land within the Site and the ZTV mapping shown on **Figures 7.1** to **7.7**. The baseline includes operational windfarm development and windfarms under construction. The assessment of effects of the proposed Development is considered in that context.

50. The baseline description in this Section is not intended to be an exhaustive inventory of all landscape and visual resources in the study area. It provides an overview of landscape and visual resources. A more detailed description of the baseline is provided for those landscape and visual receptors for which an initial assessment indicates the potential to be significantly affected by the proposed Development.

7.5.2 Landscape Baseline Overview

7.5.2.1 The Site and Immediate Surroundings

51. The Site is located approximately 8 km south west of John o' Groats and 16 km east of Thurso in the county of Caithness as shown on **Figure 3.1**. Land at the Site rises to an altitude of approximately 79 m Above Ordnance Datum (AOD) in the north east and slopes gradually down to approximately 37 m AOD in the north west and 42 m AOD in the south west. Land use at the Site is mainly commercial conifer plantation on heather and grass moorland with improved grassland in the south east. Phillips Mains Mire Site of Special Scientific Interest (SSSI) is in the north east of the Site.

52. A number of small watercourses and drainage ditches are present at the Site including Link Burn which drains the southern and eastern parts of the Site; Burn of Ormigill and Burn of Hollandmey which drain the central part and Burn of Horsegrow which drains the northern part of the Site.

53. There are uninhabited farm buildings in the north and south east of the Site and old shielings and sheepfolds at various locations. There are constructed tracks in the northern part of the Site and a single access track into the south-eastern part.

54. Lochend Windfarm comprising of four wind turbines each 91 m in height to blade tip is adjacent to the south-western part of the Site. The land adjacent to the south-western part of the Site includes improved grassland while to the north west moorland is the dominant land cover. The Site is partly fringed by agricultural land to the north and east although moorland and forestry are the dominant land cover forming part of a continuous tract of similar land cover that extends east to the coast between Duncansby Head and Freswick bay and south to Lyth and Keiss.

55. Settlement pattern comprises townships of scattered properties such as Inkstack and Barrock to the west and Gills to the north east with linear townships such Scarfskerry, Mey and East Mey to the north. There are small groups of properties and farmsteads to the west of the Site at Syster, Lochend and Greenland; to the north at West Lodge and to the south east at Slickly. In addition, there are scattered individual properties.

7.5.2.2 Landscape Character

56. The assessment of effects on landscape considers the effects of the proposed Development on Landscape Character Type (LCT) in the study area. These are shown on **Figure 7.5: Landscape Character.**

57. SNH published its national review of LCT in 2019 which is available online The map and descriptions of LCT supersedes the Caithness and Sutherland Landscape Assessment published in 1998. LCT are areas of landscape that share common characteristics and may occur in more than one geographical area as separate 'units'. The Site is coincident mainly in a unit of LCT 134 Sweeping Moorland and Flows with a small proportion of the Site in the north coincident with LCT 143 Farmed Lowland Plain.

58. THC published Onshore Wind Energy Supplementary Guidance (OWESG) in 2016 with an Addendum in 2017. The Addendum included an assessment of the sensitivity and capacity of landscape character areas (LCA) in Caithness. The Site is in LCA CT3 the boundary of which corresponds exactly to the unit of LCT 134 Sweeping Moorland and Flows discussed above. A small proportion of the northern part of the Site is coincident with LCA CT9 which corresponds exactly with LCT 143 Farmed Lowland Plain.

59. The SNH 2019 LCT boundaries and the THC 2017 LCA boundaries are identical. This LVIA therefore refers to the SNH 2019 LCT names as those are the most up-to-date descriptions of each unit. Both the SNH and THC published information is used in conjunction with field survey work to inform the baseline and assessment of effects.

7.5.2.3 Landscape Designations

60. Landscape designations are areas of land given statutory or policy protection for reasons relating to landscape character, views and scenic quality. The following types of landscape designation are coincident with the study area and are shown on **Figure 7.6: Landscape Designations and Wild Land Areas**:

- NSA is a statutory landscape designation afforded legal protection and of national importance. The nearest NSA to the Site is North Hoy and West Mainland NSA 25 km to the north;
- GDL is a landscape designated for its national importance as a cultural heritage asset. The nearest GDL to the Site is Castle of Mey (Barrogill Castle) approximately 2 km to the north; and
- SLA is a landscape designation afforded protection through Development Plan policies and is not a statutory designation. There are four SLA coincident with the study area two of which (Dunnet Head SLA and Duncansby Head SLA) are within 10 km of the Site.

61. Landscape designations are assessed separately in this Chapter in **Section 7.7**. Viewpoints in the SLA are used to aid in the description of both the baseline and assessment of effects and visualisations are shown in **Volumes 3b and 3c** where relevant.

62. A landscape designation is one factor that indicates higher landscape value and is a consideration when evaluating sensitivity of landscape receptors including LCT and LCA.

7.5.2.4 Wild Land

63. In 2014 SNH published a map of WLAs and in 2017 published descriptions of each of the 42 WLA. WLA are not a landscape designation and are not afforded statutory protection or policy protection in Development Plans. They are areas identified for qualities of wildness, remoteness, inaccessibility and absence of human influences and many of them are coincident with NSA and local landscape designations such as SLA. WLA are shown on **Figure 7.6**. The nearest WLA to the Site is WLA41 Hoy approximately 20 km to the north with two larger WLA over 23 km to the south west.

64. Through consultation with NatureScot it was agreed that a detailed assessment of WLA would not be required due to the distance between the proposed Development and the WLA.

7.5.3 Visual Baseline Overview

65. The visual baseline overview provides an understanding of the spatial distribution of visual receptors assessed in the LVIA and whether or not they are coincident with the ZTV. It indicates where the focus of the assessment of visual effects will lie.

7.5.3.1 Settlements, Villages and Townships

66. The north east Caithness is remote in terms of its distance from large centres of population. Inverness is the nearest city at a distance of approximately 140 km. While most of Caithness is characterised by uninhabited land, north east Caithness is more settled owing to the presence of cultivable soils in the lowland plains which has allowed agriculture to become established. Larger settlements in the study area include Thurso (estimated population 7,610) 16 km to the west of the Site, Wick (7,040) 17 km to the south east, Halkirk (970) 17 km to the south west and Castletown (860) 8 km to the west. The most recent opulation estimates have been obtained from National Records of Scotland. The ZTV shown on **Figure 7.1** indicates theoretical visibility from the western part of Thurso, from the northern and southern parts of Wick, from Castletown with no visibility at Halkirk.

67. There are smaller villages and townships with populations of less than 500 that are not categorised as settlements according to the National record of Scotland (NRS). These include Barrock and Inkstack 2 km to the west of the Site, Dunnet 6 km to the north west, Gills 2 km to the north, Mey 0.5 km to the north of the Site and Lyth 4 km to the south. The ZTV indicates theoretical visibility from these villages and townships and others within 10 km of the proposed Development.

7.5.3.2 Residential Properties

68. In addition to settlements, villages and townships, there are scattered residential properties and farmsteads in the study area. An assessment of effects on residential visual amenity of properties within 2 km of the outermost wind turbines of the proposed Development is described in **Technical Appendix 7.2**. In addition, there is an assessment of effects on visual amenity in general which references parts of the study area from which the proposed Development would theoretically be visible and identifies whether or not effects would be **'Significant'**.

7.5.3.3 Transportation Routes

69. In the study area the main transportation routes are coincident with the coastal fringe or valleys and straths. The A9 passes through the central part of the study area from Latheronwheel in the south to Thurso in the north. The ZTV indicates limited theoretical visibility from the A9. The A882 crosses the study area from Wick in the south east joining the A9 to the east of Halkirk. The ZTV indicates theoretical visibility of the proposed Development at distances of between 14 km and 18 km. The A99 connects Thrumster and Wick in the south east with John o' Groats on the north east of the study area. This Section of the A99 is coincident with the North NC500 tourist route. The ZTV shown on **Figure 7.1** indicates theoretical visibility of blade tips between Thrumster and John o' Groats with intermittent theoretical visibility of hubs as indicated on **Figure 7.4: Zone of Theoretical Visibility to Hub Height**. The A836 runs west from John o' Groats along the north coast passing through Dunnet, Castletown and Thurso and passes within 0.5 km of the Site at its closest point. The ZTV indicates theoretical visibility of blade tips between John o' Groats and west of Thurso.

70. This LVIA also considers the effects on the B876 between Castletown and Reiss to the north west of Wick; the B855 between Dunnet and Dunnet Head and local roads within 5 km of the Site including the minor road immediately to the north of the Site which is coincident with NCN1.

71. The Far North railway line terminates at Wick with a branch line between Georgemass Junction, to the east of Halkirk and Thurso. The railway line passes through the south-western part of the study area crossing large tracts of unpopulated flow country. The ZTV indicates intermittent theoretical visibility between a part of the line to the north east of Alnabreac Station and Wick. There is no visibility of the proposed Development on the branch line.

72. John o' Groats and Gills Bay are the two ferry terminals that provide a connection to South Ronaldsay in the Orkney Islands. The John o' Groats to Burwick service is a summer only service while the Gills Bay to St Margaret's Hope service operates all year. The ZTV indicates theoretical visibility of the proposed Development from the route of these two crossings. A third service operates year round between Scrabster and Stromness and the ZTV indicates theoretical visibility from this crossing. The LVIA focuses upon the Gills Bay and John o' Groats crossings due to the long separation distance to the Scrabster route.

7.5.3.4 Recreational Cycling and Walking Routes

73. There are no long distance walking trails in the study area. There are core paths throughout the study area. The nearest to the Site is CA05.16 that runs between Mey and West Lodge immediately to the north of the Site. Core paths within 5 km of the Site are shown on **Figure 7.7**.

7.5.3.5 Other Recreation Destinations and Visitor Attractions

74. Important recreation destinations and visitor attractions are considered in this LVIA with the more notable destinations having representative viewpoints showing visualisations of the proposed Development. These include:

- NC500 tourist route;
- Castle of Mey house and gardens;
- Dunnet Head;
- Duncansby Head; and
- Castletown Heritage Centre.

7.5.3.6 Viewpoints

75. As mentioned above viewpoints are included in this LVIA to provide an indication of what the proposed Development would look like and to inform the assessment of effects. The viewpoints were agreed in consultation with stakeholders and visualisations prepared in accordance with both SNH and THC guidance. A single viewpoint may be one or more of three types: representative, illustrative or specific. It is not possible to show what the proposed Development would look like from all points where theoretical visibility is indicated. The viewpoints are therefore typical of the types of views that would be experienced in the study area and show the proposed Development in a number of different contexts and at a range of distances, directions and altitudes.

76. Viewpoints and visualisations are used to inform the assessment of effects of visual receptors and landscape receptors. Viewpoints are used to explain changes to the way in which the landscape would be perceived with the introduction of the proposed Development and provide an indication of scale of the landscape and its components. Viewpoints are listed in **Table 7.3** and their location is shown on **Figure 7.7**. Visualisations are shown on **Figures 7.14** to **7.36.**

Table 7.3: Viewpoint details

No.	Viewpoint title	Coordinates	Distance and direction to the proposed Development (nearest wind turbine – T1 to T10)	Landscape receptor	Visual receptor
01	North Hoy and West Mainland NSA	318572, 999167	T1, 30.8 km South-south east	North Hoy and West Mainland NSA	Walkers
02	Burwick, South Ronaldsay	344275, 983899	T10, 19.4 km south west	LCT 306 Coastal Hills and Heath	Residents, visitors
03	Gills Bay Ferry	332960, 980883	T10, 9.4 km south-south west	Looking across to LCT 143 Farmed Lowland Plain and LCT 144 Coastal Crofts and Small Farms	Ferry passengers, visitors
04	Dunnet Head	320543, 976503	T1, 10.2 km south east	LCT 141 High Cliffs and Sheltered Bays Dunnet Head SLA	Walkers, visitors
05	Castle of Mey Entrance	329017, 973884	T7, 3.8 km south	LCT 143 Farmed Lowland Plain Castle of Mey GDL	Visitors
06	Duncansby Head	340526, 973270	T10, 10.4 km west-south west	LCT 141 High Cliffs and Sheltered Bays Duncansby Head SLA	Walkers, visitors

No.	Viewpoint title	Coordinates	Distance and direction to the proposed Development (nearest wind turbine – T1 to T10)	Landscape receptor	Visual receptor
07	A836 West of Thurso	308024, 969571	T1, 20.4 km east	LCT 143 Farmed Lowland Plain	Visitors on NC500
08	Barrock	325933, 971349	T1, 2.8 km south east	LCT 143 Farmed Lowland Plain	Residents
09	Brabster	332019, 969721	T10, 1.5 km west	LCT134 Sweeping Moorland and Flows	Motorists
10	A99 Warth Hill	337164, 969879	T10, 6.6 km west	LCT134 Sweeping Moorland and Flows	Walkers and visitors on NC500
11	Lochend	325611, 966606	T4, 3.6 km north east	LCT 143 Farmed Lowland Plain	Residents
12	Bower	323836, 962244	T4, 7.8 km north east	LCT 143 Farmed Lowland Plain	Residents
13	Lyth	328175, 963395	T4, 4.9 km north	LCT 143 Farmed Lowland Plain	Residents
14	Keiss	334637, 961431	T9, 8.6 km north west	LCT 144 Coastal Crofts and Small farms	Residents
15	Ben Dorrery	306463, 955068	T4, 25.9 km north east	LCT134 Sweeping Moorland and Flows	Walkers
16	A9 Georgemas Junction	315612, 959014	T4, 16.1 km north east	LCT 143 Farmed Lowland Plain	Motorists, visitors
17	Watten	323800, 954688	T4, 14.4 km north north east	LCT 143 Farmed Lowland Plain	Motorists, residents
18	Noss Head	338144, 954742	T9, 16.1 km north north west	LCT 143 Farmed Lowland Plain	Walkers, visitors
19	A9 near Rangag	317715, 945752	T4, 25.1 km north north east	LCT134 Sweeping Moorland and Flows	Motorists, visitors
20	Badlipster	324709, 949299	T4, 19.4 km north	LCT134 Sweeping Moorland and Flows	Motorists
21	Thrumster	333801, 945402	T4, 23.4 km north	LCT 144 Coastal Crofts and Small farms	Residents, visitors on NC500
22	A836 east of Castletown	320324, 968018	T1, 7.0 km east-south east	LCT 140 Sandy Beaches and Dunes Dunnet Head SLA	Motorists, visitors on NC500
23	Far North Railway Line	305163, 949100	T4, 30.4 km north east	LCT134 Sweeping Moorland and Flows	Rail passengers, visitors

7.5.4 Cumulative Assessment

7.5.4.1 Introduction

77. SNH guidance (2012) advises that the addition of the proposed Development to different cumulative scenarios be considered. One of the scenarios stated in the guidance is the proposed Development with existing operational windfarms and those under construction. This LVIA refers to that as the environmental baseline against which the effects of the proposed Development are assessed and which is the focus of the LVIA. This cumulative LVIA (CLVIA) considers the environmental baseline in two cumulative scenarios as follows:

- Cumulative Scenario 1: whereby the cumulative effects of the addition of the proposed Development to operational windfarms, windfarms under construction and consented windfarms is assessed; and
- Cumulative Scenario 2: whereby the cumulative effects of the addition of the proposed Development to operational windfarms, windfarms under construction, consented windfarms and windfarms in planning is assessed.

78. Cumulative Scenario 2 assumes that all sites for which a valid planning application has been submitted would be constructed. **Table 7.4** shows wind energy developments that are included in the cumulative assessment.

7.5.4.2 Operational Windfarms and Windfarms Under Construction

79. Operational windfarms and those under construction are an established part of the baseline environment in the study area.

80. Lochend Windfarm is immediately to the west of the Site, Stroupster Windfarm is 4 km to the south east and the single Taigh Na Muir wind turbine is 4 km to the north west. The nearest other operational or under construction windfarms are Baillie Windfarm, Forss 1 Windfarm and Forss 2 Windfarm approximately 25 km to the west and groups of windfarms to the west of Wick at two locations.

81. A group comprising of Camster Windfarm, Wathegar 1 and 2 Windfarms, Bilbster Windfarm and Achairn Windfarm 15-25 km to the south of the proposed Development and a second group including Causeymire Windfarm, Bad a' Cheo Windfarm, Achlachan Windfarm and Halsary Windfarm 20-25 km to the south west. These windfarms are part of the baseline environment on which the LVIA is based. These also form part of the two Cumulative Scenarios, influencing the assessment of cumulative effects arising from the addition of the proposed Development which is described in the CLVIA section for each receptor.

82. The pattern of development coincides with inland areas of elevated open moorland where the scale of the landscape is large, notably modified by forestry plantation and where windfarm development can be accommodated. This has led to groups of windfarms between 15 km and 25 km to the south of the Site, to the west of Thurso and in the vicinity of the Site. There is also windfarm development on the coastal edge at Forss and at Taigh Na Muir Dunnet.

7.5.4.3 Consented Windfarms

83. Consented but not constructed windfarms include Cogle Moss Windfarm 11.3 km to the north, Achlachan 2 Windfarm 21.3 km to the northeast and part of a larger group of operational and under construction windfarms and Limekiln Resubmission Windfarm which is 30 km to the west of the proposed Development.

7.5.4.4 Planning Application Windfarms

84. This category includes only those windfarms for which a valid planning application has been made and which is yet to be determined. Planning application sites in the study area include Slickly Windfarm 3 km to the south east, Camster 2 Windfarm part of the group to the west of Wick and 18 km to the south, Golticlay windfarm 28 km to the north and Hoy Windfarm 23 km to the south.

Table 7.4: Cumulative windfarm development

Cumulative windfarm development	Number of wind turbines	Height to blade tip	Distance and direction to the proposed Development (nearest turbine)	LCT in which cumulative development is located	Planning status
Achairn	3	100 m	17.7 km to the north	LCT 143 Farmed Lowland Plain	Operational
Achlachan	5	115 m	21 km to the north east	LCT134 Sweeping Moorland and Flows	Operational
Bad a' Cheo	13	112 m	21.9 km to the north east	LCT134 Sweeping Moorland and Flows	Operational
Baillie	21	110 m	25.2 km to the east	LCT 143 Farmed Lowland Plain	Operational
Bettyhill	2	120 m	55.4 km to the east	LCT 136 Rocky Hills and Moorland	Operational
Bilbster	3	93 m	16.6 km to the north	LCT134 Sweeping Moorland and Flows	Operational

Cumulative windfarm development	Number of wind turbines	Height to blade tip	Distance and direction to the proposed Development (nearest turbine)	LCT in which cumulative development is located	Planning status
Buolfruich	15	75 m	34.8 km to the north-north east	LCT134 Sweeping Moorland and Flows / LCT 144 Coastal Crofts and Small Farms	Operational
Burn of Whilk	9	115 m	26.3 km to the north	LCT134 Sweeping Moorland and Flows	Operational
Camster	25	120 m	19.9 km to the north	LCT134 Sweeping Moorland and Flows	Operational
Causeymire	21	101 m	21.2 km to the north east	LCT134 Sweeping Moorland and Flows	Operational
Forss 1	2	76 m	26.2 km to the east	LCT 143 Farmed Lowland Plain	Operational
Forss 2	4	78 m	26.2 km to the east	LCT 143 Farmed Lowland Plain	Operational
Halsary	15	120 m	19.5 km to the north east	LCT134 Sweeping Moorland and Flows	Operational
Lochend	4	99 m	0.8 km to the east	LCT134 Sweeping Moorland and Flows	Operational
Strathy North	33	110 m	47.8 km to the east-north east	LCT134 Sweeping Moorland and Flows	Operational
Stroupster	13	110 m	3.8 km to the north west	LCT134 Sweeping Moorland and Flows	Operational
Taigh Na Muir Dunnet	1	80 m	4.1 km to the south east	LCT 143 Farmed Lowland Plain	Operational
Wathegar	5	101 m	17 km to the north	LCT 143 Farmed Lowland Plain	Operational
Wathegar 2	9	110 m	17.1 km to the north	LCT 143 Farmed Lowland Plain	Operational
Achlachan 2	3	110 m	21.3 km to the north east	LCT134 Sweeping Moorland and Flows	Consented
Berriedale and Dunbeath	3	74 m	37.8 km to the north-north east	LCT134 Sweeping Moorland and Flows	Consented
Cogle Moss	12	99.5 m	11.3 km to the north	LCT134 Sweeping Moorland and Flows	Consented
Dounreay Tri	2	201 m	36.1 km to the east-south east	Offshore	Consented
Limekiln Resubmission	24	139 m	30.4 km to the east-north east	LCT134 Sweeping Moorland and Flows	Consented
Rumster WEP	3	75 m	21.3 km to the north-north east	LCT134 Sweeping Moorland and Flows	Consented
Strathy South	39	180 m	50.1 km to the east north east	LCT134 Sweeping Moorland and Flows	Consented
Camster 2	11	126.5 m	18.3 km to the north	LCT134 Sweeping Moorland and Flows	Application
Golticlay	19	130 m	27.9 km to the north	LCT134 Sweeping Moorland and Flows	Application
Hoy	6	150 m	23.2 km to the south	LCT 314 Moorland Hills – Orkney	Application
Slickly	11	149.9 m	2.6 km to the north west	LCT134 Sweeping Moorland and Flows	Application
Strathy Wood	26	180 m	47.2 km to the east-north east	LCT134 Sweeping Moorland and Flows	Application

7.6 Assessment of Physical Effects on Landscape

7.6.1 Introduction

85. In this Section, the effects of the proposed Development on landscape components within the Site are assessed. As mentioned previously the dominant landcover at the Site is commercial forest plantation interspersed with moorlands and with smaller areas of improved grassland in the south east. The assessment therefore focusses upon the removal and alteration of forestry and moorland and the consequences this would have on the baseline. For the purposes of this assessment, forestry/moorland is considered as a single component as the mosaic of forestry of varying ages interspersed with moorland create an area of homogenous character with regard to landscape components. Pockets of improved grazing on the fringes of LCT 134 are also a key characteristic.

7.6.2 Forestry/Moorland Mosaic

86. Coniferous forestry is a key characteristic of LCT 134 Sweeping Moorland and Flows in which the majority of the proposed Development would be located. Within the Site the distribution and size of forest blocks varies and is interspersed with areas of moorland, felled areas and watercourses where forestry is absent. The land is privately owned, and eight of the 10 wind turbines would be positioned in forestry. Two wind turbines would be positioned in a second area of privately owned land; one in an area of moorland and one on improved grassland.

7.6.2.1 Sensitivity

87. As mentioned above forestry is a key characteristic of LCT 134 Sweeping Moorland and Flows. It is a common place component of landscape and not subject to statutory landscape designation or policy protection. While it is a key characteristic of LCT 134, forestry/moorland mosaic is of limited importance as a component of LCT 134. It makes a limited contribution to landscape character and contrasts with the open, exposed moorlands so it's value is considered to be **'Low'**. Forestry is a relatively recent addition to the landscape and once felled can be replaced. Susceptibility to change from the proposed Development is therefore **'Low'** and sensitivity is assessed as **'Low'**.

7.6.2.2 Magnitude of Effect

88. Approximately 24.3 ha of forestry would be removed to accommodate the proposed Development. This would increase the proportion of moorland. The solar array would occupy an area of moorland in the north of the proposed Development and the substation and battery storage unit would also occupy moorland. New tracks would avoid forestry plantation where possible although felling would occur to provide an internal road layout that minimises the amount of new track that would be constructed while providing the infrastructure required to construct and operate the proposed Development. The loss of forestry and moorland and the alteration of moorland through the introduction of new features would result in a **'High'** magnitude of effect within the Site.

7.6.2.3 Significance of Effect

89. The proposed Development would result in a **'High'** degree of change to physical features of the landscape within the Site and effects would be **'Significant'**. The **'Significant'** effects would be associated mainly with the loss and alteration of moorland. Forestry plantation can be replaced and makes a limited contribution to landscape character. The application is for the proposed Development in perpetuity. It is therefore assumed that moorland would not be restored, and its loss or alteration would be permanent.

7.6.2.4 Improved Grazing

90. There are small areas of improved grazing at the fringes of LCT 134. These tend to be small, isolated areas amidst the rough vegetation of surrounding moorland that contrast with the darker hues of moorland vegetation.

7.6.2.5 Sensitivity

91. Improved grazing comprises small areas of contrasting colour that introduce an agricultural influence on the large-scale moorland landscape and emphasise the dominant landcover of rough ground in which these isolated areas are set. Improved grazing is a commonplace component of the landscape occurring at predictable locations at the fringes of the moorland areas or as smaller pockets associated with farmsteads. As this area makes a limited contribution to landscape character and is not subject statutory landscape designation or policy protection it's value is considered to be **'Low'**. The proposed Development has the potential to result in the loss of improved grazing in the footprint of constructed elements such as tracks and wind turbine foundations. Improved grazing could be substituted or replaced. Susceptibility to change from the proposed Development is therefore **'Low'** and sensitivity is assessed as **'Low'**.

7.6.2.6 Magnitude of Effect

92. A small area of improved grazing would be affected by the proposed Development in a single field. The unaffected part of the field would remain as improved grazing. There would be limited loss and alteration to the component of improved grazing within a very limited geographical area. The magnitude of effect is assessed as **'Low'**.

7.6.2.7 Significance of Effect

93. There would be limited alteration to the component of improved grazing and the remaining area of the field in which the affected area is a part would be unchanged. The landscape component would be recognisable as improved grazing. The combination of **'Medium-Low'** sensitivity and **'Low'** magnitude of effect mean that the effects would be **'Not Significant'**.

7.7 Assessment of Effects on Landscape Character

7.7.1 Introduction

94. The assessment of effects on landscape character considers the effects of the proposed Development on LCT, landscape designations and WLA. LCT are consider first as the description of effects on LCT informs an understanding of effects on landscape designations and WLAs.

95. The assessment refers to viewpoints and visualisations to assist in understanding and describing the landscape baseline and the assessment of effects. The use of viewpoints shown in **Volumes 3b** and **3c** has its limitations when considering landscape effects. The viewpoints are a fixed point in the landscape and show a fixed field of view. They do not convey the experience of being at that location and the aesthetic and perceptual aspects of landscape that contribute to landscape character. The viewpoints do not convey the variations in landscape quality and condition that may occur in a LCT and which are a consideration in the assessment of effects. The assessment of effect on landscape character is also informed by field surveys.

7.7.2 Initial Assessment of Effects

96. The initial assessment is undertaken to ascertain which LCT, landscape designations and WLAs should be considered for more detailed assessment. The detailed assessment is undertaken if it is considered that **'Significant'** effects are likely to arise and require a more detailed analysis to understand which aspects of landscape character would be affected and to what degree. The purpose of this two stage assessment method is to provide a more focussed and proportionate approach to assessing landscape receptors in the large study area commonly used for LVIA of windfarm development. The detailed assessment also defines in more detail the geographical area across which **'Significant'** effects are predicted to occur or the proportion of the landscape receptor or particular key characteristics or special qualities that would be affected most. The detailed assessment uses viewpoints and visualisations in **Volumes 3b** and **3c** to inform the assessment of effects.

97. For those LCT in THC administrative area this LVIA refers to the Council's OWESG which gives each unit of LCT a code. The OWESG uses the same LCT boundaries as the landscape character assessment published by SNH in 1998 and the review published in 2019. When referring to a specific unit of an LCT the OWESG code is referred to in brackets after the 2019 LCT number: LCT 134 (CT3) Sweeping Moorland and Flows, abbreviated to 'LCT 134 (CT3)' or 'CT3'.

7.7.2.1 Landscape Character Types

No or Very Limited Visibility from LCT

98. Where there is no or very limited theoretical visibility of the proposed Development from LCT it is very unlikely that effects would be **'Significant'**. The ZTV shown on **Figure 7.5** indicates no or very limited theoretical visibility from the following LCT on the island of Hoy and small islands to the east in Scapa Flow in the Orkney Islands:

- LCT 295 Holms;
- LCT 298 Low Island Pastures;
- LCT 301 Coastal Basin;
- LCT 302 Inclined Coastal Pasture;
- LCT 305 Enclosed Bays;
- LCT 308 Coast with Sand – Orkney;
- LCT 312 Plateau Heath and Pasture; and
- LCT 315 U-shaped Valley.

99. These LCT are therefore not considered in detail in the assessment of effects.

Limited Influence on Key Characteristics of LCT

100. Where there is theoretical visibility from a larger proportion of an LCT there is the potential for key characteristics to be affected to a greater degree than LCT from which there is no or very limited theoretical visibility. However, with increased distance from the proposed Development it is less likely that **'Significant'** effects would occur. It may also be the case that the proposed Development would have a limited influence on key characteristics due to the nature of the characteristics. The proposed Development would have a limited influence on the key characteristics of the LCT listed below and effects would be **'Not Significant'**:

LCT 296 Whaleback Islands

101. The nearest unit of this LCT to the proposed Development is coincident with the island of South Walls which is connected to the southern part of Hoy by a causeway. The proposed Development would be visible from South Walls at a distance of approximately 18 km. A key characteristic is "*islands are focal points in views from other islands*." This key characteristic would not be significantly affected by the proposed Development as it would not be positioned between South Walls and other islands in the Orkney Islands (i.e. the effect is **'Not Significant'**). The key characteristics of "*isolation and solitude*" would not be significantly affected as South Walls is separated from mainland Scotland by the Pentland Firth which is an open stretch of sea approximately 13 km in width (i.e. the effect is **'Not Significant'**). Visibility of the proposed Development would not significantly reduce the sense of isolation and solitude (i.e. the effect is **'Not Significant'**).

LCT 298 (South Ronaldsay) Low Island Pastures

102. The nearest unit of LCT 298 is at the southern end of South Ronaldsay approximately 18 km from the nearest wind turbine of the proposed Development. The ZTV shown on **Figure 7.5** indicates theoretical visibility from most of this unit the key characteristics of which relate mainly to coastal features, machair and the influence of crofting and archaeology on the landscape. The key characteristic of "*open and extensive views with dominant skies and a sense of exposure and vulnerability to the weather and sea*" would not be significantly affected by the proposed Development (i.e. the effect is **'Not Significant'**). Viewpoint 2 shown on **Figure 7.15** is near the western boundary of LCT 298 and indicates that while the proposed Development would be noticeable new feature, the physical separation from LCT 298 and partial screening by intervening landform and vegetation mean that its influence would be limited.

LCT 299 Undulating Island Pasture

103. There is a unit of LCT 299 on the island of Flotta approximately 23 km from the nearest wind turbine of the proposed Development. The ZTV shown on **Figure 7.5** indicates theoretical visibility from the southern part of the unit which is well settled with irregularly spaced crofts and dwellings and a network of minor roads and tracks. The key characteristic of a "*strong visual relationship with the sea from highest areas, views of adjoining flat landscapes and other islands*" would not be significantly affected (i.e. the effect is **'Not Significant'**). The proposed Development would be noticeable as a distant element on the horizon and would not compromise the strong visual relationship with the sea and other islands.

LCT 301 Coastal Basin

104. Four units of LCT 301 Coastal Basin are coincident with South Ronaldsay with three of these units showing theoretical visibility. The closest unit to the proposed Development is at a distance of approximately 19 km with the northern most unit on South Ronaldsay at a distance of 23 km. The key characteristics of "*views subtly focussed by the landform onto the coastline, and skylines from the visual containment when viewed from low level*" would not be significantly affected by the proposed Development which would be seen as a distant object on the horizon (i.e. the effect is **'Not Significant'**).

LCT 302 Inclined Coastal Pasture

105. LCT 302 occurs in the northern part of South Ronaldsay and the eastern and northern part of Hoy. **Figure 7.5: Landscape Character** indicates visibility from the South Ronaldsay unit and the key characteristics include "*extensive views out to sea over fields which appear to merge with the sea".* There would be glimpses of the proposed Development from the South Ronaldsay unit at distances of 24 km or great. Given the separation distance the proposed Development would be a minor object on the horizon of land and would not impinge upon views out to sea from LCT 302.

LCT 307 Cliffs – Orkney

106. LCT 307 is coincident with the west coast of Hoy and with the west and south east coast of South Ronaldsay. Landscape character of LCT 307 is dominated by natural forces and landform. Key characteristics of relevance are:

- "*The sound and sight of sea bird colonies and the sea action on cliffs;*
- *Spectacular and dramatic coastal scenery and views, iconic of Orkney; and*
- *A sense of remoteness and wildness."*

107. LCT 307 includes the Old Man of Hoy, a 137 m high sea stack and cliffs at St John's Head to the north of the Old Man of Hoy which reach a height of 335 m above sea level. The LCT description notes that the cliffs on Hoy are landmark features in views from ferry crossings of the Pentland Firth and are important in views from Orkney mainland cliffs. Viewpoint 1 shown on **Figure 7.14** and Viewpoint 2 (**Figure 7.15**) indicate that the proposed Development would be visible as a minor object on the horizon. It would not compete with the cliff scenery or key features such as the Old Man of Hoy. It would not reduce the sense of remoteness and wildness as it would not impinge upon views out to sea and the separation distance to mainland Scotland would remain.

LCT 311 Low Moorland

108. LCT 311 Moorland is coincident with the northern and western part of the island of Flotta from which **Figure 7.5** indicates theoretical visibility of the proposed Development. The key characteristics of "*uninhabited and mainly lacking roads and tracks"* and "*sense of remoteness and wildness in many areas"* would potentially be affected by the proposed Development. There is a viewpoint on West Hill identified on Ordnance Survey maps with a single wind turbine nearby. Flotta Oil Terminal occupies the central part of this unit of LCT 311 and there is a disused landing strip in the west of the unit. The sense of remoteness and wildness is compromised to a degree by Flotta Oil Terminal and the well settled land to the south east. While the proposed Development would be visible at a distance of 23 km it would be a minor object on the horizon.

LCT 312 Plateau Heath and Pasture

109. The unit of LCT 312 on South Ronaldsay extends most of the length of the island and is associated with the hillier land of the interior. **Figure 7.5** indicates fragmented theoretical visibility of the proposed Development. Views of the proposed Development at distances of 20 km or greater would not conflict with the key characteristics of LCT 312 Plateau Heath and Pasture.

LCT 314 Moorland Hills – Orkney

110. LCT 314 is coincident with the central part of Hoy and covers most of the island. Most of this unit of LCT 314 is coincident with WLA 41 Hoy and the northern part is coincident with North Hoy and West Mainland NSA. **Figure 7.5** indicates limited theoretical visibility of the proposed Development coinciding with more elevated parts of LCT 314. Relevant key characteristics include:

- "*Open landscape lacking fences and with few other structures;*
- *Elevated vantage points giving views to other islands; and*
- *A sense of wild character in remoter parts of Hoy."*

111. The LCT description emphasises that the rounded hills can rarely be seen from the outside due to screening by intervening slopes which accentuates qualities of remoteness and sanctuary. The proposed Development would be visible at distances of 18.5 km and greater. It would be seen across the large expanse of the Pentland Firth and be visible as a distant object on the horizon associated with mainland Scotland. The effects on key characteristics of LCT 314 would be limited and **'Not Significant'**.

LCT 316 Rugged Hills

112. There are two units of LCT 316 in the north west of Hoy forming a small range of steep deeply incised hills rising to 479 m. The two units are separated by a narrow, secluded valley which is coincident with LCT 315 U-shaped Valley from which the ZTV indicates there is no visibility of the proposed Development. The key characteristics of *"elevated vantage point for views across Orkney and the sea"* and "*wild character due to natural and rugged landforms, lack of signs of human use, and exhilarating experience"* would not be significantly affected due to the long separation distance to the proposed Development of 30 km and the fragmented visibility indicated by **Figure 7.5** (i.e. the effect is **'Not Significant'**). Viewpoint 1 (**Figure 7.14**) provides an indication of the scale and size of the proposed Development when viewed from the southern part of the western unit on the footpath to the Old Man of Hoy.

Greater Influence on Key Characteristics of LCT

113. LCT closer to the proposed Development or with visibility from a large proportion of its area as indicated by the ZTV shown on **Figure 7.5** are more likely to experience **'Significant'** effects. The relatively low lying and gently undulating topography of north east Caithness means there is the potential for proposed Development to be visible over greater distances than would be the case if it were seen across landscapes of hillier or more varied topography. LCT in landward north east Caithness tend to cover large areas with some units covering vast tracts of flow country. Coastal LCT tend to be smaller in area or units of LCT are smaller. This Section considers those LCT units in the study area coincident with mainland Scotland that are more likely to be significantly affected by the proposed Development and identifies those that will be assessed in more detail in this LVIA.

LCT 134 Sweeping Moorland and Flows

114. There are four units of LCT 134 in the LVIA study area. The proposed Development would be located in a large unit of LCT 134 (CT3) and would result in physical alteration of landscape components of the LCT within the Site and would influence aesthetic and perceptual aspects of landscape character beyond the Site. There is the potential for **'Significant'** effects on this unit of LCT 134.

115. To the north west of the proposed Development at Dunnet Head there is a small unit of LCT 134 (CT5). The unit is coincident with Dunnet Head SLA indicating that it is a valued landscape. There is the potential for **'Significant'** effects on this unit of LCT 134.

116. To the south of the proposed Development there is a unit of LCT 134 (CT6) associated with Moss of Kilminster to the west of Sinclair's Bay and approximately 6.5 km from the nearest wind turbine. **Figure 7.5** indicates theoretical visibility of the proposed Development from most of the unit and it is therefore considered in more detail.

117. The fourth unit, LCT 134 (CT4), is a vast area extending south west approximately roughly from a line drawn between Dounreay, Halkirk and Wick to Lairg and Loch Shin outside the study area and west to Ben Hope also outside the study area in Sutherland. **Figure 7.5** indicates theoretical visibility of the proposed Development at distances of 15 km and greater with larger continuous tracts of visibility in the eastern part of the unit than in the north and west. Parts of the unit are coincident with SLA and WLA indicating valued landscapes. The unit is therefore considered in more detail.

LCT 143 Farmed Lowland Plain

118. There is one unit of LCT 143 in the study area. A small part of the northern area of the Site is coincident with LCT 143 which lies to the west and south of the unit of LCT 134 (CT3) in which the proposed Development would be located. The unit of

LCT 143 (CT9) extends from Dounreay in the north west to Wick on the south east and its southern boundary is contiguous with LCT 134 (CT4). Most of the components of the proposed Development would not be located in LCT 143 (CT9). The proposed Development has the potential to result in **'Significant'** effects aesthetic and perceptual aspects due to the short separation distance between it and LCT 143 (CT9). LCT 143 (CT9) is therefore considered in more detail.

LCT 144 Coastal Crofts and Small Farms

119. There are three units of LCT 144 within 10 km of the proposed Development and as shown in **Figure 7.5** there would be theoretical visibility from all three. The north west unit is coincident with Dunnet Head SLA and the north-eastern unit is coincident with part of Duncansby Head SLA. The south-eastern unit is coincident with a section of the NC500. All three units are considered in more detail. The OWESG gives the same code (CT1) for each unit.

LCT 140 Sandy Beaches and Dunes

120. Three units of LCT 140 occur in the study area within 15 km of the proposed Development. The LCT description identifies key characteristics of "*focus for recreation…"* and "*wildness character to all of these seascapes…"* The ZTV shown on **Figure 7.5** indicates theoretical visibility from all three units. LCT 140 is therefore considered in more detail. The OWESG gives the same code (CT7) for each unit.

LCT 141 High Cliffs and Sheltered Bays

121. There are four units of LCT 141 in the study area two of which are within 10 km of the proposed Development. The north western unit is coincident with Dunnet Head SLA and the north-eastern unit is coincident with Duncansby Head SLA indicating valued landscapes that are potentially of higher sensitivity. A third unit is located on the north coast to the west of Thurso approximately 18 km west of the proposed Development. **Figure 7.5** indicates very limited theoretical visibility from this unit and given the separation distance it is not considered further. A fourth unit is located approximately 28 km to the south near Lybster. The ZTV indicates no visibility from this unit. The two units within 10 km of the proposed Development are considered in more detail. The OWESG gives the same code (CT8) for each unit.

7.7.2.2 Landscape Designations

No or Very Limited Visibility from the Landscape Designation

122. **Figure 7.6** indicates theoretical visibility from all landscape designations considered in this LVIA within 30 km of the proposed Development.

Greater Influence on Special Qualities of the Landscape Designation

123. As indicated above, LCT that are closer to the proposed Development are more likely to experience a greater influence on key characteristics and more likely to experience **'Significant'** effects and depends on the nature of the key characteristics. When considering landscape designations key characteristics are expressed through the description of the relevant LCT with which they are coincident but also a specific set of key characteristics or special qualities that are the reason for their designation. This Section refers to special qualities described in published documents.

North Hoy and West Mainland NSA

124. North Hoy and West Mainland NSA is 26 km to the north of the nearest wind turbine of the proposed Development. It is a designated landscape of national importance and afforded statutory protection. The ZTV shown on **Figure 7.6** indicates limited theoretical visibility of the proposed Development from the northern part of Hoy. The ZTV of the wider area shown on **Figure 7.1** indicates there is no visibility of the proposed Development on the western part of mainland Orkney.

125. Viewpoint 1 (**Figure 7.14**) shows a wireline of the proposed Development from the footpath to the Old Man of Hoy which is a sea stack and key feature of the coastal landscape of the NSA. The wireline indicates that the proposed Development would be a minor object on the horizon and would not impinge upon views. The initial assessment of effects of the proposed Development on special qualities is provided in **Table 7.5**. On the basis of the initial assessment it is concluded that a more detailed assessment of effects on NSA special qualities is not required.

Table 7.5: Assessment of effects on special qualities of North Hoy and West Mainland NSA

NSA special quality	Potential effect	Predicted effect of the proposed Development
A palimpsest of geology, topography, archaeology and land use.	Visibility of the proposed Development could potentially affect the perceived pattern of land use.	The ZTV shown on **Figures 7.1: Zone of Theoretical Visibility to Blade Tip 45 km** and **7.6: Landscape Designations and Wild Land Areas** indicate very limited theoretical visibility of the proposed Development. Viewpoint 1 (**Figure 7.14**) shows a wireline image of the proposed Development from the footpath to the Old Man of Hoy. It indicates that the proposed Development would be a minor element on the distant horizon and would not influence the pattern of land use within the NSA.
An archaeological landscape of world heritage status.	The Heart of Neolithic Orkney World Heritage Site (WHS) is sensitive to development that could affect the composition of views to and from it.	The ZTV indicates almost zero theoretical visibility of the proposed Development from the WHS at a separation distance of approximately 40 km. The proposed Development would potentially be visible in views of the WHS from the Orkney Islands. However, the separation distance means that the effect on view composition would be very limited.
The spectacular coastal scenery.	Potentially the proposed Development could be seen in views of the cliffs and the height of wind turbines could be compared to the cliffs at St John's Head and Old Man of Hoy. The pale colour of the wind turbines could contrast with the dark hues of red sandstone.	Viewpoint 1 (**Figure 7.14**) indicates the proposed Development would be visible from the vicinity of the Old Man of Hoy and St John's Head. The long separation distance means that adverse scale comparisons would not occur. The proposed Development would also be visible in the foreground of views from Caithness looking across the Pentland Firth to the coastal scenery of the NSA. The long separation distance means that adverse scale comparisons would not occur.
Sandstone and flagstone as an essence of Orkney.	The slender aerodynamic appearance and pale colour of the wind turbines could contrast with the dark hues of bedrock and exposed cliffs on Orkney and the drystone walls and vernacular buildings built from local stone and now weathered over time.	The pale colour of the wind turbines and the movement of rotors would be discernible from the NSA. However, the long separation distance means that the influence of the proposed Development would be very limited and the colours and textures of rock and stone in the NSA would be the dominant influence.
A long settled and productive land and sea.	The wind turbines could be perceived as a departure from the traditional ways of earning a living from agriculture and fishing.	The proposed Development would be discernible from the NSA, but it would not be associated with the Orkney Islands and would be perceived as part of the Caithness landscape.
The contrast between fertile farmland and the unimproved moorland.	The proposed Development does not have the potential to affect this special quality.	No predicted effects on this special quality.
A landscape of contrasting curves and lines.	The proposed Development could potentially be perceived as conflicting with the pattern of curves and lines in the landscape.	The proposed Development would be visible in views to and from North Hoy where the simple curves of the hills are a strong influence on view composition. The separation distance means that the proposed Development would be seen as a minor object on the distant horizon and would not

NSA special quality	Potential effect	Predicted effect of the proposed Development
		be part of the pattern of curves and lines in the NSA.
Land and water in constantly changing combinations under the open sky.	The proposed Development has the potential to introduce movement into views across the Pentland Firth and become a minor focal point and scale reference in views.	Movement of the rotors of the proposed Development may be discernible from North Hoy. The long separation distance means that movement of the rotors would not be a distracting feature of views.
The High hills of Hoy.	The proposed Development does not have the potential to affect this special quality.	No predicted effects on this special quality.
The townscape of Stromness, its setting and link with the sea.	The proposed Development does not have the potential to affect this special quality.	No predicted effects on this special quality.
The traditional buildings and crofting patterns of Rackwick.	The proposed Development would potentially be visible in views of Rackwick from elevated locations to the north and could potentially contrast with the vernacular style of buildings.	The traditional buildings and crofting patterns at Rackwick combined with the sense of enclosure by sandstone headlands at either side of Rackwick Bay give a small scale character and palette of natural hues and colours. The proposed Development would be visible in elevated views from the north across Rackwick. The long separation distance means that the contrast between the pale colours of the wind turbines and the darker hues of Rackwick would be very limited. The wind turbines would be minor distant objects and their individual forms would barely be discernible.

Castle of Mey (Barrogill Castle) GDL

127. Castle of Mey (Barrogill Castle) GDL is approximately 3.2 km to the north of the nearest wind turbine of the proposed Development. As mentioned in **Chapter 11: Archaeology and Cultural Heritage** the List description of the GDL mentions important views north to Dunnet Head and the Orkney Islands. The List description does not mention important views to the south. The scoping response of HES indicates that there is a designed view to the south from the castle and grounds that is channelled between two areas of woodland. Viewpoint 5 (**Figure 7.18**) is located at the south facing entrance to the castle and indicates that the proposed Development would be visible. There is the potential for **'Significant'** effects on views from the GDL and it is considered in more detail.

128. It is important to note that the assessment of effects on the GDL described in this LVIA concern the effects of the proposed Development on identified views from the GDL and not effects on the significance of the GDL as a cultural heritage asset. For an assessment of effects on the significance of the GDL as a cultural heritage asset please refer to **Chapter 11: Archaeology and Cultural Heritage**.

Melsetter House GDL

129. Melsetter House GDL is on the island of Hoy approximately 19 km to the north of the nearest wind turbine of the proposed Development. The description of the GDL indicates that Melsetter House GDL is important in views from the B9047. It also mentions views south from the burial ground on Melsetter Hill to the north west of the GDL towards the Scottish mainland and specifically to Castle of Mey. The proposed Development would not impinge upon views of the GDL from the B9047. It would potentially be visible in views to the south from Melsetter Hill although it is unlikely to be visible from the grounds of the GDL due to screening by landform and vegetation. Due to the long separation distance to the proposed Development and the restricted views to the south from the GDL it is not considered in detail.

Dunnet Head SLA

130. Dunnet Head SLA is approximately 5.5 km to the west of the proposed Development. Viewpoint 4 (**Figure 7.17**) and Viewpoint 22 (**Figure 7.35**) indicate that the proposed Development would be visible from the SLA and would be seen in combination with operational Lochend and Stroupster Windfarms. The description of special qualities identifies views to the south from the headland including Morven, Maiden Pap and Scaraben which are approximately 50 km to the south of the headland viewing point. The proposed Development has the potential to result in **'Significant'** effects on the SLA and is therefore considered in more detail.

Duncansby Head SLA

131. Duncansby Head is approximately 8 km to the east of the proposed Development. Viewpoint 6 (**Figure 7.19**) indicates that the proposed Development would be visible from the SLA. The description of special qualities mentions views to Dunnet Head to the west and the contrast between the dynamic environment of the coastal edge and the long, low horizons of the Caithness landscape and Pentland Firth. The proposed Development has the potential to result in **'Significant'** effects on the SLA and is therefore considered in more detail.

The Flow Country and Berriedale Coast SLA

132. The Flow Country and Berriedale Coast SLA is approximately 26 km south-south west of the proposed Development. The SLA covers an area of 363 km^2 extending from Rangag in the north to Berriedale in the south. It includes open, expansive tracts of peatland in the north and hills in the south including the prominent peaks of Morven (709 m AOD) and Scaraben (626 m AOD). The ZTV shown on **Figure 7.6** indicates theoretical visibility of the proposed Development from the northern part of the SLA in the 30 km study area. The special qualities of the SLA are its distinctive mountain and moorland skyline; exposed peaks, vast openness and intimate glens; and the historic landscape. The proposed Development would potentially be visible from the mountains and would be visible from the moorland in the north of the SLA at a distance of approximately 26 km. the proposed Development would not impinge upon the scale and openness of the moorland landscape nor would it compromise the sense of scale and prominence of the mountains when viewed from the north. Given the separation distance between the proposed Development and the Flow Country and Berriedale Coast SLA it is predicted that there would be **'Not Significant'** effects and it is not considered in further detail.

7.7.2.3 Wild Land Areas

133. There are three WLAs in the study area and the ZTV shown on **Figure 7.6** indicates theoretical visibility of the proposed Development from each of them. The potential effects of the proposed Development on WLA relate to the influence it would have on the aesthetic and perceptual aspect of wildness as experienced from each WLA. Prior to submitting the Scoping Report to consultees RSK undertook an initial appraisal of potential effects on WLA using our understanding of the reasons for identifying these areas as WLA and visibility studies using wirelines of a preliminary layout of the proposed Development. It was concluded through an appraisal of potential effects on the key attributes and qualities of each WLA that **'Significant'** effects would be unlikely to occur and a detailed assessment of effects on WLA would be scoped out of the EIA.

134. During scoping RSK provided further assessment information to NatureScot on WLA and it was agreed that a detailed assessment of effects would be scoped out of the LVIA. WLA are therefore not considered further in this LVIA.

7.7.3 Detailed Assessment of Effects on LCT

135. This Section describes a detailed assessment of effects of those LCT and landscape designations which the initial assessment indicates would potentially be significantly affected by the proposed Development. As mentioned previously the purpose of this two stage assessment method is to provide a more focussed and proportionate approach to assessing landscape receptors in the large study area commonly used for LVIA of windfarm development. The detailed assessment also defines in more detail the geographical area across which **'Significant'** effects are predicted to occur or the proportion of the landscape receptor or particular key characteristics or special qualities that would be affected most. The detailed assessment uses viewpoints and visualisations in **Volumes 3b** and **3c** to inform the assessment of effects.

7.7.3.1 LCT 134 Sweeping Moorland and Flows

Baseline Description

136. The proposed Development would be located in a unit of LCT 134 which SNH describe as occurring extensively across Caithness and East Sutherland. The key characteristics of LCT 134 are described by SNH as:

- *"Gently sloping or undulating landform which lies generally below 350 metres.*
- *Occasional isolated hills of limited height form local landmark features.*

- *Lochs and mature, meandering rivers.*
- *Very distinct flora, dominated by sphagnum mosses, produced by the wetness and infertility of the flows.*
- *Areas of peat cuttings and hagging.*
- *Pockets of improved grazing, mainly within the outer fringes of sweeping moorland.*
- *Coniferous forest forming a dominant characteristic within some parts of this landscape character type.*
- *Ribbons of broadleaf woodland occasionally run along the water courses and loch edges.*
- *Very sparsely settled with dispersed crofts, farms and estate buildings largely found on the outer edges of this landscape or near a strath.*
- *Vehicular tracks within parts of the landscape.*
- *Wind farms, transmission lines, the A9 and a network of minor roads are key features within the more modified outer fringes within Caithness.*
- *Long, low and largely uninterrupted skylines offering extensive views across this landscape and result in a feeling of huge space.*
- *Consistent views to the distant Lone Mountains and Rugged Mountain Massif – Caithness & Sutherland.*
- *Great sense of exposure on areas of flat peatland on upland plateau.*
- *A strong sense of remoteness is associated within the largely uninhabited, inaccessible core flows and moorlands of this landscape."*

137. The unit (CT3) in which the proposed Development would be located is typical of LCT 134 in that it exhibits key characteristics of this LCT to varying degrees. Relative to its size, the unit in which the proposed Development would be located has a large proportion of land covered in forestry plantation and includes two operational windfarms: Lochend and Stroupster. While the unit is sparsely populated, with most residential properties and farm buildings being on the fringes of the LCT, the sense of remoteness is not strongly expressed due to the size of the unit and its position where the landscapes of Caithness are more modified by forestry plantation, agriculture, infrastructure and settlements. The presence of Lochend and Stroupster Windfarms and intervisibility with powerlines and farm buildings also reduce the sense of remoteness.

138. The unit (CT5) to the north west of the proposed Development is relatively small and while its location on the headland of Dunnet Head means it is physically remote its small scale and proximity to the villages of Dunnet and Brough and the presence of the B855 which passes through the north east of the unit means that the sense of remoteness is reduced. Other key characteristics are absent or partially expressed in this unit.

139. The unit (CT6) to the south of the proposed Development at Moss of Kilminster is low lying and influenced by townships and farmsteads at its fringes, coniferous forestry in the south and north. Two 'B' class roads pass through the unit and a double railway line associated with the Subsea 7 Pipeline Bundle Fabrication Site crosses the northern part of the unit. The size of the unit and the influence of these features reduce the sense of remoteness. Other key characteristics are absent or partially expressed in this unit.

140. The vast unit (CT4) of LCT 134 to the south west of the proposed Development consistently exhibits the key characteristics of this LCT.

141. The OWESG indicates that on a scale of 1-4 where 1 is 'most susceptible to change' the degree of landscape sensitivity of CT3 to large-scale windfarms is assessed as 2. The OWESG advises that there is 'limited scope' for larger scale development in CT3 and indicates that the existing layout of Stroupster Windfarm should be consolidated and improved. The OWESG identifies the viewpoint on the A99 at Warth Hill as a key viewpoint and this is represented by Viewpoint 10 (**Figure 7.23**).

142. The OWESG indicates there is no capacity for windfarm development in CT5 to the north west of the proposed Development. A specific key view in CT5 is not identified in the OWESG although the document states that "*the open, elevated landform allows wide 360 degree panoramas from any number of locations…"* Viewpoint 4 (**Figure 7.17**) shows the baseline view from the established viewpoint at Dunnet Head in LCT 141 High Cliffs and Sheltered Bay. The viewpoint looks across CT5 and is representative of views from that unit of LCT 134 Sweeping Moorland and Flows.

143. The unit (CT6) to the south of the proposed Development is also assessed in the OWESG as having no scope for windfarm development, with its relatively small surface area being the main reason for its high sensitivity according to the OWESG. A specific key view is not identified in the OWESG which states there are "…*wide 360 degree panoramas from any number of locations…*"

144. The largest unit (CT4) in the study area is assessed in the OWESG as being less sensitive to large-scale windfarms with a sensitivity rating of 3. The OWESG states there is scope for larger wind turbines which should consolidate the pattern of existing windfarm development in CT4 which includes Buolfruich, Causeymire, Camster, Wathegar, Bad a' Cheo and Halsary (under construction). Key viewpoints include Ben Dorrery, Viewpoint 15 (**Figure 7.28**)

Sensitivity

145. The value of CT3 is considered to be **'Medium'**. The unit is not coincident with any landscape designation. Philips Mains Mire SSSI is an area of blanket bog that contains an extensive system of dubh lochans and contributes to landscape character of LCT 134 Sweeping Moorland and Flows.

146. The susceptibility of CT3 to change from the proposed Development is assessed as **'Medium'**. The large-scale and simple topography of the landscape could potentially accommodate the proposed Development. The presence of Lochend Windfarm and Stroupster Windfarm lessen susceptibility to a degree although the proposed Development could potentially increase the influence of wind energy development on the landscape by adding new features to the skyline and potentially affecting views of Lone Mountains and Rugged Mountain Massif LCT.

147. The combination of **'Medium'** value and **'Medium'** susceptibility gives CT3 a sensitivity of **'Medium'**.

148. The value of unit CT5 is considered to be **'Medium'**. CT5 is coincident with Dunnet Head SLA and forms part of the foreground in views to the south which are identified as integral to the special qualities of the SLA.

149. The susceptibility of CT5 to change from the proposed Development is assessed as **'Medium'**. The proposed Development would not be located in CT5. It would be present in views to the south from CT5. However, there are no core paths or visitor destinations in CT5 that would provide opportunities for views. The B855 crosses the north-eastern part of the unit and the ZTV indicates theoretical visibility from the road.

150. The combination of **'Medium'** value and **'Medium'** susceptibility gives CT5 a sensitivity of **'Medium'**.

151. Unit CT6 is considered to be of **'Medium'** value. It is not coincident with any landscape designation and development at its fringes and infrastructure crossing the unit lessen the sense of remoteness and uninhabited character.

152. The susceptibility of CT6 to change from the proposed Development is assessed as **'Medium'**. The proposed Development would not be located in CT6 and the ZTV shown in **Figure 7.5** indicates it would be theoretically visible from areas occupied by coniferous forestry and from the eastern part of the unit which is influenced by settled lowland farmland.

153. The combination of **'Medium'** value and **'Medium'** susceptibility gives CT6 a sensitivity of **'Medium'**.

154. Unit CT4 is considered to be of **'High'** value. It is a vast area of land which is coincident with SLA and WLA in the LVIA study area. There are vast uninhabited areas where qualities of remoteness and wildness are more strongly expressed and there is evidence of recreational use.

155. The susceptibility of CT4 to the proposed Development is considered to be **'Low'**. The vast scale of CT4 and the separation distance to the proposed Development mean that the potential for substantial change to key characteristics of CT4 is limited.

156. The combination of **'High'** value and **'Low'** susceptibility gives CT4 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

157. The proposed Development would be located in LCT 134 (CT3). It would result in the loss and alteration of moorland and forestry as described in this Chapter in **Section 7.5**. The proposed Development would change landscape character of the Site to forestry plantation with renewable energy development. Beyond the Site in the open moorland of CT3 the proposed Development would be a very noticeable new focal point in the landscape introducing vertical components into the simple skyline. The modified character of the landscape at the Site, the presence of operational Lochend Windfarm and the open and large-scale of the landscape are factors that lessen the magnitude of effect.

158. Stroupster Windfarm is in CT3 and therefore part of the baseline. The addition of the proposed Development would increase the influence of wind energy development in the landscape although wind turbines would occupy a similar sized area to that of Stroupster Windfarm with a reasonable separation distance from them. Viewpoint 10 (**Figure 7.23**) is at Warth Hill viewpoint on the A99 and indicates that the proposed Development would be seen across intervening moorland and would be associated with the modified landscape of forestry plantation and improved pasture.

159. The magnitude of effect on CT3 would be **'High'** at the Site reducing to **'Medium'** within 5 km of the proposed Development.

160. The proposed Development would not be located in CT5 and would affect aesthetic and perceptual aspects of landscape character as opposed to having a physical effect on landscape components. When viewed from Dunnet Head (Viewpoint 4, **Figure 7.17**) the proposed Development would be visible in the middle distance with CT5 forming the foreground to views. The proposed Development would introduce features that are not characteristic of the baseline of CT5 into views across the landscape. The separation distance between CT5 and the proposed Development is large enough to avoid it becoming a dominant focal point in views or altering landscape character. It would also not affect the importance of views to the south where distant lone mountains are visible.

161. The magnitude of effect on CT5 would be **'Low'**.

162. The proposed Development would be approximately 6.5 km to the north of CT6. It would be a noticeable new feature in views, and it would be seen in combination with operational Stroupster Windfarm. The proposed Development would not physically affect CT6. It would affect the sense of remoteness to a degree which is already influenced by Stroupster Windfarm, settlements at the edge of CT6 and existing infrastructure. Given these factors the magnitude of effect on CT6 would be **'Low'**.

163. CT4 is coincident with a vast area of largely uninhabited moorland and flow country. As mentioned above it exhibits the key characteristics of LCT 134 as described by SNH and is coincident with SLA and WLA elevating its value. However, susceptibility to change from the proposed Development is **'Low'** due to its vast scale, distance from the proposed Development and presence of operational windfarms in the north of the unit.

164. The proposed Development would be discernible at distances of approximately 15 km or greater. It would not impinge upon the vast scale of CT4 or the sense of remoteness and exposure. Views of lone mountains would not be adversely affected due to the long separation distance between the proposed Development and the mountains which lie to the south and west. The magnitude of effect in CT4 would be **'Low'**.

Significance

165. The effect of the proposed Development on the north-western part of CT3 would be **'Significant'**. The proposed Development would physically alter landscape character at the Site and would result in considerable localised change to aesthetic and perceptual aspects of landscape character including the sense of remoteness and exposure. It would increase the amount of windfarm development in this unit of LCT 134. In the eastern and southeastern parts of CT3 effects would be **'Not Significant'**. While the proposed Development would be visible it would not exert a strong influence on the key characteristics of LCT 134 Sweeping Moorland and Flows.

166. The effects of the proposed Development on units CT5, CT6 and CT4 would be **'Not Significant'**.

167. CT5 is to the north west of the proposed Development and is coincident with Dunnet Head SLA. The proposed Development would not affect physical features of the baseline and the underlying character the landscape would endure. As mentioned above the unit is physically remote but the sense of remoteness gained from the experience of being in vast area of moorland landscape is limited due to the relatively small size of this unit.

168. CT6 is to the south of the proposed Development. It is influenced by existing development, infrastructure and forestry plantation and is separated from moorland areas of CT3 by an area of LCT 143 Farmed Lowland Plain and by forestry plantation. The proposed Development would not affect physical features of landscape and would have a limited effect on the sense of remoteness associated with this relatively small unit of LCT 134.

169. CT4 covers a vast area and more strongly exhibits the key characteristics of LCT 134 than CT3, CT5 and CT6. The proposed Development would be more than 15 km from the nearest part of CT4. The northern part of the unit is influenced by operational wind energy development and by the more settled and modified landscapes of LCT 143 Farmed Lowland Plain. While the proposed Development would be visible its influence on the key characteristics of unit CT4 would be very limited.

Cumulative Assessment (refer to CZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

170. **Table 7.4** indicates that 17 windfarm developments considered in Scenario 1 in this LVIA are located in the LCT 134 Sweeping Moorland and Flows of which six are consented. Of those two operational developments (Lochend and Stroupster) are in the same unit (CT3) in which the proposed Development would be located. The focus of the cumulative assessment is on unit CT3 and the cumulative windfarm developments of Lochend, Stroupster and nearby Taigh Na Muir Dunnet as the nearest consented but not constructed development (Cogle Moss) is approximately 11.3 km to the south and has a limited indirect influence on CT3. As mentioned in the baseline description and assessment of effects of the proposed Development with operational and under construction development, other units of LCT 134 Sweeping Moorland and Flows would not be directly affected by the proposed Development. While wind energy development is commonplace in the northern part of CT4 there is sufficient separation between the proposed Development and CT4 to prevent **'Significant'** cumulative effects.

171. The addition of the proposed Development would intensify the presence of wind energy development in CT3 and would primarily affect the northwestern part. There would be reasonable separation between the proposed Development and Stroupster Windfarm to avoid coalescence of wind energy production. The proposed Development would be located in a part of CT3 that is modified by forestry plantation. The scale of change in a localised area means that the cumulative magnitude of effect is assessed as **'High'** in the north west of CT3 and **'Medium'** elsewhere in CT3.

172. The effects would be **'Significant'** in the north-western part of CT3 and elsewhere would be **'Not Significant'**. It is considered that CT3 could accommodate the addition of the proposed Development in combination with Lochend and Stroupster Windfarms without **'Significant'** change to the defining characteristics of the LCT as exhibited in CT3.

173. **Table 7.4** and **Figure 7.8: Cumulative Windfarm Development** indicate that there are seven consented windfarms yet to be constructed. Six of those are in the LCT 134 Sweeping Moorland and Flows although none are in unit CT3. Of these sites Cogle Moss Windfarm is the nearest to the proposed Development at a distance of 11 km to the south in unit CT6 of LCT 134 Sweeping Moorland and Flows. As mentioned above CT6 is strongly influenced by settlement, agriculture, industry and infrastructure. Cogle Moss Windfarm would be in a different landscape context to the proposed Development and the separation distance is sufficient to avoid the two developments coalescing or intensifying development and leading to conflicts in design and layout.

174. Given the separation distance between the proposed Development and consented sites and the fact that none of these sites would be present in CT3 means that the contribution these sites make to cumulative effects is lessened. Another factor reducing the cumulative influence of consented sites is the location of the proposed Development in a heavily modified part of LCT 134 Sweeping Moorland and Flows (CT3) where wind energy is already an established feature of the baseline.

Scenario 2 – Sites in Planning

175. There are four windfarm developments in planning in LCT 134 Sweeping Moorland and Flows. This LVIA focuses on Slickly Windfarm as it is in unit CT3 and 2.6 km to the south east of the proposed Development.

176. The addition of the proposed Development to Slickly, Stroupster and Lochend Windfarms would further intensify the presence of windfarm development in CT3. Slickly Windfarm would be associated with Stroupster Windfarm extending the influence of windfarm development in that part of CT3. The proposed Development would add to this although the separation distance of 2.6 km to Slickly Windfarm means it would not be seen as a continuation of the same windfarm but would be perceived as following the existing pattern of windfarm development in relation to areas of CT3 that exhibit large-scale landform and modification by forestry plantation. The addition of the proposed Development would result in a localised **'High'** cumulative magnitude of effect in the north west of CT3 and in the central part of CT3 as it would change the defining characteristics of landscape character in combination with Stroupster, Slickly and Lochend Windfarms in a limited area.

177. The effects would be **'Significant'** in the north west and central part of CT3 and elsewhere would be **'Not Significant'**.

7.7.3.2 LCT 143 Farmed Lowland Plain

Baseline Description

178. A small part of the Site is coincident with the unit of LCT 143 in the study area. Part of the proposed upgrade to the existing track is in LCT 143. The proposed substation and proposed battery storage area would also be located in LCT 143 at the boundary with LCT 134 (CT3). The nearest wind turbine of the proposed Development is T1 within 0.5 km of the boundary of LCT 143 to the north east. The key characteristics of LCT 143 are described by SNH as:

- *"A generally open, low-lying plain, gently undulating to form shallow broad valleys, which are often filled with lochs and mosses, and subtle low ridges.*
- *Occasional smooth hills rise above the more low-lying plain forming local landmarks.*
- *The broad and shallow valley of the River Wick forming the largest of a series of valleys generally aligned south-east/north-west across the plain.*
- *Agriculture the predominant land cover.*
- *More intensively managed farmland near the coast around Thurso and Wick, and close to Loch Watten.*
- *Distinctive Caithness flagstone fences in some parts, creating low, sharp edges to fields.*
- *Sparse woodland, mainly comprising small angular coniferous plantations planted for shelter on farms.*
- *Larger conifer woodlands located at the transition with the Sweeping Moorland and Flows standing out where they are planted on poorer wetter ground on low ridges.*
- *Farm buildings and houses forming focal points within the landscape.*
- *Occasional loose clusters of croft houses located on more marginal upper slopes and near the coast.*
- *A number of historic environment features, including conspicuous castles, Baronial mansions and tall 'Lairds' houses, usually with broadleaf shelter woods planted around them.*
- *Roads reinforce the settlement pattern, often following the field and property boundaries, running straight and then swinging around sharp corners.*
- *A number of large settlements, including the towns of Thurso and Wick, situated on the coast, as well as several smaller settlements.*
- *Many historic features, including brochs and cairns, dotted across farmland and situated on hills within, or adjacent to, this area.*
- *Small groups of large wind turbines sited on some of the low ridges and hills and prominent visibility of larger wind farms in adjacent Landscape Character Types.*
- *Extensive views due to the openness of the landscape, and the clarity of northern air and light.*
- *Dramatic views from the northern part of this landscape to Dunnet Head and the distant Orkney islands, and views from the A9 on the western edge of this landscape of the Lone Mountains of Movern and Scaraben seen across the low-lying Sweeping Moorland and Flows."*

179. The unit of LCT 143 in which part of the proposed Development would be located and which lies adjacent to it is typical in that it exhibits most of the key characteristics described by SNH to varying degrees. Parts of LCT 143 to the north and west of the proposed Development are more likely to be affected by the proposed Development. These parts of LCT 143 are well settled and influenced by proximity to the sea with views along the coast and towards Dunnet Head and the Orkney Islands.

Sensitivity

180. The value of LCT 143 is considered to be **'Medium'**. Castle of Mey GDL is located in the LCT and indicates a localised area of **higher** value. It makes a positive contribution to landscape character in a localised area and although of **'High'** value does not confer upon LCT 143 an evaluation of **'High'** value.

181. The susceptibility of LCT 143 to change from the proposed Development is assessed as **'Medium'**. A small area of the LCT would be physically affected by the proposed Development with upgrades to an existing track and ancillary development being located at the boundary between LCT 143 and LCT 134 (CT3). The proposed Development would increase the influence of windfarm production in the north-eastern part of LCT 143 between Dunnet Bay and East Mey.

182. The combination of **'Medium'** value and **'Medium'** susceptibility gives LCT 143 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

183. The physical effects of the proposed Development on LCT 143 would occur in a very limited area that is influenced by forestry plantation and by existing forest tracks. Rising terrain at the Site tends to truncate views to the south from the coastal margins of LCT 143 to the north of the proposed Development. The proposed Development would be a new focal point in views in the north-eastern part of LCT 143. The wind turbines would contrast with the scale of the scattered residential properties and farmsteads and field pattern of LCT 143. It would be associated more with LCT 134 (CT3) and the modified landscape of forestry plantation due to the separation distance between the proposed Development and the farmed and settled lowlands to the north and west. Viewpoints 5 (**Figure 7.18**), 8 (**Figure 7.21**), 11 (**Figure 7.24**) and 13 (**Figure 7.26**) give an indication of the what the proposed Development would look like from LCT 143 within a 5 km radius.

184. In longer distance views represented by Viewpoints 7 (**Figure 7.20**), 12 (**Figure 7.25**), 16 (**Figure 7.29**) and 17 (**Figure 7.30**), the proposed Development is a noticeable feature seen in the context of the modified landscape of commercial forestry and the settled and farmed lowlands.

185. The magnitude of effect would be **'Medium'** to the north and west of the proposed Development reducing to **'Low'** at distances of greater than approximately 5 km.

Significance

186. The effect of the proposed Development on the north-eastern part of LCT 143 would be **'Significant'**. The proposed Development would physically alter a small part of LCT 143. The wind turbines would influence views across the landscape between East Mey and St John's Loch and between Barrock and Greenland. The effects on the majority of the LCT to the west and south would not **'Not Significant'**.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9 - 7.13)

Scenario 1 – Operational, Under Construction and Consented

187. **Table 7.4** indicates that seven windfarm developments considered in Scenario 1 in this LVIA are in LCT 143 Farmed Lowland Plain none of which would be consented sites. As mentioned above a small proportion of the proposed Development would be located in a unit of LCT 143 Farmed Lowland Plain and no wind turbines would be positioned in the LCT.

188. Cogle Moss Windfarm is 11 km to the south of the proposed Development and loosely associated with the group of windfarms to the south. Achlachan 2 Windfarm is associated with the Causeymire group of windfarms and Limekiln Resubmission Windfarm is 30 km to the west of the proposed Development. The Cumulative ZTV (CZTV) indicates that consented sites would not introduce new areas of visibility. There would be intervisibility of Cogle Moss Windfarm and the proposed Development across LCT 143 Farmed Lowland Plain. However, given the separation distance between the proposed Development, Cogle Moss Windfarm and other consented sites there is very limited interaction between them that would give rise to cumulative effects on landscape character of LCT 143 Farmed Lowland Plain.

189. The part of LCT 143 in which the proposed Development woud be located is influenced primarily by the baseline cumulative windfarm developments of Lochend, Stroupster and Taigh Na Muir Dunnet. Achairn, Wathegar and Wathegar 2 form a group in the southern part of the LCT unit and are over 16 km to the south of the Site. Baillie Windfarm is in the western part of the LCT unit and over 25 km from the Site. These distant cumulative baseline developments and the fact that the effects of the proposed Development would primarily be indirect mean there would be a very limited direct physical effect on LCT 143 Farmed Lowland Plain and the cumulative effects arising from the addition of proposed .Development relate primarily to its interation with the nearby baseline cumulative sites of Lochend, Stroupster and Taigh Na Muir Dunnet.

190. The proposed Development would be a noticeable new feature in combination with Lochend, Stroupster and Taigh Na Muir Dunnet Windfarms and would intensify the influence of windfarm development in views to the south from the north-eastern part of the LCT. It would be seen in the same part of the view as Lochend and Stroupster Windfarms and in the same context of large-scale moorland and forestry plantation. There would be a scale comparison with Taigh Na Muir Dunnet Windfarm although the separation distance and different landscape context mean that the two developments would not be read as occupying the same LCT. The cumulative magnitude of effect is assessed as **'Medium'** to the north and west of the proposed Development and **'Low'** elsewhere.

191. The cumulative effects would be **'Significant'** in the north-eastern part of the LCT and **'Not Significant'** elsewhere.

Scenario 2 – Sites in Planning

192. **Table 7.4** indicates there are no windfarm developments of the type considered in this LVIA that are in planning and in LCT 143 Farmed Lowland Plain. This LVIA focuses on cumulative effects with Slickly Windfarm.

193. The addition of the proposed Development to Slickly Windfarm would result in a **'Medium'** cumulative magnitude of effect in the north-eastern part of the LCT. Slickly Windfarm would be 2.6 km to the south east of the proposed Development in the central part of unit CT3 of LCT 134 Sweeping Moorland and Flows. It would be associated more with CT3 than LCT 143 Farmed Lowland Plain. From the south and south west the proposed Development would be seen in combination with Slickly, Stroupster and Lochend Windfarms as evidenced by Viewpoints 11, 12, and 13 (**Figures 7.24** to **7.26**) with Slickly and Stroupster Windfarms making a greater contribution to cumulative effects. In views from the west the proposed Development would overlap with Slickly and Stroupster Windfarms with the two cumulative sites appearing more distant and the proposed Development making the greater contribution to cumulative effects. The cumulative magnitude of effect is assessed as **'Medium'** to the north and west of the proposed Development and **'Low'** elsewhere.

194. The cumulative effects would be **'Significant'** in the north-eastern part of the LCT and **'Not Significant'** elsewhere.

7.7.3.3 LCT 144 Coastal Crofts and Small Farms

Baseline Description

195. The nearest wind turbine (T10) of the proposed Development is approximately 1.8 km to the south west of the nearest unit of LCT 144 which is partly coincident with Duncansby Head SLA. The western unit is approximately 6.6 km from the nearest wind turbine (T1) and the south-eastern unit is 6.8 km from the nearest wind turbine (T9). The key characteristics of LCT 144 are described by SNH as:

- *"Narrow, settled and farmed coastal fringe with subtle variations in topography, from long stretches of strongly contained coastal shelves and raised beaches, to smaller pockets at river mouths and squeezed between dunes and areas of Cnocan – Caithness & Sutherland.*
- *Pastures and occasional arable fields, most often divided by post and wire fences, with the division of fields marked by crop colour and texture rather than boundaries.*
- *Low stone walls enclosing fields on the shelf above the High Cliffs and Sheltered Bays between Dunbeath and Wick.*
- *Little woodland within the more exposed east and north Caithness coasts.*
- *Small woodlands and clumps of trees present at the outlet of more sheltered straths or along the eastern shores of Kyle of Tongue and Loch Eriboll.*
- *Settlement most concentrated where this Landscape Character Type broadens at the mouths of major rivers along the east coast, where larger farms and crofts are concentrated.*
- *Small, hunkered-down croft houses and outbuildings loosely clustered or sometimes aligned in a linear fashion on the top of terraces or ridges above the coast or a river floodplain.*
- *More dispersed settlement pattern on the east coast to the north of Brora.*
- *Newer housing most evident to the south of Brora with larger modern houses often infilling spaces between older croft houses and contrasting with the size and form of these original buildings.*
- *A number of settlements, often located at bridging points and at the junction with the straths, many with harbours particularly on the east coast of Sutherland and Caithness.*
- *Major communications routes on the east coast including the A9, the railway and transmission line aligned along the edge of this landscape.*
- *A number of historic sites including churches, castles, mills and cemeteries.*
- *Highly visible landscape, seen from major roads and, on the east Sutherland coast, the railway.*
- *Complex visual composition of views tending to focus on the detail of houses, field patterns and crops, yet with the wider context of backdrop hills and sea adding diversity."*

196. All three units of LCT 144 are within 10 km of the proposed Development and exhibit most of the key characteristics to varying degrees.

Sensitivity

197. The value of LCT 144 is considered to be **'Medium'**. The western and north-eastern units are coincident with Dunnet Head SLA and Duncansby Head SLA respectively. Both the north-eastern unit and the south-eastern unit are coincident with the route of the NC500 route.

198. The susceptibility of the nearest unit of LCT 144 to change from the proposed Development is evaluated as **'Medium'**. The proposed Development would not be located in a unit of LCT 144 and would have the potential to affect aesthetic and perceptual aspects of landscape character, through the introduction of wind turbines into views to and from the three units. The proposed Development would increase the influence of windfarm development in units of LCT 144 which are affected to a degree by operational Lochend and Stroupster Windfarms both of which are located in LCT 134 Sweeping Moorland and Flows and to a lesser extent by the single wind turbine Taigh na Muir Dunnet located in LCT 143 Farmed Lowland Plain.

199. The susceptibility of the western and south-eastern units of LCT 144 is evaluated as **'Low'**. The separation distance from the proposed Development of greater than 5 km means that it would influence key characteristics of the baseline to a lesser degree. The potential for adverse scale comparisons between existing landscape components and the pattern of the landscape is less than would be the case for the nearest unit of LCT.

200. The combination of **'Medium'** value and **'Medium'** susceptibility gives the nearest unit of LCT 144 a sensitivity of **'Medium'**. The western and south-eastern units have a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

201. The proposed Development would be a new focal point in views from the western part of the north-eastern unit of LCT 144 and wind turbines would be partly visible. Topography rises from north to south and the majority of wind turbines would be positioned beyond the crest of a low ridge such that blade tips only would be visible for the majority of wind turbines from the western part of this unit of LCT 144. The magnitude of change in the western part of the unit would be **'Medium'** and in the rest of the unit would be **'Low'**.

202. The proposed Development would be visible from the western unit with the lower parts of wind turbines screened by intervening landform and by forestry plantation in the western part of the Site. While wind turbines would be a noticeable new feature in views from the western unit of LCT 144 the majority of its key characteristics would be unaffected. The composition of views to and from the unit would be affected to a limited degree. The magnitude of change is assessed as **'Low'**.

203. The ZTV shown on **Figure 7.5** indicates theoretical visibility from approximately half of the south-eastern unit. The hub height ZTV shown on **Figure 7.4** indicates that the amount of visibility reduces considerably at hub height indicating that blades or blade tips only would be theoretically visible from the majority of the unit. Viewpoint 14 (**Figure 7.27**) is in the southern part of the unit where there would be partial visibility of all 10 wind turbines with intervening landform providing screening to the lower parts of the proposed Development. The magnitude of change is assessed as **'Low'**.

Significance

204. The short separation distance between the proposed Development and the western part of the north-eastern unit of LCT 144 means that it would influence the composition of views looking south and south west. The size of the wind turbines relative to smaller components in the landscape would be adverse. However, most of the key characteristics of LCT 144 would not be affected and the underlying character of the landscape would endure. The visual relationship between the unit and the proposed Development would not compromise the physical components of LCT 144. The effect in the western part of the unit would be **'Significant'** and in the rest of the unit would be **'Not Significant'**.

205. The effects of the proposed Development would be **'Not Significant'** on the western and south-eastern units of LCT 144. The separation distance between the western unit and the proposed Development means that the proposed Development, while visible, would not exert a strong influence on the composition of views thereby limiting adverse scale comparisons between the wind turbines and smaller landscape components in the unit. The composition of views from the south-eastern unit would be affected and the proposed Development would extend the influence of windfarm development already experienced with Stroupster. However, mainly blades and blade tips of the proposed Development would be seen across the open and exposed landscape of LCT 134 Sweeping Moorland and Flows.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

206. The ZTV shown on **Figure 7.9: Cumulative Zone of Theoretical Visibility - Operational** indicates there would be theoretical visibility of the proposed Development with cumulative operational sites from all three units of LCT 144 considered in this LVIA. With regards to the north-eastern unit of LCT 144 the ZTVs shown on **Figures 7.10**, **7.11** and **7.12** indicate that the proposed Development only would be visible from the majority of the unit with the baseline site of Stroupster Windfarm making the greater contribution to combined visibility of the cumulative sites assessed. The influence on landscape character of consented windfarm sites of Cogle Moss, Achlachan and Limekiln Resubmission would be very limited. The cumulative magnitude of effect is assessed as **'Medium'** in that part of the unit and **'Low'** elsewhere.

207. The cumulative significance of effects on the western part of the north-eastern unit is assessed as **'Significant'** and elsewhere would be **'Not Significant'**.

208. There are no consented but not yet constructed cumulative sites that would influence the western and south-eastern units of LCT 144 and to which the proposed Development would give rise to cumulative effects greater than those assessed against the baseline of operational sites. The cumulative effects would therefore relate primarily to the addition of the proposed Development to Lochend, Stroupster and Taigh Na Muir Dunnet Windfarms. The cumulative magnitude of effect on both the western and south-eastern units is assessed as **'Low'** and the effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

209. Slickly Windfarm is the key cumulative site to consider in Scenario 2. The nearest other site in planning is Camster 2, 18 km to the south and very unlikely to influence landscape character of LCT 144.

210. The ZTV shown on **Figure 7.13** indicates theoretical visibility of both the proposed Development and Slickly Windfarm primarily from the western part of the north eastern unit in the vicinity of Gills and East Mey. The proposed Development would be seen in combination with Lochend, Stroupster and Slickly Windfarms. Slickly Windfarm would appear as a more distant element with a limited influence on the north-eastern unit of LCT 144. The proposed Development would have the greater influence on the unit of LCT 144 with Slickly Windfarm being less noticeable and perceived as a more distant element. The cumulative magnitude of change is assessed as **'Medium'** in the western part of the unit and **'Low'** elsewhere.

211. The cumulative effects of the proposed Development would be **'Significant'** in the western part of the unit and **'Not Significant'** elsewhere.

212. Cumulative sites in planning would have a limited influence on the western unit of LCT 144 and the cumulative effects would be **'Not Significant'**.

213. Slickly Windfarm would potentially have a greater influence on the south-eastern unit of LCT 144 although as evidenced by Viewpoint 14 (**Figure 7.27**) and the hub height ZTV show on **Figure 7.4** the proposed Development would have a limited influence on that unit. The cumulative effects would be **'Not Significant'**.

7.7.3.4 LCT 140 Sandy Beaches and Dunes

Baseline Description

214. The ZTV shown on **Figure 7.5** indicates that three units of LCT 140 coincide with the study area and with areas of theoretical visibility. The western unit is approximately 5 km from the nearest wind turbine (T1) and the two units to the south east are between 9 km and 14 km from the nearest wind turbine (T4). The key characteristics of LCT 140 are described by SNH as:

- *"Near continuous stretch of sandy beach between the Dornoch Firth and Brora.*
- *Low shingle ridges backing many of these sandy beaches and forming the base for dune systems.*
- *Large sand banks, splayed sandy beach and spit occurring at the mouth of the Dornoch Firth, backed by low dunes and expansive grassy links.*
- *Wide plain covered with gorse, heather and rough grazing land at Cuthill Links in the Dornoch Firth,*
- *Shingle bars at the mouth of Loch Fleet.*
- *Undulating machair abutting dunes and dune slacks along parts of the east Sutherland coast, with golf courses occupying some of these areas.*
- *Post-glacial raised shorelines backed by relict cliffs to the north of Brora with the sandy beach being narrow in this area.*
- *Long gently curved sandy arcs of Sinclairs Bay and Dunnet Bay in Caithness.*
- *Striking complex landscape pattern at Torrisdale Bay*
- *The long sandy beach at Balnakeil, with extensive dune system and machair.*
- *Remoteness of Sandwood Bay in west Sutherland.*
- *Focus for recreation with camp sites, caravan parks and car parks located close to more accessible areas of coast with golf courses present where links and machair areas are more extensive.*
- *Many small crofting communities located on the fringes of beaches, particularly in north and west Sutherland.*
- *Castles with historic gardens and designed landscapes, as well as prehistoric brochs and cists, cairns, and hut circles.*
- *Strong sense of space, light and exposure, and extensive visibility on the larger and more open stretches of sandy beach.*
- *Contained smaller beaches on the north coast with views focused along the beach to rocky headlands and out to sea to near shore islands.*
- *Strong contrast of the white/pale pink sands of the beaches in the north-west with surrounding darker cliffs and moorland.*
- *Wildness character to of all these seascapes, more intensely experienced on the more remote beaches along the north and west coasts of Sutherland."*

215. Where the SNH description refers to specific geographical locations outside the study area such as the Dornoch Firth, Balnakeil and Sandwood Bay the description is not directly relevant to the three units coincident with the study area. However, those key characteristics relating to recreation and wildness character are relevant and provide the basis for the evaluation of sensitivity and assessment of effects.

Sensitivity

216. The value of LCT 140 is considered to be **'Medium'**. The western unit is coincident with Dunnet Head SLA and is used for recreation. The two south-eastern units are used for recreation as evidenced by the car park in the northern unit and the golf course that extends across the western parts of the southern unit.

217. The susceptibility of the western unit to change from the proposed Development is evaluated as **'Low'**. The unit encompasses the beach and dune system in addition to a tract of land to landward across which the A836 passes. The character of LCT 140 relates to its seascapes and views along beaches. The beach in the western unit is aligned approximately south west to north east and the focus of views is likely to be on Dunnet Head and intervening seascapes. The proposed Development would be to the east of the beach and Dunnet Head and not in the line of sight of people walking along the beach or looking out to sea.

218. The susceptibility of the two south-eastern units to change from the proposed Development is evaluated as **'Low'**. The separation distance between these units and the proposed Development is relatively long and the ZTV indicates that mainly blades or blade tips would theoretically be visible. There is limited potential for the proposed Development to affect key characteristics of LCT 140 at these two units.

219. The combination of **'Medium'** value and **'Low'** susceptibility gives the three units of LCT 140 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

220. The proposed Development would be a noticeable feature in views looking east from the western unit of LCT 140. Viewpoint 22 (**Figure 7.35**) indicates that intervening landform and remaining forestry plantation would screen the lower parts of the wind turbines which would be seen in combination with Lochend Windfarm. While the proposed Development would be noticeable it would have a limited influence on views of seascapes and of Dunnet Head. The magnitude of effect is assessed as **'Low'**.

221. The ZTV shown on **Figure 7.5** and the photomontage of Viewpoint 14 (**Figure 7.27**) indicate that the proposed Development would be discernible from the two south-eastern units of LCT 140. The proposed Development would be a minor feature in views and would not impinge upon the sense of wildness or seascape views. The magnitude of effect is assessed as **'Negligible'**.

Significance

222. The effects on the three units of LCT 140 would be '**Not Significant'**. The proposed Development would be visible from the western unit. It would introduce more windfarm development into views to the east. However, it would have a limited influence on the sense of wildness and views of seascapes that include Dunnet Head. The composition and quality of views of seascapes would be affected to a limited degree and the key characteristics of the landscape would endure.

223. The proposed Development would be discernible in views from parts of the two south-eastern units of LCT 140. Where visible it would be a minor element in views due to mainly blades or blade tips being visible with intervening landform providing screening. The separation distance of 9 km and greater means that the proposed Development would not be associated with LCT 140 and would not result in adverse scale comparisons with features in the existing view composition.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

224. There are no cumulative sites that are consented but yet to be constructed which would influence the western or south-eastern units of LCT 140. The cumulative magnitude of change would therefore be none and the effects would be **'Not Significant'**. effects relate primarily to the addition of the proposed Development to Lochend and Taigh Na Muir Dunnet

Windfarms with very limited influence of Stroupster Windfarm. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

225. Slickly Windfarm is the key cumulative site to consider in Scenario 2 as other sites in planning are too distant to have any influence on landscape character. The proposed Development would be visible in combination with Slickly Windfarm from the western unit although Slickly Windfarm would have a limited influence due to the screening of lower parts of wind turbines by landform and the separation distance from the proposed Development and the unit of LCT. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

226. Slickly Windfarm would be noticeable from the two south-eastern units of LCT 140 although it would not impinge upon the key characteristics of these units which relate to the beaches and seascapes with views focused along the coast. The cumulative magnitude of effect is assessed as **'Negligible'** and the effects would be **'Not Significant'**.

7.7.3.5 LCT 141 High Cliffs and Sheltered Bays

Baseline Description

227. There are four units of LCT 141 in the study area and as mentioned in the initial assessment of effects above the two units within 10 km of the proposed Development are considered in more detail. The western unit is coincident with Dunnet Head and is approximately 8.2 km from the nearest wind turbine (T1). The eastern unit is coincident with Duncansby Head and the cliffs to the south. It is approximately 9 km from the nearest wind turbine (T10). The key characteristics of LCT 141 are described by SNH as:

- *"Duncansby Head, with high, fissured and blocky cliffs, jagged asymmetric rock stacks, arches and geos.*
- *Dunnet Head, with towering cliffs edged by low rocky reefs.*
- *Occasional inlets and coves, often with very deep and sheltered waters, and sometimes containing tiny harbours tucked between cliffs and not readily visible from the main coast road and settlement.*
- *Harbours on the east Caithness coast which have a strong association with settlements which are perched above the cliff.*
- *Moorland largely abutting this Landscape Character Type which is particularly open and sweeping to the east and north within Caithness.*
- *The most prominent and exposed headlands marked by lighthouses.*
- *Exhilarating experience of being precariously perched upon a high edge on the cliff tops, offering open elevated views and a perception of huge space.*
- *Views of turbulent currents at the juncture of the Pentland Firth and North Sea, heightening the sense of wildness experienced from the headland.*
- *The absence of development along the remote stretches of coast and a strong sense of naturalness creating a wild landscape character."*

228. The two units of LCT 141 are typical in that they exhibit the key characteristics to varying degrees. Both these units are accessible by road and have lighthouses at their extremities.

Sensitivity

229. The value of both units is considered to be **'Medium'**. The western units are coincident with Dunnet Head SLA and the eastern unit is coincident with Duncansby Head SLA. Both are visitor destinations where the focus of interest is likely to be on the cliffs and seaward views. Landward views form the context to the coastal views.

230. The susceptibility to change for both units is evaluated as **'Low'**. The proposed Development would not be located in either of the units and would be associated with the interior LCT 134 Sweeping Moorland and Flows landscapes viewed across the well settled and modified LCT 143 Farmed Lowland Plain and Coastal Crofts and Small Farms LCT. The proposed Development has the potential to affect the composition of open, elevated views and the open moorland visible from both units.

231. The combination of **'Medium'** value and **'Low'** susceptibility gives the two units of LCT 141 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

232. Viewpoint 4 (**Figure 7.17**) is located at the viewing area in the western unit of LCT 141 and indicates that the proposed Development would be a noticeable feature in landward views. The key characteristics of LCT 141 are mainly the physical features of coastal cliffs, reefs and inlets and views of the sea and the turbulent interface between sea and land. Views in the direction of the proposed Development do not exhibit the key characteristics of LCT 141. The proposed Development would not impinge upon views out to sea nor would it affect the perception of elevation and scale of coastal features due to the separation distance between the proposed Development and the western unit. The magnitude of change is assessed as **'Low'**.

233. Viewpoint 6 (**Figure 7.19**) is located at the viewing area at Duncansby Head in the eastern unit of LCT 141. It indicates that the proposed Development would be associated with the elevated moorland landscapes that extend across the left part of the view. The wind turbines would be partly visible at a distance of approximately 10 km. Views in the direction of the proposed Development do not exhibit the key characteristics of LCT 141. The proposed Development would not impinge upon views out to sea nor would it affect the perception of elevation and scale of coastal features due to the separation distance between the proposed Development and the unit. The magnitude of change is assessed as **'Low'**.

Significance

234. The effects of the proposed Development on the two units of LCT 141 would bet **'Not Significant'**. The proposed Development would not be located in either of the units. It would be visible in landward views from the two units. The key characteristics of LCT 141 are exhibited in views along the coast or out to sea where the sense of elevation and wildness are stronger and where physical features of LCT 141 are noticeable and contribute to the composition of views. The separation distance to the proposed Development and degree of visibility means it would not result in adverse scale comparisons or exert a strong influence on landscape character.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

235. There are no consented sites that would influence the western unit of LCT 141. The key cumulative baseline developments are operational Taigh Na Muir Dunnet, Lochend and Stroupster all of which are part of the existing baseline comprising part of Scenario 1. Viewpoint 4 (**Figure 7.17**) shows a view from the western unit and indicates that the proposed Development would be visible in combination with Taigh Na Muir Dunnet, Lochend and Stroupster Windfarms in a narrow field of view where windfarm development is an established element. There are no other cumulative sites with which the proposed Development would interact and give rise to cumulative effects on the western unit of LCT 141. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects would be **'Not Significant'**.

236. Lochend and Stroupster are the key cumulative baseline developments to consider in relation to the eastern unit of LCT 141 which is coincident with Duncansby Head and represented by Viewpoint 6 (**Figure 7.19**). The viewpoint is considered representative of the type of view experienced from LCT 141 and therefore the influence of the addition of the proposed Development to cumulative development on landscape character. It indicates that Lochend and Stroupster Windfarms would exert a limited influence on landscape character with consented sites have no discernible influence. The addition of the proposed Development would be a noticeable change albeit with a limited influence on defining characteristics of LCT 141. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

237. Slickly Windfarm is the key cumulative development considered in Scenario 2. Other sites in planning are distant features with very limited or no influence on LCT 141. Slickly Windfarm would be visible in the same field of view as Lochend, Stroupster and Taigh Na Muir Dunnet Windfarms as indicated by Viewpoint 4 (**Figure 7.17**). The addition of the proposed Development would intensify the appearance of windfarm development in views from LCT 141 although it would not affect the defining characteristics of the landscape. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects would be **'Not Significant'**.

238. The ZTV shown on **Figure 7.13** indicates that both Slickly Windfarm and the proposed Development would theoretically be visible from the eastern unit of LCT 141. Viewpoint 6 (**Figure 7.19**) indicates that blade tips only of Slickly Windfarm would be discernible and is considered to be typical of views from the unit and representative of the influence of Slickly Windfarm on landscape character. The influence of Slickly Windfarm would be very limited and the addition of the proposed Development would result in a cumulative magnitude of change assessed as **'Low'**. The cumulative effects of the proposed Development would be **'Not Significant'**.

7.7.4 Detailed Assessment of Effects on Landscape Designations

7.7.4.1 Castle of Mey (Barrogill Castle) GDL

239. A detailed assessment of the effects of the proposed Development on the significance of Castle of Mey (Barrogill Castle) GDL as a cultural heritage asset is described in **Chapter 11: Archaeology and Cultural Heritage**. This LVIA describes an assessment of the effects of the proposed Development on the contribution of the GDL to landscape character and includes reference to views from the GDL. An assessment of effects on the visual amenity of visitors to the GDL is described in **Section 7.8**.

Baseline Description

240. Castle of Mey (Barogill Castle) GDL is described by HES as being "*of outstanding historical value due to its association with the Royal Family and the Earls of Caithness, the designed landscape of Castle of Mey provides the setting for a category A listed castle and makes a major contribution to the surrounding scenery*." The location and setting of the GDL are described by HES as follows:

"The Castle of Mey is situated on the north coast of Scotland approximately 5 miles (8km) west of John O'Groats, and 15 miles (24km) east of Thurso. The lands of Mey lie on the flat coastal plain of Caithness and are extremely exposed to the harsh climate and winds which blow off the Pentland Firth. The surrounding landscape is predominantly pasture land and there are few trees. Magnificent views can be gained west to Dunnet Head, the most northerly point of Scotland, and across the Pentland Firth to the Orkney islands. The Castle and its woodlands are significant from the A836 and other minor roads between it and the coast, particularly from the east. The flat nature of the surrounding landscape limits views of the policies which are enclosed within the woodlands to the south and the policy walls to the north.

The Castle of Mey commands a magnificent position some 500 yards from the shore of the Pentland Firth. The designed landscape extends south to the lodge, west to the edge of the walled garden and the woodlands flanking the west drive, and east to Barrogill Mains farm. To the north, a road links the Castle with a road running west to the pier at Harrow, approximately 1km to the west of the Castle. To the south, a road runs due south from the lodge flanked by a beech/hawthorn hedge and a stone dyke to the A836. A shelterbelt has been established along the northern edge of the A836, but this is not part of the Castle of Mey property.

The designed landscape includes some 100 acres (40.5ha) of parkland, 11.64 acres (4.7ha) of woodland, and 2.68 acres (1.08ha) of formal garden which includes 1.25 acres (.5ha) of walled gardens."

Sensitivity

241. The GDL is evaluated as being of very **'High'** value. It is a cultural heritage designation of national importance recognised as making a *"…major contribution to the surrounding scenery"*. While it is not strictly a landscape designation recognition of its contribution to the surrounding scenery gives it a higher value than the **'Medium'** value attributed to LCT 143 farmed Lowland Plain in this LVIA.

242. Susceptibility to change from the proposed Development is considered to be **'Low'**. The proposed Development would not be located in the GDL. The nearest wind turbine (T7) would be approximately 3.2 km to the south of the GDL and the proposed Development would be visible from the GDL as indicated by Viewpoint 5 (**Figure 7.18**). Viewpoint 5 is representative of the designed view to the south which is described in **Chapter 11: Archaeology and Cultural Heritage** as "*…not a view of 'grand' design, nor even is it very interesting; it is modest, domestic and largely naturalistic. It does not focus or take advantage of any feature beyond the castle curtilage.*" The contribution of the GDL to the surrounding scenery is experienced in views from the surrounding landscape in the direction of the GDL. There are views looking west from the A836 in which the GDL and castle are seen in views of Dunnet Head. There are limited views looking east from the A836 due to landform and buildings. There are views from the minor roads to the east and west of the GDL and views from the north looking south in which the castle is prominent and the woodland in the GDL is noticeable. **Chapter 11: Archaeology and Cultural Heritage** notes that "*…the castle is prominently visible in a coastal setting from the east at distances of less than 1km, but that the grandeur of the castle and its complex architecture with multiple towers and chimneys can only be readily appreciated from outside its own grounds from Harrow pier and also on the Braes of Harrow approaching the castle from the west, each also at a distance of less than 1km*." The proposed Development has limited potential to affect views from the surrounding landscape where the contribution of the GDL to scenery is exhibited.

243. The combination of very **'High'** value and **'Low'** susceptibility give Castle of Mey (Barrogill Castle) GDL a sensitivity of **'Medium-High'**.

Assessment of Effects

Magnitude

244. The magnitude of change is assessed as **'Low'**. The proposed Development would be visible from the GDL and would be visible from the landscape around the GDL to which it makes a scenic contribution. The contribution is more evident in views from the east and in views from the north. The proposed Development would not result in physical effects on the GDL and would not alter any of the characteristics that contribute to scenic quality of the surrounding locality to which the GDL contributes. The proposed Development would be visible in the designed view south from the castle as shown on **Figure 7.18**. **Chapter 11: Archaeology and Cultural Heritage** notes that *"…the driveway along which the view of the proposed Development would be channelled was primarily designed to guide the view of visitors northwards towards the castle on arrival.*" It also notes that views to the south are not cited in the List Description of the GDL.

Significance

245. The effects of the proposed Development on the contribution of Castle of Mey (Barrogill Castle) GDL to landscape character would be **'Not Significant'**. The separation distance between the GDL and the proposed Development mean that it would not impinge upon views towards the GDL where its contribution to scenic quality is exhibited. The proposed Development would be associated more with the moorland landscape with forestry plantation than the smaller scale landscape of LCT 143 Farmed Lowland Plain in which the GDL is located. **Chapter 11: Archaeology and Cultural Heritage** notes that **"***where turbines would be introduced into the view, they would not obscure or interfere with any intended intervisibility with any natural or historical focal point.*"

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

246. The key baseline cumulative developments to consider in Scenario 1 are Taigh Na Muir Dunnet and Lochend. The nearest consented cumulative development would be Cogle Moss Windfarm, 18 km to the south. Castle of Mey GDL is beyond the cumulative influence of Cogle Moss Windfarm as the contribution of the GDL to landscape character is relatively localised. The addition of the proposed Development therefore has the potential to affect the contribution of the GDL to landscape character primarily when seen in combination with either or both Taigh Na Muir Dunnet and Lochend Windfarms.. Stroupster Windfarm would not influence the GDL as it would not be seen in the context of the designated landscape's influence on landscape character. The addition of the proposed Development would not alter characteristics of the GDL or any of the characteristics that contribute to scenic quality of the surrounding locality. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

247. Slickly Windfarm is the key cumulative development to consider in Scenario 2, as other sites in planning are too distant to have any influence on the contribution of the GDL to landscape character and scenic quality. Slickly Windfarm would be located to the west of Stroupster Windfarm and the ZTV shown on **Figure 7.13** indicates theoretical visibility of both the proposed Development and Slickly Windfarm from the GDL and surrounding locality. The proposed Development would not be visible in combination with Slickly Windfarm when looking west towards the GDL. It would potentially be visible in views looking south from the locality surrounding the GDL and it is likely that the upper parts only of Slickly Windfarm would be discernible and would be perceived as distant elements on the horizon. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.7.4.2 Dunnet Head SLA

Baseline Description

248. The key landscape and visual characteristics of Dunnet Head SLA are described by THC as follows:

- *"A peninsula offering a spectacular panorama both seaward and inland to distant mountain peaks.*
- *The headland which is massive in scale and formed from Old Red Sandstone. In detail, the cliffs form a complex cracked, fissured and eroded profile, with prominent and distinctive horizontal strata clearly visible.*
- *Reaching heights of up to 100m, the cliffs form an abrupt and sharply defined vertical edge to the coastline viewed against the open sea from distance. From distant viewpoints, these are seen to rise in stark contrast to the open sea while, from the cliff tops, the sense of exposure can be dramatic and, for some, intimidating.*
- *Low vegetation clings to the cliff tops, ledges, and eroded faces and parts of the rocky shoreline. The rich green hues of algae growing on damp areas of the cliff faces provide further striations of contrast against the red sandstone rock face.*
- *Sea birds including puffins frequent the cliff ledges and steep coastal grasslands. Together with the pounding spray and constant swell, the sounds and activity of these birds contribute to a dynamic experience.*

- *Sweeping moorland, punctuated by lochans, hilltops and the remains of WWII defensive structures, forms a contrasting open interior to the peninsula, where remote qualities can be experienced within a short distance from the busier settled areas.*
- *Elevated views from the peninsula reveal a pattern of pasture and arable fields to the south; these form a distinctive transition between the exposed headland and the settled agricultural lowlands to the south."*

249. The special qualities of the SLA are described as:

- *"Panoramic Views from Prominent Headland and Striking Cliffs*
  - *The prominent headland forms a striking large landmark at the northernmost point of the British mainland. High numbers of visitors travel along the single-track road to the viewpoint and lighthouse which occupies a commanding position and is itself a prominent feature in views from land and sea.*
  - *Views to the sheer cliffs of distinctive, horizontally layered Old Red Sandstone are enlivened by the changing light and weather conditions, the crashing waves of the Pentland Firth and the presence of many species of nesting sea birds.*
  - *Distinctive landform features also include ravines such as Red and Chapel Geos, crags and promontories such as The Neback and Easter Head, and by areas of rocky coast where the cliff have slumped and eroded.*
  - *In clear conditions expansive views are obtained, from the cliff tops and from elevated positions, extending across the sea to Orkney, Cape Wrath, Strathy Point, Duncansby Head, and inland to the peaks of Caithness including Morvern, Maiden Pap and Scaraben. These views looking across flat terrain or a low seaward horizon, are so expansive that they can prompt strong emotional responses, including evoking an "edge of world" feeling.*
- *Isolated Moorland and Lochans*
  - *Inland from the sea cliffs the headland consists of an outlying area of moorland with scattered lochans, isolated from the landward moors by a farmed and settled coastal strip that extends across the neck of the peninsula.*
  - *The moorland seems extensive, even though it is actually quite small in extent, as its edges are typically not seen from its interior, and there is a lack of comparable size indicators.*
- *Contrasting Bay and Cliff Landscapes*
  - *The sweeping curve of fine sandy beach and sheltered agricultural landscape at Dunnet Bay seems to form a secluded haven in sharp contrast to the elevated and dramatic headland which projects beyond."*

Sensitivity

250. The value of Dunnet Head SLA is evaluated as **'High'**. It is a non-statutory locally designated landscape. It is a visitor attraction with a core path leading from a car park to the south west of the lighthouse to a viewing area on a knoll to the east. There is a 360 degree view at the viewing area.

251. Susceptibility to change from the proposed Development is evaluated as **'Medium'**. The proposed Development would not be located in the SLA and does not have the potential to physically affect landscape components important to the character and special qualities of the landscape of the SLA. Viewpoint 4 (**Figure 7.17**) indicates that the proposed Development would be visible from the viewing area in the SLA and the ZTV shown on **Figure 7.6** indicates theoretical visibility from more elevated parts of the SLA and from the south-eastern part represented by Viewpoint 22 (**Figure 7.35**). The proposed Development has the potential to affect views inland which are noted in the THC description as a key landscape and visual characteristic and contribute to the special quality of *"panoramic views from prominent headland and striking cliffs*".

252. The combination of **'High'** value and **'Medium'** susceptibility give Dunnet Head SLA a sensitivity of **'Medium-High'**.

Assessment of Effects

Magnitude

253. The nearest wind turbine (T1) of the proposed Development would be approximately 5.6 km to the east of Dunnet Head SLA. T1 would also be the nearest wind turbine to the viewing area at a distance of approximately 10.3 km. The proposed Development would not result in physical effects on any landscape components in the SLA. It would introduce windfarm development into south facing views in a part of the view where windfarms form part of the baseline (Taigh na Muir Dunnet, Lochend and Stroupster) and an established component of the view. The proposed Development would be a noticeable new feature and would slightly extend the horizontal field of view occupied by windfarm development. The proposed Development would be associated with the moorland landscape with forestry plantation in a part of the view with a fairly simple composition on the horizon and an absence of key landscape features that could contribute to scenic quality in the backdrop to views of the proposed Development. **Figure 7.17** indicates that the proposed Development would not interrupt views of the lone mountains to the south which are visible on the distant horizon. It would be separated from the line of sight to the lone mountains and would also be separated from the coastline by an area of well settled and modified LCT 143 Farmed Lowland Plain.

254. The ZTV shown on **Figure 7.6** indicates the proposed Development would theoretically be visible from the beach at Dunnet Bay and from the stretch of the NC500 that runs parallel to the beach. Views of the proposed Development from the beach would be truncated by the **'High'** dunes that occur to the east. It is likely that there would be glimpses of the proposed Development through gaps in the dunes and blade tips would potentially be visible above lower parts of the dunes. The focus of views is likely to be along the beach rather than inland. Views from the NC500 are also likely to be focussed out to sea and towards Dunnet Head. Where visible the proposed Development would have a limited influence on the sense of wildness and views of seascapes that include Dunnet Head. The composition and quality of views would be affected to a limited degree and the key characteristics and special qualities of the SLA would endure.

255. Magnitude of effect is assessed as **'Low'**.

Significance

256. The effects of the proposed Development on Dunnet Head SLA would be **'Not Significant'**. The proposed Development would not alter any physical features of the SLA. The description of key landscape and visual characteristics of the SLA indicate that views inland to the south are important with specific mention of distant mountain peaks including Morvern, Maiden Pap and Scaraben at a distance of approximately 50 km. Viewpoint 4 (**Figure 7.17**) indicates that the proposed Development would not be in line of sight between the SLA and the distant lone mountains and would be seen in a different part of the view associated more with the lower lying moorland landscapes where Lochend and Stroupster Windfarms are present.

257. The proposed Development would be noticeable from the SLA and **Figure 7.17** indicates that it would slightly increase the horizontal extent of windfarm development in views from the viewing area at Dunnet Head. The wind turbine rotors would introduce movement into that part of the view where windfarm developments are part of the baseline environment and an established component of views. However, the degree of change to the key landscape and visual characteristics and special qualities of the SLA is limited.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

258. As indicated in the assessment of the proposed Development in the current baseline of operational and under construction windfarms it would be visible from Dunnet Head SLA although it would not impinge upon views of key features in inland views and would not affect the key qualities and characteristics of the SLA which focus upon coastal scenery. There are no consented but not yet constructed developments that are likely to influence the SLA. The cumulative magnitude of effect resulting from the addition of the proposed Development in Scenario 1 is assessed as **'Low'** and the cumulative effects would be **'Not Significant'** on Dunnet Head SLA.

Scenario 2 – Sites in Planning

259. Slickly Windfarm is the key cumulative development in planning that is considered in Scenario 2. Viewpoint 4 (**Figure 7.17**) indicates that the proposed Development would be seen in combination with Slickly, Lochend, Stroupster and Taigh Na Muir Dunnet Windfarms. Slickly Windfarm would occupy a gap on the horizon between Stroupster and Lochend Windfarms appearing as a dense array of wind turbines. The proposed Development would overlap with the gap and with Stroupster Windfarm. The wide spacing of wind turbines in the proposed Development and linear arrangement creates visual permeability and mitigates the intensification of development that would be experienced with a denser array. The proposed Development slightly increases the horizontal extent of windfarm development visible from the SLA. The cumulative magnitude of effect resulting from the addition of the proposed Development in Scenario 2 is assessed as **'Low'** and the cumulative effects would be **'Not Significant'** on Dunnet Head SLA.

7.7.4.3 Duncansby Head SLA

Baseline Description

260. The key landscape and visual characteristics of Duncansby Head SLA are described by THC as follows:

- "*The approach to the coastline is across gentle open grassland adding to the visual drama when the cliffs are suddenly encountered and the expansive views of the surrounding sea revealed. A distinctive and diverse sequence of views is available as the paths parallel to the coastline are followed.*

- *This area of spectacular coastal scenery is formed from horizontally bedded Old Red Sandstones with a complex mix of erosion landforms that include cliffs, stacks, geos, arches, caves and wave cut platforms.*
- *The cliffs are formed from less resistant sandstones than the neighbouring Dunnet Head and are characterised by a lower height (c.60m), and with more abundant vegetation cover on ledges and faces. Views are open and principally seaward with the landform largely screening glimpses of the shoreline far below. The high cliffs landscapes contrast with occasional sand and shingle beaches within sheltered bays.*
- *In clear conditions, the seaward views are very impressive, varying as you move along the coast.*
- *The cliffs and stacks form ideal nesting habitat for breeding sea birds. The constant noise and movement of these birds form a key feature of the landscape.*
- *Immediately inland of the Head open grassland and moorland are the predominant ground cover, although wood pole mounted overhead lines are prominent, and crofting settlement increases in density westwards towards John o' Groats."*

261. The special qualities of the SLA are described as:

- *"Commanding views and 'End of the Road' Experience*
  - *The location of the headland at the extreme north-eastern point of the British mainland is a key attribute of the area and is the compelling attraction for the many of the people who visit.*
  - *The headland is clearly separated from the neighbouring settlement of John o' Groats and the immediate approach to the cliff line is over a simple expanse of open grassland adding to the surprise and drama of the spectacular views when they are ultimately revealed.*
  - *The lighthouse and adjoining car park form a focus for visitors and offer a safe haven from which to venture to appreciate the dynamic forces of the Pentland Firth with its visibly powerful currents and turbulent waves which crash onto the shore far below.*
  - *Tidal streams flowing through the Pentland Firth have earned the title 'Hell's Mouth' due to the Atlantic and North Sea ebbing in opposite directions forming a flurry of eddies, races and overfalls including the Duncansby Bore. These can be seen from Duncansby Head.*
  - *In clear conditions, impressive seaward views extend to Dunnet Head and the Orkney Islands while closer to shore, the island of Stroma and the Pentland Skerries form focal features.*
- *Striking and Diverse Coastal Landforms*
  - *The striking arrangement of coastal features and landforms include sheer cliffs, rocky arches, jagged stacks, deep ravines, crashing waves and shingle bays concentrated within a relatively small area.*
  - *The coastal edge is a very dynamic environment and in an exposed position such as this the sea cliffs are continually being moulded and transformed by the destructive power of wind and wave. They stand prominent and dark juxtaposed with a simple backdrops of grassland and open sea.*
  - *In contrast to these land-based views which are dominated by the long, low horizons of the Caithness landscape and the Pentland Firth, views from the sea are dominated by the presence of the looming vertical rock faces. These can appear as vast, dark walls when in shadow or alternatively as a diverse patchwork of details when in the spotlight of sunlight.*
  - *Nesting sea birds, perched precariously on narrow ledges, or swooping close to the cliffs create noise and movement and emphasise the sheer scale and inaccessible nature of the coastal edge."*

Sensitivity

262. The value of Duncansby Head SLA is evaluated as **'High'**. It is a non-statutory local landscape designation. It is a visitor destination with a car park and a viewing area to the west of the lighthouse. The viewing area provides a 180 degree view to the north across the Pentland Firth to the Orkney Islands. A core path heads south from the viewing area along the cliff top to the Stacks of Duncansby.

263. Susceptibility to change is evaluated as **'Low'**. As indicated by the description of the SLA, the focus of key landscape and visual characteristics and special qualities is on coastal features and scenery. Views inland are not a defining aspect of the SLA. The proposed Development has the potential to affect inland views and has the potential to affect views from Duncansby Head SLA towards Dunnet Head SLA.

264. The combination of **'High'** value and **'Low'** susceptibility give Duncansby Head SLA a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

265. The nearest wind turbine (T10) would be approximately 9 km to the west of Duncansby Head SLA and approximately 10 km west of the viewing area. Viewpoint 6 (**Figure 7.19**) indicates that the proposed Development would be visible on the horizon in views inland from the SLA. The proposed Development would occupy a small proportion of the field of view and would be seen as a distant feature associated with the moorland landscape beyond the crofting land in the mid-ground. The proposed Development would not impinge upon the small scale LCT 144 Coastal Crofts and Small Farms or LCT 143 Farmed Lowland Plain. Viewpoint 6 indicates that Dunnet Head is visible in the right of the view. The proposed Development would not impinge upon views of Dunnet Head or diminish the scale of the cliffs at Dunnet Head when viewed from Duncansby Head.

266. The magnitude of effect is assessed as **'Low'**.

Significance

267. The effects of the proposed Development on Duncansby Head SLA would be **'Not Significant'**. The description of key landscape and visual characteristics and special qualities indicates that views inland are not a defining aspect of the SLA. Views of Dunnet Head are identified as contributing to the SLA's special qualities. The proposed Development would be visible on the horizon in views inland from the SLA and would be associated with large-scale moorland landscapes of LCT 134 Sweeping Moorland and Flows rather than the smaller scale, settled and farmed landscape that lie between the proposed Development and the SLA. The proposed Development would not impinge upon views of Dunnet Head. It would be separated from the main field of view in which Dunnet Head is visible.

Cumulative Assessment (refer to cumulative ZTV Figures 7.9-7.13)

Scenario 1 – Operational, Under Construction and Consented

268. As indicated in the assessment of the proposed Development in the current baseline of operational and under construction windfarms it would be visible from Duncansby Head SLA although it would not impinge upon views of key features in views along the coast to Dunnet Head or south towards Stacks of Duncansby. There are no consented but not yet constructed developments that are likely to influence the SLA. The cumulative magnitude of effect resulting from the addition of the proposed Development in Scenario 1 is assessed as **'Low'** and the cumulative effects would be **'Not Significant'** on Duncansby Head SLA.

Scenario 2 – Sites in Planning

269. Slickly Windfarm is the key cumulative development in planning that is considered in Scenario 2. Viewpoint 6 (**Figure 7.19**) indicates that the proposed Development would be seen in combination with Slickly, Lochend and Stroupster Windfarms. Blade tips of Slickly Windfarm would be visible occupying a small proportion of the horizon between Stroupster Windfarm and the proposed Development. The proposed Development would be a noticeable new feature on the horizon occupying a small proportion of the field of view. The cumulative magnitude of effect resulting from the addition of the proposed Development in Scenario 2 is assessed as **'Low'** and the cumulative effects would be **'Not Significant'** on Duncansby Head SLA.

7.8 Assessment of Effects on Views and Visual Amenity

7.8.1 Introduction

270. The assessment of effects on views and visual amenity is about the changes to views experienced by people (visual receptors) resulting from the proposed Development. The assessment considers the degree of change relative to the baseline view i.e. the existing view without the proposed Development, and also considers the composition and quality of existing views. The assessment of effects on views and visual amenity is informed by baseline research, ZTV analysis, field survey and analysis of 3D modelling and visualisations. The assessment uses 23 viewpoints which have been agreed with consultees as suitably representative of visual receptors in the study area. Visualisations are provided for each viewpoint and these are used to inform the assessment of effects and illustrate the appearance, size and scale of the proposed Development in typical views. The visualisations have been prepared in accordance with current guidance and a method statement is provided in **Technical Appendix 7.1.**

7.8.2 Initial Assessment of Effects

7.8.2.1 Viewpoints

271. Viewpoints have been selected in consultation with stakeholders and provide information to inform the assessment of effects on visual amenity and views. The location of viewpoints is shown on **Figure 7.7** and visualisations are shown on **Figures 7.14** to **7.36**. As mentioned above viewpoints may be representative of typical views experienced by key visual receptors, illustrative of a particular view to indicate the degree of impact or conversely absence of impact or a specific view identified on Ordnance Survey maps. An initial assessment of viewpoints is described in this Section and referred to in the initial assessment of effects on key visual receptors. Where **'Significant'** effects are likely a more detailed assessment of viewpoints and visual receptors is described in **Section 7.8.3**.

Viewpoint 1 North Hoy and West Mainland NSA (Figure 7.14)

272. Viewpoint 1 is included to illustrate potential views from North Hoy and West Mainland NSA. As described in **Section 7.7** the impacts on North Hoy and West Mainland NSA would be **'Not Significant'**. The wireline indicates that the proposed Development would be visible as a minor feature on the distant horizon. It would occupy a small proportion of the field of view and would be associated with the Scottish mainland and Caithness rather than the immediate context to the view which is defined by coastal scenery and the wide expanse of the Pentland Firth. Viewpoint 1 is not assessed in detail.

Viewpoint 2 Burwick, South Ronaldsay (Figure 7.15)

273. Viewpoint 2 is representative of views from the southern part of South Ronaldsay in the Orkney Islands and one of the closest points in the Orkney Islands to the proposed Development at a distance of 19.4 km from the nearest wind turbine. The photomontage indicates that the proposed Development would be a noticeable new feature on the horizon. It would not impinge upon important features in the view such as Duncansby Head in the left and Dunnet Head in the right of the view. It would occupy a small proportion of the field of view and would result in limited change to the composition of views. Viewpoint 2 is not assessed in detail.

Viewpoint 3 Gills Bay Ferry (Figure 7.16)

274. Viewpoint 3 is representative of views from the route of the ferry between St Margaret's Hope and Gills Bay. The wireline indicates that the proposed Development would be partly visible with lower parts of the wind turbines screened by intervening landform. The viewpoint is considered further with reference to the ferry route as a key visual receptor.

Viewpoint 4 Dunnet Head (Figure 7.17)

275. Viewpoint 4 is a specific viewpoint at Dunnet Head viewing area. It is identified on Ordnance Survey maps and there is a viewing area with a view indicator. The viewpoint is in Dunnet Head SLA the impacts on which are described previously. The viewpoint is considered in more detail.

Viewpoint 5 Castle of Mey Entrance (Figure 7.18)

276. Viewpoint 5 is located in Castle of Mey (Barrogill Castle) GDL at the southern entrance to the castle. It is representative of visitors who access the interior of the castle using the southern entrance. Views from the visitor car park and walled garden to the north are screened by walls, buildings and woodland. The viewpoint was requested by HES in connection with the assessment of effects on cultural heritage assets as described in **Chapter 11: Archaeology and Cultural Heritage**. It is included in the LVIA as it indicates potential visibility of the proposed Development for visitors to the castle. It is considered in more detail.

Viewpoint 6 Duncansby Head (Figure 7.19)

277. Viewpoint 6 is located at Duncansby Head viewing area. It is identified on Ordnance Survey maps and is in Duncansby Head SLA the impacts on which are described previously. The viewpoint is considered in more detail.

Viewpoint 7 A836 West of Thurso (Figure 7.20)

278. Viewpoint 7 is located on the A836 to the west of Thurso on the route of the NC500. It provides an elevated view in the direction of the proposed Development and is a sequential viewpoint. It is considered in more detail as there is the potential for cumulative sequential effects.

Viewpoint 8 Barrock (Figure 7.21)

279. Viewpoint 8 is representative of views from the scattered settlements of Barrock and Inkstack approximately 2.8 km to the north west of the proposed Development. The viewpoint is considered in more detail.

Viewpoint 9 Brabster (Figure 7.22)

280. The viewpoint is located on a minor road to the south of Upper Gills and is representative of views that would be experienced by motorists. It is considered in more detail.

Viewpoint 10 A99 Warth Hill (Figure 7.23)

281. Viewpoint 10 is located at the viewpoint off the A99 at Warth Hill. It is representative of views that would be experienced by visitors on the NC500. It is a sequential viewpoint and is considered in more detail.

Viewpoint 11 Lochend (Figure 7.24)

282. Viewpoint 11 is representative of views experienced from the settlement of Lochend. It is considered in more detail.

Viewpoint 12 Bower (Figure 7.25)

283. Viewpoint 12 is representative of views experienced from the settlement of Bower. It is considered in more detail.

Viewpoint 13 Lyth (Figure 7.26)

284. Viewpoint 13 is representative of views experienced from the settlement of Lyth. It is considered in more detail.

Viewpoint 14 Keiss (Figure 7.27)

285. Viewpoint 14 is representative of views that would be experienced from the settlement of Keiss. The photomontage indicates that blade tips only would be visible with the majority of the proposed Development screened by intervening landform. It is not considered in more detail.

Viewpoint 15 Ben Dorrery (Figure 7.28)

286. The viewpoint is located at the summit of Ben Dorrery which is a small hill 244 m in height that marks the transition from LCT 143 Farmed Lowland Plain to LCT 134 Sweeping Moorland and Flows. It provides an elevated view across the vast tract of low lying land between Ben Dorrery and the proposed Development. While the effects of the proposed Development are unlikely to be **'Significant'** it is considered in more detail as it is used to inform the cumulative assessment and to assist in illustrating the scale of the landscape and the distance over which the proposed Development may be visible.

Viewpoint 16 A9 Georgemas Junction (Figure 7.29)

287. Viewpoint 16 is on the A9 near Georgemas Junction where the Far North railway line diverges and where there are a number of scattered settlements and rural properties in addition to the village of Halkirk 2 km to the west. The wireline indicates that the proposed Development would be screened by intervening vegetation and landform. The viewpoint is not considered in more detail.

Viewpoint 17 Watten (Figure 7.30)

288. Viewpoint 17 is located in the settlement of Watten and is representative of views experienced from the settlement and surrounding area and from the A882. The wireline indicates that the majority of the proposed Development would be screened by intervening landform and that cumulative windfarm development would potentially be noticeable from the surrounding area. The viewpoint is not considered in more detail.

Viewpoint 18 Noss Head (Figure 7.31)

289. Viewpoint 18 is located on a core path that leads from a car park to the west of the lighthouse at Noss Head to Castle Sinclair Girnigoe a scheduled monument on the south side of Sinclair's Bay. The viewpoint is considered in more detail as it provides an indication of potential cumulative effects.

Viewpoint 19 A9 near Rangag (Figure 7.32)

290. The viewpoint is located on the A9 near Rangag and is a sequential viewpoint that gives an indication of cumulative effects. While the viewpoint is not assessed in detail it is used to inform the initial assessment of effects on the A9.

Viewpoint 20 Badlipster (Figure 7.33)

291. The viewpoint is located at an elevated location on a minor road to the north of Camster Windfarm and approximately 11 km to the west of Wick. It is assessed in more detail as it provides an indication of cumulative effects.

Viewpoint 21 Thrumster (Figure 7.34)

292. Viewpoint 21 is located in the village of Thrumster and on the route of the NC500 to the south of the proposed Development. It is assessed in more detail as it provides an indication of cumulative and sequential effects.

Viewpoint 22 A836 east of Castletown (Figure 7.35)

293. Viewpoint 22 is located on the route of the NC500 and is in the south of Dunnet Head SLA. It is considered in more detail.

Viewpoint 23 Far North Railway Line (Figure 7.36)

294. Viewpoint 23 is a wireline viewpoint on the Far North Railway Line. It is considered in more detail as it provides a sequential view and informs the assessment of potential cumulative effects.

7.8.2.2Key Visual Receptors

295. Key visual receptors are those considered more likely to experience **'Significant'** effects.

Settlements, Villages and Townships

296. The following settlements, villages and townships are assessed in detail:

- Barrock and Inkstack;
- Gills and Upper Gills;
- Canisbay;
- Mey and East Mey,
- Scarfskerry and Rattar;
- Dunnet and West Dunnet area;
- Lyth,
- Bower,
- Freswick and Tofts;
- Castletown; and
- Keiss.

Residential Properties

297. All residential properties within 2 km of the outermost wind turbines of the proposed Development have been assessed in detail. In addition, a residential visual amenity assessment (RVAA) has been undertaken and this is described in **Technical Appendix 7.2.**

Transportation Routes

298. The following transportation routes are considered in detail:

- A9 between Loch Rangag and Thurso;
- A99 between Thrumster and John o Groats;
- A882 between Wick and Georgemas Junction;
- A836 from John o' Groats to Scrabster Hill to the west of Thurso;
- B876 between Castletown and Reiss to the north west of Wick;
- B855 between Dunnet and Dunnet Head;
- the minor road that runs between Barrock and Upper Gills;
- the minor road that runs between Upper Gills and Lyth;
- Gill Bay to St Margaret's Hope ferry; and
- John o' Groats to Burwick ferry.

299. Other minor roads within 5 km of the proposed Development are considered generally in the assessment of effects on visual amenity and views.

Recreational Cycling and Walking Routes

300. NCN1 is considered in detail and core paths within 5 km of the proposed Development are also considered in detail. Core paths are shown on **Figure 7.7**.

Other Recreation Destinations and Visitors Attractions

301. The NC500 tourist route is considered in the assessment of effects on the A99 and A836. Castle of Mey GDL is considered in the assessment of effects in **Section 7.7** and with reference to Viewpoint 5 (**Figure 7.18**). Dunnet Head and Duncansby Head are considered with reference to Viewpoint 4 (**Figure 7.17**) and Viewpoint 6 (**Figure 7.19**) respectively. Castletown Heritage Centre is considered with reference to Viewpoint 22 (**Figure 7.35**)

7.8.3 Detailed Assessment of Effects on Viewpoints

7.8.3.1Viewpoint 3 Gills Bay Ferry (Figure 7.16)

Baseline Description

302. The viewpoint is located on the route of the Gills Bay to St Margaret's Hope ferry. On the day that photography was taken, due to sea conditions, the ferry passed to the west of the island of Stroma part of which is visible on the left of the view. A wireline only (**Volume 3b: Figure 7.16-NS-03**) of the view from a position within 5 km of the proposed Development on a course headed to the east of the island of Stroma is also provided .Castle of Mey is discernible to the right of centre and in the centre of the view the land rises from St John's Point in the direction of the Site to Mey Hill. In the left of the view Stroupster Windfarm is visible on the horizon and Taigh na Muir Dunnet single wind turbine is discernible in the right of the view. Gills Bay ferry terminal is not visible but is positioned to the left of centre.

Sensitivity

303. The view is evaluated as being of **'Medium'** value. It is located on a scheduled ferry passenger service used by people local to the area and visitors.

304. Susceptibility to change from the proposed Development is evaluated as **'Medium'**. It is a transient view and the proposed Development has the potential to affect a small part of the overall views available from the ferry route.

305. The combination of **'Medium'** value and **'Medium'** susceptibility give Viewpoint 3 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

306. There would be sustained views of the proposed Development as the ferry approaches the Caithness coast. The proposed Development would be a noticeable new feature on the horizon occupying a small proportion of the field of view. It would not impinge upon views of Dunnet Head or Duncansby Head and would not be associated with the smaller scale landscape of LCT 143 Farmed Lowland Plain and LCT 144 Coastal Crofts and Small Farms. The magnitude of change on Viewpoint 3 is assessed as **'Low'**.

Significance

307. The effects of the proposed Development on Viewpoint 3 would be **'Not Significant'**. While the proposed Development would be noticeable it would not be a dominant focal point in views. Views from the ferry are available in all directions and it is likely that peoples' attention would be drawn to other features in the views such as the island of Stroma, Dunnet Head and the cliffs to the east (left in the view) towards Duncansby Head and views of the Orkney Islands.

308. Closer to Gills Bay between the island of Stroma and the ferry terminal within approximately 5 km of the proposed Development effects would potentially be **'Significant'**.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

309. From this viewpoint Stroupster, Lochend and Taigh Na Muir Dunnet Windfarms are visible and form part of the cumulative baseline. **Figure 7.16** inidcates that blade tips of the consented cumulative development of Limekiln Resubmission Windfarm are theoretically visible at a distance of over 39 km, however, it is unlikely to be discernible and the cumulative effets relate to the addition of the proposed Development to the cumulative baseline. The low vertical angle of the view and the presence of rising landform at the coast mean that Lochend Windfarm is barely discernible. Taigh Na Muir is a minor element in a large-scale landscape with a horizontal emphasis. Stroupster Windfarm occupies a small proportion of the horizon in the view and is perceived as a distant element and a separate development due to the separation distance between it and the proposed Development. Limekiln Resubmission Windfarm is a consented development at a distance of 39.1 km from the viewpoint and unlikely to be discernible. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

310. From this viewpoint Slickly Windfarm would be perceived as a continuation of Stroupster Windfarm with mainly blades of Slickly wind turbines visible. The proposed Development would be a noticeable new feature on the horizon and would increase the influence of windfarm development on views from this location. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

7.8.3.2 Viewpoint 4 Dunnet Head (Figure 7.17)

Baseline Description

311. The viewpoint is located at the viewing area at Dunnet Head in Dunnet Head SLA. The viewing area is a short distance from the car park and allows 360 degree views. There are views across the Pentland Firth to the island of Hoy and the Orkney Islands. There are views east towards the island of Stroma and Duncansby Head and views to the west along the Caithness coast to Strathy Point. Views inland extend south to the lone mountains of Morvern, Scaraben and Maiden Pap and in southern Caithness at a distance of 50 km. Views in the direction of the Site show high rocky cliffs in the centre of the view and to the right of centre. To the left of centre the land slopes gradually down to beaches and rock platform with low, rocky cliffs in the left of the view. The landscape between the sea and the Site is settled and farmed. The green hues dotted with white houses contrast with the brown moorland in the foreground of the views and at the Site where the dark forestry plantation is visible. In the centre of the view Taigh na Muir wind turbine, Stroupster Windfarm and Lochend Windfarm are visible.

Sensitivity

312. The value of the view is evaluated as **'High'**. The viewpoint is in the non-statutory designated SLA. A viewing area has been constructed and a path leads to the viewing area from a designated car park. The viewpoint is identified on Ordnance Survey maps and Dunnet Head is identified as a destination in tourist brochures and accommodation.

313. Susceptibility to change from the proposed Development is evaluated as **'High'**. The viewing area has been created to benefit visitors to Dunnet Head by providing an elevated location from which views may be obtained with information provided to assist in the identification of features visible in the view.

314. The combination of **'High'** value and **'High'** susceptibility give Viewpoint 4 a sensitivity of **'High'**.

Assessment of Effects

Magnitude

315. **Figure 7.17** indicates that the proposed Development would be a noticeable new feature in views inland from Viewpoint 4. It would occupy a small proportion of the horizon in the view and would result in a slight increase in the horizontal extent of the view in which windfarm development is visible. The proposed Development would be associated with the modified landscape of forestry plantation and the open expansive moorland that extends across the horizon in that part of the view at a distance of more than 10 km. It would be seen in the context of the farmed and settled landscape of the coastal fringe although it would not impinge upon the smaller scale pattern and features in the landscape. It would also be seen in the same part of the view as the operational Stroupster, Lochend and Taigh Na Muir Dunnet Windfarms and would result in a slight increase in the horizontal extent of the view occupied by windfarm development. A group of operational windfarm development that includes Achairn, Wathegar, Wathegar 2, Bilbster and Camster is a distant feature at distances of greater than 25 km to the south and seen against a backdrop of low hills. The magnitude of effect is assessed as **'Low'**.

Significance

316. The effects of the proposed Development on Viewpoint 4 Dunnet Head would be **'Not Significant'**. The proposed Development would be a noticeable new feature in views and would introduce movement into the view. The immediate context to the proposed Development is of a large scale landscape in which windfarm development is already located. While the proposed Development would add to existing windfarm development it would not extend development into parts of the view in which development is absent in the baseline. The proposed Development would not impinge upon views of lone mountains which are important focal points in the distance to the south. Neither would it impinge upon views of the coast and Duncansby Head. There is sufficient separation between the proposed Development and coastal features to avoid adverse scale comparisons.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

317. In this view Stroupster, Lochend and Taigh Na Muir Dunnet Windfarms are visible in the same field of view as the proposed Development which increases slightly the horizontal extent of windfarm development. The proposed Development would intensify the appearance of wind energy development in the view introducing development into a part of the view where windfarms are an established component. The wireline shown in **Figure 7.17** indicates that the consented development of Achlachan 2 Windfarm would barely be discernible and unlikely to be differentiated from operational development in its vicinity. The consented Limekiln Resubmission and Cogle Moss Windfarms would both be discernible and associated with existing operational development at distances of 20.8 km and greater. These consented developments would have a limited influence on views and a very limited association with the proposed Development. The cumulative magnitude of effects is assessed as **'Low'** and the effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

318. Slickly Windfarm would occupy a gap on the horizon between Stroupster and Lochend Windfarms appearing as a dense array of wind turbines. The proposed Development would overlap with the gap and with Stroupster Windfarm. The wide spacing of wind turbines in the proposed Development and linear arrangement creates visual permeability and mitigates the intensification of development that would be experienced with a denser array. The proposed Development slightly increases the horizontal extent of windfarm development visible from the viewpoint. The cumulative magnitude of effect resulting from the addition of the proposed Development in Scenario 2 is assessed as **'Low'** and the cumulative effects would be **'Not Significant'**.

7.8.3.3 Viewpoint 5 Castle of Mey Entrance (Figure 7.18)

Baseline Description

319. The viewpoint is located at the entrance to the Castle of Mey on the south side of the building. The viewpoint location was requested by HES as it is representative of the designed view from the castle looking south through a gap in woodland. It is included in this LVIA as it is a point where visitors enter and exit the castle and where an appreciation of the designed view and garden would be obtained. It is representative of views from this part of the GDL to which visitors have access. The woodland in the left and right of the view extends approximately 200 m to the south enclosing an area of grassland in which three regularly spaced tree clumps are positioned.

Sensitivity

320. The value of the view is evaluated as **'High'**. Castle of Mey is a cultural heritage designation with a single designed view to the south. Viewpoint 5 is representative of that view. The viewpoint is also representative of Castle of Mey as a visitor destination to which people are drawn with the expectation of views from the designed landscape. The evaluation is also influenced by the rarity of the view in that there is a single designed vista to the south.

321. Susceptibility to change from the proposed Development is evaluated as **'High'**. The view is channelled between woodland to a part of the horizon where the proposed Development would be located. The proposed Development has the potential to change the composition of the view.

322. The combination of **'High'** value and **'High'** susceptibility give Viewpoint 5 a sensitivity of **'High'**.

Assessment of Effects

Magnitude

323. **Figure 7.18** indicates that the majority of the proposed Development would be screened by landform and vegetation. The nacelles of two wind turbines (T7 and T10) would be visible above vegetation in the left of the view. People who walk to the benches shown in the centre of the baseline photograph on **Figure 7.18** would experience slightly more open views across the pasture field with the three clumps of trees in the foreground. There would be views of T7 and T10 at distances of greater than 3.8 km in addition to blade tips of other wind turbines in the proposed Development The movement of rotors of wind turbines would draw attention to the blades that extend above the horizon line in views. Existing windfarms are not visible due to screening by woodland in the foreground and landform. The magnitude of change is assessed as **'Low'**.

Significance

324. The effects on viewpoint 5 would be **'Not Significant'**. The view is a small part of the visitor experience of Castle of Mey GDL where visitors also have access to the walled garden from which there woud not be views and the castle interior from which there would be restricted external views unrelated to an appreciation of the designed view and parkland to the south

represented by Viewpoint 5. As mentioned in **Section 7.7** and in **Chapter 11: Archaeology and Cultural Heritage** "…*the driveway along which the view of the proposed Development would be channelled was primarily designed to guide the view of visitors northwards towards the castle on arrival.*" It also notes that views to the south are not cited in the List Description of the GDL While the view is important to the immediate context of the GDL and experience of visiting the castle the amount of change to the view is limited.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

325. There are no consented cumulative developments visible in the view nor are any baseline cumulative developments visible. The cumulative magnitude of effect is none and the cumulative effect is **'Not Significant'**.

Scenario 2 – Sites in Planning

326. There are no cumulative in planning developments visible in the view. The cumulative magnitude of effect is 'none' and the cumulative effect is **'Not Significant'**.

7.8.3.4 Viewpoint 6 Duncansby Head (Figure 7.19)

Baseline Description

327. The viewpoint is located at the viewing area at Duncansby Head in Duncansby Head SLA. Views from Duncansby Head viewing area are focused on a 180 degree field of view centred on due north looking towards the Orkney Islands. The view shown in **Figure 7.19** looks west-south west towards the Site. The composition of the view is influenced strongly by expanses of moorland in the foreground leading to the horizon in the left of the view and extending to the central part of the horizon at the Site. The scattered properties and farmsteads of the well settled and farmed coastal fringe are a feature of the view drawing the eye to the horizon and to Dunnet Head in the right of the view. Wind turbines of Stroupster Windfarm are visible on the horizon in the left of the view.

Sensitivity

328. The value of the view is evaluated as **'High'**. The viewpoint is in the non-statutory designated SLA. A viewing area has been constructed and a path leads to the viewing area from a designated car park. The viewpoint is identified on Ordnance Survey maps and Duncansby Head is identified as a destination in tourist brochures and accommodation.

329. Susceptibility to change from the proposed Development is evaluated as **'Medium'**. The viewing area has been created to benefit visitors to Duncansby Head by providing an elevated location from which views may be obtained primarily to the north but also along the coast to Dunnet Head.

330. The combination of **'High'** value and **'Medium'** susceptibility give Viewpoint 6 a sensitivity of **'Medium-High'**.

Assessment of Effects

Magnitude

331. The proposed Development would be a noticeable new feature on the horizon in views to the west/south west from the viewing area at Duncansby Head. The focus of views is along the coast and to the north of Viewpoint 6. The proposed Development would be seen to the left of Dunnet Head which is a focal point in views along the coast. It would not impinge upon views of Dunnet Head and would be associated with the forested moorland landscapes on the horizon as opposed to the smaller scale features of the coastal fringe. The magnitude of change is assessed as **'Low'**.

Significance

332. The effects of the proposed Development would be **'Not Significant'**. It would occupy a small proportion of the field of view and be partially visible. It would not be in the principal focus of views from Duncansby Head and would not impinge upon views of Dunnet Head. The proposed Development would be associated with the large-scale moorland landscape rather than the smaller scale features of the coastal fringe.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

333. In the cumulative baseline, Stroupster Windfarm is partly visible in the view and the upper parts of Lochend wind turbines are visible. Taigh Na Muir Dunnet Windfarm is barely discernible. The addition of the proposed Development would increase the extent of windfarm development visible on the horizon. The separation distance between the proposed Development and Stroupster Windfarm means they would be perceived as two separate developments both associated with the expansive moorland landscape on the horizon. Limekiln Resubmission Windfarm is unlikely to be discernible. The cumulative magnitude of effects is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

334. Blade tips of Slickly Windfarm would be discernible on the horizon to the right of Stroupster Windfarm and could be perceived as part of the same development. There would be sufficient separation between Slickly Windfarm and the proposed Development to avoid coalescence and over-intensification of development in the view. The cumulative magnitude of effects is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.8.3.5 Viewpoint 7 A836 West of Thurso (Figure 7.20)

Baseline Description

335. The viewpoint is located on the A836 approximately 2.3 km to the west of Thurso on the route of the NC500. Thurso is visible in the right of the view at the head of Thurso Bay. To the left of centre cliffs on the north side of Dunnet Bay on the south side of Dunnet Head are visible and Dunnet Head is a notable feature in the view. Lochend Windfarm is discernible in the centre of the view and Stroupster Windfarm is visible to the right of centre.

Sensitivity

336. The value of the view is evaluated as **'Medium'**. It is a transient view on the route of the NC500. It is not located in a designated landscape.

337. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The view represents transient receptors who would experience views of the proposed Development for a very short duration.

338. The combination of **'Medium'** value and **'Low'** susceptibility give Viewpoint 7 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

339. **Figure 7.20** indicates that the proposed Development would occupy a small proportion of the field of view at a point where the horizon is fairly level. The proposed Development would be seen in the context of the surrounding lowland landscapes which at these separation distances appear large in scale with small features having a very limited influence on the composition of the view. The proposed Development would not compete with the key feature of Dunnet Head in the left of the view and it would not impinge upon the coastal fringe. The magnitude of change is assessed as **'Low'**.

Significance

340. The effects of the proposed Development would be **'Not Significant'**. The view is transient and experienced for a short duration by travellers moving eastward on the A836 before descending into Thurso. While the proposed Development would be visible to people in the direction of travel, it would not impinge upon views of Dunnet Head nor would it conflict with the scale of landform or features in its immediate context.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

341. There are no consented cumulative developments visible in the view. The cumulative magnitude of effect is none and the cumulative effect is **'Not Significant'**.

342. Stroupster and Lochend Windfarms are discernible in the view with wind turbines of each appearing at a similar size on the horizon. The addition of the proposed Development would slightly increase the amount of windfarm development across the horizon. It would be more noticeable than Lochend and Stroupster Windfarms and would add development to a part of the view where windfarms are an established component. The cumulative magnitude of effect is assessed as **'Low'** and the effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

343. Slickly Windfarm would be perceived as a dense linear array of wind turbines that overlaps with Stroupster Windfarm and slightly increases the horizontal extent of windfarm development across the horizon. The addition of the proposed Development would intensify the appearance of windfarm development in a part of the view where it is an established component. It would be similar to the pattern of existing and emerging development in that it is a linear layout with discrete

groups of wind turbines and an overall visually permeable layout. The cumulative magnitude of effect is assessed as **'Low'** and the effect would **'Not Significant'**.

7.8.3.6 Viewpoint 8 Barrock (Figure 7.21)

Baseline Description

344. The viewpoint is located in the scattered hamlet of Barrock approximately 2.8 km to the north west of the proposed Development. Barrock is a loose arrangement of farmsteads and dwellings on land slightly elevated above the surrounding landscape. The viewpoint is located in the east of Barrock where views in the direction of the Site are not interrupted by vegetation, landform and buildings. The landform in views is fairly level and the composition of the view is simple comprising of moorland and forestry. Lochend Windfarm is visible in the right of the view and wind turbines of Stroupster Windfarm are discernible on the horizon in the centre of the view.

Sensitivity

345. The viewpoint is located on a public road in Barrock. The hamlet is not in a designated landscape or in a conservation area. It is therefore evaluated as being of **'Low'** value.

346. Susceptibility to change from the proposed Development is evaluated as **'High'**. The viewpoint is representative of views experienced by people in the hamlet of Barrock as opposed to views from individual properties. People in Barrock are likely to have prolonged viewing opportunities as opposed to transient views and are likely to be focussed on their immediate surroundings.

347. The combination of **'Low'** value and **'High'** susceptibility give Viewpoint 8 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

348. The proposed Development would be a very noticeable new feature in views from Barrock. It would become a new focal point occupying a large proportion of the field of view to the south east. It would extend the influence of windfarm development and introduce more movement into the view. The magnitude of effect is assessed as **'High'**.

Significance

349. The effects of the proposed Development on Viewpoint 8 would be **'Significant'**. The proposed Development would introduce a large amount of change into a fairly simple view composition. While views are already influenced by windfarm developments the proposed Development would result in a greater number of wind turbines being present and become a defining feature of views to the south east.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

350. Stroupster Windfarm has a limited influence on the view due to the distance from the viewpoint. Lochend Windfarm occupies a small proportion of the view and has a linear layout with close spacing of wind turbines. Neither of these windfarms would interact with Cogle Moss and Aclachan 2 Windfarms which would potentially be visible at distances of 14.5 km and greater. These two consented developments would be seen in the context of existing operational windfarms and would have a limited influence on views from this location. The proposed Development would be a very noticeable addition to operational and consented windfarm development. While consented windfarms have a limited influence the magnitude of cumulative effect is assessed as **'High'** and the effect would be **'Significant'** due to the degree of incremental change brought about the proposed Development.

Scenario 2 – Sites in Planning

351. Slickly Windfarm would be visible on the horizon and would be perceived as dense array that extends the influence of Stroupster Windfarm across the horizon. The proposed Development would have a greater influence on the view and would be a very noticeable addition. The magnitude of cumulative effect is assessed as **'High'** and the effect would be **'Significant'**.

7.8.3.7 Viewpoint 9 Brabster (Figure 7.22)

Baseline Description

352. Viewpoint 9 is located on the minor road that leads from Upper Gills to Lyth. Views are open and expansive with semi-improved grassland in the foreground leading to forestry plantation. The second frame of the view shows long distance views towards Morvern, Scaraben and Maiden Pap 50 km to the south with Stroupster Windfarm in the left of the view.

Sensitivity

353. The view is evaluated as being of **'Low'** value. It is not in a designated landscape and is a transient view on a local road.

354. Susceptibility to change from the proposed Development is assessed as **'Medium'**. The expansive views to the south are important and the proposed Development has the potential to impinge upon these views or become a competing focal point.

355. The combination of **'Low'** value and **'Medium'** susceptibility give Viewpoint 9 a sensitivity of **'Low'**.

Assessment of Effects

Magnitude

356. The magnitude of effect is assessed as **'High'**. The proposed Development would be a new focal point in views extending beyond the forestry plantation in the foreground. It would be seen to the right of the distant hills of Ben Alisky, Beinn Glas-choire and Beinn Breac which are approximately 40 km to the south west. The proposed Development would occupy a large proportion of the field of view and would be a defining feature of the view. However, the view is transient and effects would be of very short duration.

Significance

357. The effects of the proposed Development on Viewpoint 9 would be **'Significant'**. Although it is a transient view the road is used locally by people living in the area and provides an elevated long distance view to the south. The proposed Development would become a new focal point in views and would impinge slightly upon long distance views to the south.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

358. Stroupster Windfarm is the key cumulative baseline site to be considered in Scenario 1. The visualisation shown on **Figure 7.22** indicates that the proposed Development would be visible in succession with Stroupster Windfarm and with other more distant operational windfarms which have less influence on the view. Cogle Moss and Achlachan 2 Windfarms would be discernible at separation distances of greater than 13.5 km and would be seen in the context of operation windfarms with which they would visually merge. The cumulative magnitude of effect is assessed as **'High'** and the effect would be **'Significant'**.

Scenario 2 – Sites in Planning

359. Slickly Windfarm is the key site in planning considered in Scenario 2. It would be seen as increasing the influence of Stroupster Windfarm on the view with two wind turbines in the right of the Slickly Windfarm overlapping with wind turbines in the far distance. The addition of the proposed Development would result in windfarm development in a part of the view where currently development is not visible albeit in a view that is extensively modified by forestry plantation. The cumulative magnitude of effect is assessed as **'High'** and the effect would be **'Significant'**.

7.8.3.8 Viewpoint 10 A99 Warth Hill (Figure 7.23)

Baseline Description

360. Viewpoint 10 is located off the A99 at Warth Hill trig point. There is a car park nearby with a viewpoint identified on Ordnance Survey maps facing north. The viewpoint is representative of walkers and visitors using the NC500. The view looks out across the LCT 134 Sweeping Moorland and Flows. The dark hues of moorland and forestry plantation are the dominant elements in the view. Green areas of pasture are visible in the centre of the view enclosed by the darker green forestry plantation. In the left of the view Stroupster Windfarm is partly visible and in the right of the view Dunnet Head is visible. The right frame shows views to the south with the skyline in the right of the view formed by the distant hills to the west of Dunbeath.

Sensitivity

361. The value of the view is evaluated as **'Medium'**. It is a transient view on the route of the NC500. It is not located in a designated landscape.

362. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The view represents transient receptors who would experience views of the proposed Development for a very short duration.

363. The combination of **'Medium'** value and **'Low'** susceptibility give Viewpoint 10 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

364. The proposed Development would be a noticeable new feature in views and would occupy a small proportion of the field of view. It would be seen in the context of the large-scale moorland landscape in which windfarm development is and established component. The pale colour of the wind turbines would contrast with the dark hues of moorland and forestry plantation and the proposed Development would introduce more movement into the view. The magnitude of effect is assessed as **'Medium'**.

Significance

365. The effects of the proposed Development on Viewpoint 10 would be **'Not Significant'**. The proposed Development would introduce a noticeable new feature into the view which would contrast with the dark colour of the moorland and forestry which are the dominant land cover in the view. The large-scale moorland landscape could accommodate the proposed Development which would not impinge upon views of key features such as Dunnet Head in the right of the view.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

366. Lochend and Stroupster Windfarms are the key cumulative baseline developments to consider in Scenario 1. Other cumulative operational developments are visible in the distance and have a limited influence on views from this location. Lochend Windfarm is perceived as a relatively minor element in the large scale landscape in the view and the proposed Development would be seen in combination with Lochend Windfarm. Stroupster Windfarm is in the mid-ground in the left of the view and would be seen in succession with the proposed Development in a similar landscape context. Cogle Moss and Achlachan 2 Windfarms would be seen as part of the pattern of distant development and would have a limited influence on views and a very limited association with the proposed Development. The cumulative magnitude of effect is assessed as **'Medium'** and the effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

367. Slickly Windfarm would overlap with Stroupster Windfarm and would extend slightly the influence of windfarms. The addition of the proposed Development would further increase the proportion of the view occupied by windfarm development while maintaining separation between Stroupster and Slicky Windfarms and avoiding over-intensification of development. The cumulative magnitude of effect is assessed as **'Medium'** and the effect would be **'Not Significant'**.

7.8.3.9 Viewpoint 11 Lochend (Figure 7.24)

Baseline Description

368. The viewpoint is located near the trig point on a minor road to the south of Lochend. It is representative of views experienced from the Lochend, Greenland and Reaster areas. The view looks across pasture fields in the foreground to forestry plantation and moorland at the Site. The landform at the Site is fairly level and the composition of the view is simple comprising of moorland and forestry. Lochend Windfarm is visible in the centre of the view and wind turbines of Stroupster Windfarm are discernible on the horizon in the right of the view.

Sensitivity

369. The viewpoint is located on a public road in an area where there are scattered dwellings and farmsteads. The viewpoint is not in a designated landscape or in a conservation area. It is therefore evaluated as being of **'Low'** value.

370. Susceptibility to change from the proposed Development is evaluated as **'High'**. The viewpoint is representative of views experienced by people in the area as opposed to views from individual properties. People are likely to have prolonged viewing opportunities as opposed to transient views and are likely to be focussed on their immediate surroundings.

371. The combination of **'Low'** value and **'High'** susceptibility give Viewpoint 11 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

372. The proposed Development would be a very noticeable new feature in views. It would become a new focal point occupying a large proportion of the field of view to the north east. It would extend the influence of windfarm development and introduce more movement into the view. The magnitude of effect is assessed as **'High'**.

Significance

373. The effects of the proposed Development on Viewpoint 11 would be **'Significant'**. The proposed Development would introduce a large amount of change into an existing view of fairly simple composition. While views are already influenced by windfarms, the proposed Development would result in a greater number of wind turbines being present and become a defining feature of views to the north east.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

374. Lochend Windfarm is a noticeable feature in view occupying a small proportion of the field of view. Stroupster Windfarm is a more distant element on the skyline in the right of the view and its immediate context is an expansive large-scale moorland landscape. The addition of the proposed Development would introduce a very noticeable new feature that would overlap with Lochend Windfarm. There would be a large separation distance between it and Stroupster Windfarm and it would not be read as the same development or result in over-intensification of development. Cogle Moss Windfarm would be discernible at a distance of 9.9 km and would be perceived as an addition or extension to the pattern of operational development and would result in very limited discernible change to the baseline from this viewpoint. Cogle Moss Windfarm would not be associated with the proposed Development and would not be an influencing factor in views. The cumulative magnitude of effect is therefore assessed as **'High'** and the effects would be **'Significant'**.

Scenario 2 – Sites in Planning

375. Slickly Windfarm would occupy a similar position in the view as Stroupster Windfarm although it would appear closer to the view and would slightly extend the influence of windfarms across the horizon in the right of the view. It would be seen in succession with the proposed Development. The proposed Development would not be read as the same development as Slickly Windfarm nor would it result in over-intensification of development. The cumulative magnitude of effect is assessed as **'High'** and the effects would be **'Significant'**.

7.8.3.10 Viewpoint 12 Bower (Figure 7.25)

Baseline Description

376. Viewpoint 12 is located on a minor road to the south of the crossroads at the hamlet of Bower. It is representative of views that would be experienced by people in the Bower area including Bowermadden, Bowertower, Hastigrow, and Halcro. **Figure 7.25** indicates that views in the direction of the Site are characterised by gently rolling topography with land cover mainly of pasture fields. Field boundaries are predominantly trimmed hedges with post and wire fences and drystone walls. There are small copses of conifer plantation and occasional deciduous trees associated with buildings. Settlement pattern is typical of the area with scattered dwellings and farmsteads and small groups of properties. There is a noticeable change in land cover at the Site where moorland and forestry plantation are visible. Lochend Windfarm is visible to the left of centre and Stroupster Windfarm is visible in the right of the view.

Sensitivity

377. The viewpoint is located on a public road in an area where there are scattered dwellings and farmsteads. The viewpoint is not in a designated landscape or in a conservation area. It is typical of views in that area and is evaluated as being of **'Low'** value.

378. Susceptibility to change from the proposed Development is evaluated as **'High'**. The viewpoint is representative of views experienced by people in the area as opposed to views from individual properties. People are likely to have prolonged viewing opportunities as opposed to transient views and are likely to be focussed on their immediate surroundings.

379. The combination of **'Low'** value and **'High'** susceptibility give Viewpoint 12 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

380. The proposed Development would be a noticeable new feature on the horizon at a distance of approximately 7.8 km. It would occupy a small proportion of the field of view and would be associated with moorland and forestry landscapes as opposed to the smaller scale features of the LCT 143 Farmed Lowland Plain in which the viewpoint is located and which define the character and composition of views. The large-scale landscape of LCT 143 Farmed Lowland Plain merging into LCT 134 Sweeping Moorland and Flows has a horizontal emphasis and a simple composition. The proposed Development could be accommodated in the view without impinging upon notable features and avoiding adverse scale comparisons with other features in the landscape. The magnitude of effect is assessed as **'Low'**.

Significance

381. The effects of the proposed Development on Viewpoint 12 would be **'Not Significant'**. The viewpoint is not sensitive, and the large-scale of the landscape and horizontal emphasis of topography mean that the proposed Development could be accommodated in the view.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

382. Lochend and Stroupster Windfarms are noticeable features on the horizon both occupying a small proportion of the field of view and perceived as minor elements in the view composition. The nearest consented windfarm would be Cogle Moss at a distance of 8.5 km which would be associated with the pattern of operational windfarm development to the south at Bilbster, Wathegar etc. Cogle Moss Windfarm would potentially be partly visible in glimpsed views in succession and in a part of the view where wind energy is an established component. Cogle Moss Windfarm would have a very limited influence and association with the proposed Development resulting in a **'Low'** cumulative magnitude of effect. The cumulative effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

383. Slickly Windfarm would slightly intensify the appearance of wind energy development on the horizon in the direction of Stroupster Windfarm. The wind turbines would be larger than those of Stroupster and it would be seen as a denser layout of wind turbines of mixed height. The proposed Development would extend development across the horizon although it would not over-intensify development and a large separation distance would remain between it and Stroupster and Slickly Windfarms. The cumulative magnitude of effect would be **'Low'**, and the cumulative effects would be **'Not Significant'**.

7.8.3.11 Viewpoint 13 Lyth (Figure 7.26)

Baseline Description

384. Viewpoint 13 is located on a minor road to the east of the crossroads at the hamlet of Lyth near the war memorial. It is representative of views that would be experienced by people in the Lyth and Sortat area. **Figure 7.26** indicates that views in the direction of the Site are characterised by gently rolling topography with land cover mainly of pasture fields. Field boundaries are predominantly trimmed hedges with post and wire fences. There are small copses of conifer plantation and occasional deciduous trees associated with buildings. Settlement pattern is typical of the area with scattered dwellings and farmsteads and small groups of properties. There is a noticeable change in land cover at the Site where moorland and forestry plantation are visible extending to become more dominant in the right of the view. Lochend Windfarm is visible to the left of centre.

Sensitivity

385. The viewpoint is located on a public road in an area where there are scattered dwellings and farmsteads. The viewpoint is not in a designated landscape or in a conservation area. It is typical of views in that area and is evaluated as being of **'Low'** value.

386. Susceptibility to change from the proposed Development is evaluated as **'High'**. The viewpoint is representative of views experienced by people in the area as opposed to views from individual properties. People are likely to have prolonged viewing opportunities as opposed to transient views and are likely to be focussed on their immediate surroundings.

387. The combination of **'Low'** value and **'High'** susceptibility give Viewpoint 13 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

388. The proposed Development would be a noticeable new feature on the horizon at a distance of approximately 4.8 km. It would occupy a **'Medium'** proportion of the field of view and would be associated with moorland and forestry landscapes as opposed to the smaller scale features of the LCT 143 Farmed Lowland Plain in which the viewpoint is located. The large-scale landscape of LCT 143 Farmed Lowland Plain merging into LCT 134 Sweeping Moorland and Flows has a horizontal emphasis and a simple composition. The proposed Development could be accommodated in the view without impinging upon notable features. The magnitude of effect is assessed as **'Medium'**.

Significance

389. The effects of the proposed Development on Viewpoint 13 would be **'Not Significant'**. The viewpoint is not sensitive, and the large-scale of the landscape and horizontal emphasis of topography mean that the proposed Development could be accommodated in the view.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

390. The proposed Development would be seen in combination with Lochend Windfarm and in succession with Stroupster Windfarm which is to the right of the view. Cogle Moss Windfarm would be the nearest consented development at a distance of 6.5 km to the south of the viewpoint. Achlachan 2 Windfarm would be 18 km to the south west and would not be discernible. Cogle Moss Windfarm may be discernible through gaps in vegetation and would be seen in succession with the proposed Development. It would have a very limited influence on views with the addition of the proposed Development to the baseline of operational windfarms being the key effect. The cumulative magnitude of effect is assessed as **'Medium'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

391. Slickly Windfarm would be visible in the right of the view extending beyond the central field of view. It would be seen in succession with the proposed Development and would overlap with Stroupster Windfarm. Wind turbines of the proposed Development would be perceived as a similar size to those of Slickly Windfarm in the view although the separation distance between the two developments means they would not be perceived as a single scheme nor would the addition of the proposed Development result in over-intensification of windfarm development. The cumulative magnitude of effect is assessed as **'Medium'** and the cumulative effect would be **'Not Significant'**.

7.8.3.12 Viewpoint 15 Ben Dorrery (Figure 7.28)

Baseline Description

392. The viewpoint is located at the summit of Ben Dorrery which is a small hill 244 m in height and marks a transition in landscape character from LCT 143 Farmed Lowland Plain in the east to LCT 134 Sweeping Moorland and Flows in the west. The baseline view shows an expanse of moorland in the foreground with a few dwellings and farmsteads. In the mid-ground land cover is mainly pasture and arable fields with small areas of forestry plantation. Dunnet Head is visible to the left of centre and further to the left the rounded hills on the island of Hoy in the Orkney Islands are a notable feature. Windfarm development is discernible to the right of centre and in the right of the view and in the right frame. Views are expansive and long distance with a horizontal emphasis to the landscape and a shortened sense of perspective due to the fairly level topography and absence of tall structures.

Sensitivity

393. The viewpoint is not in a designated landscape or WLA. It is approximately 1 km to the east of WLA 39 East Halladale Flows. There is a core path leading from the minor road at Dorrery Farm to the summit of Ben Dorrery. The view is evaluated as being of **'Medium'** value.

394. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The proposed Development would be located 25.9 km to the north east of Ben Dorrery. In the context of the large-scale landscape and expansive character of views there is limited potential for the proposed Development to adversely affect views.

395. The combination of **'Medium'** value and **'Low'** susceptibility give Viewpoint 15 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

396. **Figure 7.28** indicates that the proposed Development would be visible as a compact array of wind turbines set in a large-scale landscape and expansive vista. The proposed Development would occupy a very small proportion of the field of view and the wind turbines would be seen as minor elements. The proposed Development would not impinge upon views of Dunnet Head or Hoy and there would not be adverse scale comparisons with smaller features in the landscape. The magnitude of effect is assessed as **'Low'**.

Significance

397. The effects of the proposed Development on Viewpoint 15 would be **'Not Significant'**. While the proposed Development would be discernible and movement of rotors would to a small degree, draw the eye towards it when scanning across the view, it would be seen as a minor feature on the horizon set in a large-scale landscape.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

398. Lochend and Stroupster Windfarms are barely discernible from Ben Dorerry. Cogle Moss Windfarm would barely be discernible being screened by intervening landform. Achlachan 2 Windfarm would be indistinguishable from the group of operational windfarms comprising of Achlachan, Causeymire, Bad a' Cheo and Halsary (under construction). Limekiln Resubmission Windfarm would be visible in succession 8.5 km to the north west of the viewpoint. It would have a localised influence on views and would not associated with the proposed Development which would be a discrete and compact minor addition to the pattern of operational and consented development. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

Scenario 2 – Sites in Planning

399. Slickly Windfarm would be visible as an addition to Stroupster Windfarm and would be perceived as slightly intensifying windfarm development in that part of the view. Camster 2 Windfarm would extend development across the distant horizon and would have a very limited influence on views. The addition of the proposed Development would result in very limited intensification of windfarm development. The cumulative magnitude of effect is assessed as **'Low'** and the effects would be **'Not Significant'**.

7.8.3.13 Viewpoint 18 Noss Head (Figure 7.31)

Baseline Description

400. Viewpoint 18 is located on a core path that leads from a car park to the west of Noss Head to the scheduled monument of Castle Sinclair Girnigoe. **Figure 7.31** shows that the view in the direction of the Site is characterised by the open stretch of water at Sinclair's Bay with a fairly level horizon extending across the view. The ruin of Castle Sinclair Girnigoe is visible in the left of the view. In the right of the view the slight rise of Warth Hill is noticeable and to the right of that views extend north to Duncansby Head and South Ronaldsay which is a low horizontal band on the horizon. Lochend Windfarm is barely discernible to the right of centre and Stroupster Windfarm is noticeable to the right of centre with a small part of the hills of Hoy visible behind.

Sensitivity

401. The view is evaluated as being of **'Medium'** value. It is not in a designated landscape. It is on a core path which indicates recreational value and there are visitor interpretation boards nearby.

402. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The separation distance between the viewpoint and the Site is approximately 16.1 km. People are likely to experience views of the proposed Development when using the core path as it is aligned in the direction of the Site.

403. The combination of **'Medium'** value and **'Low'** susceptibility give Viewpoint 18 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

404. **Figure 7.31** indicates that the proposed Development would be visible on the horizon. The lower parts of all 10 wind turbines would be screened by landform. The proposed Development would occupy a small proportion of the field of view and would extend the influence of windfarm development across the simple horizon. The height of the wind turbines would be similar to the vertical extent of land between the horizon and the sea giving an adverse scale comparison with the coastal fringe and the smaller features in the landscape. The magnitude of effect is assessed as **'Low'**.

Significance

405. The effects of the proposed Development on Viewpoint 18 would be **'Not Significant'**. While it would result in adverse scale comparisons with the coastal fringe and it would increase the proportion of the horizon in which windfarm development would be visible the view composition is fairly simple and the proposed Development would occupy a relatively small proportion of the field of view.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

406. Lochend Windfarm is discernible above forestry plantation occupying a very small proportion of the field of view. Stroupster Windfarm is noticeable on the skyline to the right of centre. Cogle Moss Windfarm is the key consented windfarm to consider in this Scenario. It would be visible in succession with the proposed Development and on the same fairly level horizon line. It would appear closer to the viewpoint and would be seen in the context of coastal field pattern below the horizon. Wind turbines of the proposed Development would appear as a similar size as those in Stroupster Windfarm and the loose linear array of wind turbines would appear similar to that of Stroupster. It would therefore be read as an extension to Stroupster as it would also appear in a similar context of large-scale landscape influenced by forestry plantation. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

407. Slickly Windfarm would be to the left of Stroupster Windfarm with a small gap between the two developments. Slickly wind turbines would appear larger than those of Stroupster Windfarm and it would appear as a denser array than Stroupster. The proposed Development would partly overlap with Slickly Windfarm and be seen behind it and be perceived as a separate development as the wind turbines would appear smaller than those of Slickly. The addition of the proposed Development would result in intensification of windfarm development in a part of the view in which development would already be an established component. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.8.3.14 Viewpoint 20 Badlipster (Figure 7.33)

Baseline Description

408. Viewpoint 20 is approximately 19.4 km to the south of the proposed Development in an area where windfarm development is commonplace with five operational windfarms within 2.5 km of the viewpoint with a further four operational and one under construction within 5 km to the west. The right hand frame in **Figure 7.33** shows the influence of windfarm development on the view to the east from the viewpoint. Views in the direction of the Site are of a large-scale landscape of low topography that allows long distance views. In the foreground of the view land cover is dominated by moorland and in the direction of the Site the influence of pasture and arable farming gives a more varied mosaic of colour and land cover. Blocks of forestry plantation and distant views of moorland add dark hues into the view. To the left of centre the island of Hoy is visible as a series of dark rounded shapes on the horizon. Lochend Windfarm is barely discernible in the centre of the view and Stroupster Windfarm is also discernible in the right of the view with Warth Hill in the background. Wind turbines of Bilbster and Wathegar are visible in the right of the view.

Sensitivity

409. The viewpoint is located on a minor road in an unpopulated remote area. The viewpoint is not in a designated landscape or in a conservation area. It is typical of views in that area and is evaluated as being of **'Low'** value.

410. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The viewpoint is representative of views experienced by people driving through the area. It is a transient long distance view.

411. The combination of **'Low'** value and **'Low'** susceptibility give Viewpoint 20 a sensitivity of **'Low'**.

Assessment of Effects

Magnitude

412. **Figure 7.33** indicates that the proposed Development would be seen as a minor element on the distant horizon. It would occupy a small proportion of the field of view and would be seen in the context of the large-scale and fairly level landscape of the LCT 134 Sweeping Moorland and Flows in which the viewpoint is located and the LCT 143 Farmed Lowland Plain that characterises the mid-ground of the view. The magnitude of change is assessed as **'Low'**.

Significance

413. The effects of the proposed Development would be **'Not Significant'**. It would be seen as a minor element in views and could be accommodated in the large-scale landscape without impinging upon key features in the view or introducing adverse scale comparisons.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

414. The operational windfarm developments of Lochend, Stroupster, Bilbster and part of Wathegar are visible. Consented Cogle Moss Windfarm would also be visible in the same field of view as the proposed Development and collectively there would be combined visibility. To the right the group comprising the windfarm developments of Bilbster, Wathegar, Wathegar 2 and Achairn would be visible sequentially with the proposed Development with Camster Windfarm also visible further to the right (south). The proposed Development would be a minor element on the distant horizon in views across a large-scale landscape.

Consented Cogle Moss Windfarm would be a new focal point in the view with existing wind turbines of Bilbster, Wathegar and others prominent in the right of the view. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

415. Slickly Windfarm is the key development in planning to consider in Scenario 2. Hoy Windfarm would barely be discernible on the distant horizon at a distance of approximately 43 km and would have a very limited influence on the composition of views. Camster 2 Windfarm would be visible in succession with the proposed Development to the right (south east) of the view where it would be part of the established pattern of nearby windfarms. The addition of the proposed Development would introduce windfarm development into a part of the views where development is an established component. It would add to Lochend Windfarm while maintaining separation with Slickly and Stroupster Windfarms and without overlapping with Cogle Moss Windfarm in this view. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.8.3.15 Viewpoint 21 Thrumster (Figure 7.34)

Baseline Description

416. The viewpoint is located on the A99 at the northern edge of the village of Thrumster approximately 23.4 km south of the Site and approximately 5.7 km to the south of Wick. The viewpoint is in the LCT 144 Coastal Crofts and Small Farms and looks across the LCT 143 Farmed Lowland Plain. Scattered dwellings and farmsteads are visible in the foreground and middle distance and Loch Hempriggs is a notable feature to the right of centre in the view. The island of Hoy is visible on the horizon in the direction of the Site. Lochend Windfarm is barely discernible to the left of centre and Stroupster Windfarm is also barely discernible to the right of centre. Two small wind turbines to the north of Loch Hempriggs are visible in the right of the view. Wind turbines of Camster Windfarm are visible in the left of the view.

Sensitivity

417. The value of the view is evaluated as **'Medium'**. It is a transient view on the route of the NC500 and a long distance view experienced by residents. It is not located in a designated landscape.

418. Susceptibility to change from the proposed Development is evaluated as **'Low'**. The view represents transient receptors who would experience views of the proposed Development for a very short duration and long distance views for residents.

419. The combination of **'Medium'** value and **'Low'** susceptibility give Viewpoint 21 a sensitivity of **'Low-Medium'**.

Assessment of Effects

Magnitude

420. **Figure 7.34** indicates that the proposed Development would be seen as a minor element on the distant horizon. It would occupy a small proportion of the field of view and would be seen in the context of the large-scale and fairly level landscape of the LCT 143 Farmed Lowland Plain. It would be seen against the backdrop of the island of Hoy which is visible on the distant horizon. The magnitude of effect is assessed as **'Low'**.

Significance

421. The effects of the proposed Development would be **'Not Significant'**. It would be seen as a minor element in views and could be accommodated in the large-scale landscape without introducing adverse scale comparisons.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

422. Cogle Moss Windfarm is the key consented site to consider in Scenario 1. It would be partly visible as a relatively minor element on the horizon at a distance of 11.9 km. The group of windfarms comprising of Bilbster, Wathegar, Wathegar 2, Achairn and Camster which is visible in the left of the view and extends to the left (west). Cogle Moss Windfarm would slightly intensify the amount of windfarm development visible in a part of the view where windfarms are an established feature. The proposed Development would be visible as a minor element on the distant horizon. It would be perceived as having wind turbines of similar height to Stroupster Windfarm and as an array of similar design set within a landscape of similar large-scale and character. The operational windfarm developments in the Bilbster/Wathegar group would be more noticeable. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

423. Slickly Windfarm is the key development in planning to consider in Scenario 2. It would be visible to the left of Stroupster Windfarm with wind turbines perceived as being of similar height to those in Stroupster. The layout of wind turbines in Slickly Windfarm would appear slightly denser than that of Stroupster Windfarm and the proposed Development. The proposed Development would extend the influence of development across a small proportion of the view by adding to Stroupster and Slickly Windfarms and it could be read as an extension to those two schemes. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.8.3.16 Viewpoint 22 A836 East of Castletown (Figure 7.35)

Baseline Description

424. The viewpoint is located in a lay-by on the A836 in the southern part of Dunnet Head SLA and at the south end of the beach at Dunnet Bay. In the left of the view the grass covered dunes that back the beach are visible. In the right of the view farm buildings at Thurdistoft and to the left of those residential properties are visible. Lochend Windfarm is noticeable in the centre of the view.

Sensitivity

425. The value of the view is evaluated as **'Medium'**. The viewpoint is in the non-statutory designated SLA and on the route of the NC500. It is a transient view experienced for a short duration

426. Susceptibility to change from the proposed Development is evaluated as **'Medium'**. The view is transient and would be experienced for a short duration. It is not identified as a stopping point on the NC500, and it is likely that peoples' attention would be focussed to the left of the view on Dunnet Bay and Dunnet Head.

427. The combination of **'Medium'** value and **'Medium'** susceptibility give Viewpoint 22 a sensitivity of **'Medium'**.

Assessment of Effects

Magnitude

428. The proposed Development would be a noticeable new feature on the horizon. It would occupy a small proportion of the field of view and the wind turbines would be partly visible with lower parts screened by intervening landform. The proposed Development would not impinge upon features important to the composition of the view and it could be accommodated without any adverse scale comparisons. The magnitude of effect is assessed as **'Low'**.

Significance

429. The effects of the proposed Development on Viewpoint 22 would be **'Not Significant'**. While the proposed Development would be noticeable it would not be a dominant focal point. The view is transient and of short duration. The large-scale of the landscape and the fairly level topography at and around the proposed Development mean that it would appear surrounded by open land that provides an appropriate context in which it can be accommodated without substantial harm to the composition of the view.

Cumulative Assessment

Scenario 1 – Operational, Under Construction and Consented

430. There are no consented cumulative developments visible in the view. Lochend Windfarm is the only cumulative development visible in Scenario 1 and is part of the baseline. Taigh Na Muir Dunnet Windfarm is screened by forestry plantation. The proposed Development would add to Lochend Windfarm and be perceived as a separate development of larger wind turbines in a part of the view where windfarm development is an established component. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

431. Blade tips of Slickly Windfarm would barely be discernible to the right of centre in the view and separate from the proposed Development. Slickly Windfarm would have a very limited influence on the view. No other sites in planning would be visible. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effect would be **'Not Significant'**.

7.8.4 Detailed Assessment of Effects on Settlements

432. In this LVIA views from all settlements are evaluated as being of **'Low'** value and **'High'** susceptibility giving a sensitivity of **'Medium'**. Cumulative effects are described above in relation to viewpoints and a RVAA of properties within 2 km of the nearest wind turbines of the proposed Development is provided in **Technical Appendix 7.2**.

7.8.4.1 Barrock and Inkstack

433. Barrock and Inkstack are approximately 2.5 km west of the nearest wind turbine (T1) of the proposed Development. Barrock and Inkstack comprise of scattered residential properties and farmsteads arranged on a broad rise. Viewpoint 8 (**Figure 7.21**) shows a typical view from the eastern part of Barrock and indicates that Lochend and Stroupster Windfarms are visible in the direction of the Site.

434. Views of the proposed Development would vary due to the different orientation of properties and the presence of low level screening in the settlement. There would be views mainly for those properties to the south of the disused church at the cross-roads in the centre of the settlement. There would be no view or very restricted views for residents of properties to the north of the cross-roads. Where visible the proposed Development would be a new focal point and would result in large change to views. The magnitude of effect is assessed as **'High'**.

435. The effects of the proposed Development on the settlements of Barrock and Inkstack would be **'Significant'**. There are likely to be properties from which the proposed Development would not be visible or a small proportion of it may be visible. The elevated position of the settlements and the absence of screening vegetation for some properties means the proposed Development would be very noticeable.

436. Regarding cumulative effects there are no consented but not yet constructed windfarms that would influence visual amenity at Barrock and Inkstack. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 Slickly Windfarm would be visible as a dense linear array on the horizon adding to the horizontal extent of Stroupster Windfarm. It would have a limited influence on views. The proposed Development would be the key influence in Scenario 2. In Scenario 2 the cumulative magnitude of effect would be **'High'**, and the cumulative effects would be **'Significant'**.

7.8.4.2 Gills and Upper Gills

437. Gills and Upper Gills are approximately 2.5 km to the north east of the nearest wind turbine (T10) of the proposed Development. Gills is a linear settlement arranged along the A836 with properties on minor roads that run south to Upper Gills. Upper Gills comprises of scattered residential properties with a concentration of properties along the minor road that runs past the Site entrance. Stroupster Windfarm is a noticeable feature in views from the eastern part of Upper Gills and Lochend Windfarm is not visible or barely discernible.

438. The proposed Development would be partly visible from Gills and Upper Gills. Rising land to the south of Gills would screen the lower parts of all wind turbines with blade tips only of some being visible. Where visible wind turbines of the proposed Development would be a new focal point. A large proportion of the proposed Development would be visible from Upper Gills and it would be closer to the settlement than it would be to Gills. In the eastern part of Upper Gills, the proposed Development would be screened by Hill of Warse. The magnitude of effect on both Gills and Upper Gills is assessed as **'High'**.

439. The effects on Gills and Upper Gills would be **'Significant'**. The proposed Development would be a prominent new focal point in views to the south and it would occupy a large proportion of the field of view.

440. There are no consented but not yet constructed windfarms that would influence visual amenity at Gills and Upper Gills. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 blade tips of Slickly Windfarm would be discernible and it would have a limited influence on views from Gills and Upper Gills. The proposed Development would be the key influence in Scenario 2. In Scenario 2 the cumulative magnitude of effect would be **'High'**, and the cumulative effects would be **'Significant'**.

7.8.4.3 Canisbay

441. Canisbay is a small hamlet with a church and school centred on a crossroads approximately 4.7 km from the nearest wind turbine (T10) of the proposed Development. It is a compact settlement with the rear of houses in the western part of the hamlet facing the Site. The upper parts of Stroupster Windfarm are visible.

442. Hill of Warse would screen the majority of the proposed Development such that blade tips only would be seen. Nacelles of two wind turbines would be seen from the north-western fringe of the settlement. The magnitude of effect is assessed as **'Low'**.

443. The effects of the proposed Development on Canisbay would be **'Not Significant'**.

444. There are no consented but not yet constructed windfarms that would influence visual amenity at Canisbay. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 blade tips of Slickly Windfarm would be visible slightly increasing the influence of windfarm development in the horizon in combination with Stroupster Windfarm. It would have a limited influence on views from Canisbay. The proposed Development would be the key influence in Scenario 2. In Scenarios 1 and 2 the cumulative magnitude of effect would be **'Low'**, and the cumulative effects would be **'Not Significant'**.

7.8.4.4 Mey and East Mey

445. Mey is a linear hamlet situated on the A836 approximately 2.6 km to the north of the nearest wind turbine of the proposed Development. East Mey is also situated on the A836 and includes scattered properties to the north connected by minor roads and tracks to the A836. Lochend Windfarm is a noticeable feature of views from Mey and both Stroupster and Lochend Windfarms are visible from East Mey.

446. The proposed Development would be very noticeable from the village of Mey where there would be less screening by intervening vegetation, landform and buildings. Views from properties on the south side of the A836 would be clearer than those on the north side where there would be glimpsed views between buildings. The magnitude of effect is assessed as **'High'**.

447. From the majority of properties in East Mey the proposed Development would not be visible. Most properties are located on the north or east side of the landform on which the settlement is positioned. The land slopes down from south to north and to the east and west.

448. There would be views of the proposed Development from the western part of East Mey and the nearest wind turbine (T10) would be approximately 3.6 km to the south. The magnitude of effect on the settlement is assessed as **'Low'**.

449. The effects of the proposed Development on Mey would be **'Significant'** and on East Mey would be **'Not Significant'**.

450. There are no consented but not yet constructed windfarms that would influence visual amenity at Mey or East Mey. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2, Slickly Windfarm would be visible from East Mey extending the influence of Stroupster Windfarm although it would have a limited influence on views from East Mey and would not be visible from Mey. At Mey there would be no visibility of sites in planning. The proposed Development would be the key influence in Scenario 2 from both East Mey and Mey. In Scenario 2 the cumulative magnitude of effect on Mey would be **'High'** and the cumulative effects would be **'Significant'**. In Scenario 2 the cumulative magnitude of effect on East Mey would be **'Low'** and the cumulative effects would be **'Not Significant'**.

7.8.4.5 Scarfskerry and Rattar

451. Scarfskerry is a scattered linear settlement situated on either side of a minor road that runs between Mey in the east and Brough in the west. Rattar is also a linear settlement that extends along a minor road south east from Scarfskerry joining the A836 to the west of Mey. Lochend and Taigh Na Muir Dunnet Windfarms are visible. Stroupster Windfarm is visible primarily from the western part of the settlement.

452. There would be views of the proposed Development from Scrafskerry and Rattar across the fairly level landscape between the coastline and the A836. The proposed Development would occupy a large proportion of the horizon and would be a very noticeable new feature in views at distance of between 3 km and 4.9 km. The magnitude of effect on Scarfskerry and Rattar is assessed as **'Medium'**.

453. The effects of the proposed Development on Scarfskerry and Rattar would be **'Not Significant'**.

454. There are no consented but not yet constructed windfarms that would influence visual amenity at Scarfskerry and Rattar. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 blade tips of Slickly Windfarm would be visible in combination with the proposed Development occupying a small proportion of the field of view and have a limited influence on views from Scarfskerry and Rattar. The proposed Development would be the key influence in Scenario 2. In Scenario 2 the cumulative magnitude of effect on Scarfskerry and Rattar would be **'Medium'** and the cumulative effects would be **'Not Significant'**.

7.8.4.6 Dunnet and West Dunnet area

455. Dunnet and West Dunnet together comprise a small village with a centre at the junction of the A836 and B855 and extending along a network of minor roads to the west and north. Views in the direction of the Site from the majority of Dunnet are screened by landform and vegetation. Taigh Na Muir Dunnet Windfarm is a noticeable feature in views and Lochen is also noticeable on the horizon.

456. There would be views of the proposed Development from more elevated areas of West Dunnet in the northern part of the settlement. The upper parts of wind turbines would be visible on the horizon at a distance of approximately 6.5 km and would be seen in combination with Lochend Windfarm. The magnitude of effect is assessed as **'Low'**.

457. The effects of the proposed Development on Dunnet and West Dunnet would be **'Not Significant'**.

458. There are no consented but not yet constructed windfarms that would influence visual amenity at Mey or East Mey. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 blade tips of Slickly Windfarm would barely be visible and would have a very limited influence on views from Dunnet and West Dunnet. The proposed Development would be the key influence in Scenario 2. In Scenario 2 the cumulative magnitude of effect on Dunnet and West Dunnet would be **'Low'** and the cumulative effects would be **'Not Significant'**.

7.8.4.7 Lyth

459. Lyth is a linear village located on a low ridge to the west of Burn of Lyth approximately 4 km south of the Site. There are views across farmland to the Site which is seen as a dark patch of moorland and forestry on the horizon. Lochend and Stroupster Windfarms are noticeable features.

460. As mentioned in the assessment of effects on Viewpoint 13 (**Figure 7.26**) the proposed Development would be a noticeable new feature in views. The nearest wind turbine (T4) would be 4.8 km to the north of the settlement and the proposed Development would occupy a **'Medium'** proportion of the field of view. The magnitude of effect is assessed as **'Medium'**.

461. The effects of the proposed Development on Lyth would be **'Not Significant'**.

462. In Scenario 1 Cogle Moss Windfarm would be the nearest consented development at a distance of 6.5 km. Achlachan 2 Windfarm would be 18 km to the south west and unlikely to be readily discernible from the settlement of Lyth. Cogle Moss Windfarm would have a very limited influence on views from Lyth and the addition of the proposed Development would result in a **'Low'** cumulative magnitude of effect and the cumulative effect would be **'Not Significant'**. In Scenario 2 Slickly Windfarm would be noticeable and wind turbines would appear comparable in size to those of the proposed Development intensifying the appearance of windfarm development in combination with Stroupster Windfarm. The proposed Development would be seen as a separate development to Slickly and Stroupster Windfarms. In Scenario 2 the cumulative magnitude of effect on Lyth would be **'Medium'** and the cumulative effects would be **'Not Significant'**.

7.8.4.8 Bower

463. Bower and associated settlements are a scattered group of properties and farmsteads situated in the LCT 143 Farmed Lowland Plain and represented by Viewpoint 12 (**Figure 7.25**). As indicated by the assessment of effects on Viewpoint 12 the magnitude of effect on Bower and vicinity would be **'Low'**. The proposed Development would be visible on the horizon merging partly with Lochend Windfarm and separated from Stroupster Windfarm which is also visible on the horizon from Bower.

464. The effects of the proposed Development on Bower and surrounding area would be **'Not Significant'**.

465. In Scenario 1 Cogle Moss Windfarm would be the nearest consented development at a distance of 8.5 km and would be associated with the pattern of operational windfarm development to the south at Bilbster, Wathegar etc. Cogle Moss would potentially be partly visible in glimpsed views in succession with the proposed Development and in a part of the view where windfarms are an established component. Cogle Moss Windfarm would have a very limited influence on views from Lyth and the addition of the proposed Development would result in a **'Low'** cumulative magnitude of effect. The cumulative effect would be **'Not Significant'**. In Scenario 2 Slickly Windfarm would be noticeable and would intensify the appearance of windfarm development in combination with Stroupster Windfarm. The proposed Development would be seen as a separate development to Slickly and Stroupster Windfarms. In Scenario 2 the cumulative magnitude of effect on Bower would be **'Low'** and the cumulative effects would be **'Not Significant'**.

7.8.4.9 Freswick and Tofts

466. Freswick and Tofts comprise of a scattered group of properties situated along the A99 to the west of Freswick Bay and to the south of Warth Hill. Viewpoint 10 (**Figure 7.23**) at Warth Hill provides an indication of the horizontal and vertical scale of the proposed Development from a similar distance and direction as that which would be experienced by residents of Freswick and Tofts.

467. In the southern part of the settlement Lochend Windfarm is visible and Stroupster Windfarm is very noticeable. The proposed Development would be noticeable from the more elevated northern part of the settlement. The magnitude of effect is assessed as **'Low'**.

468. The effects of the proposed Development on Freswick and Tofts would be **'Not Significant'**.

469. There are no consented but not yet constructed windfarms that would influence visual amenity at Freswick and Tofts. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 Slickly Windfarm would be noticeable behind Stroupster Windfarm extending development across the view and would intensify the appearance of windfarm development in combination with Stroupster Windfarm. The proposed Development would be seen as a separate development in succession to Slickly and Stroupster Windfarms. In Scenario 2 the cumulative magnitude of effect on Freswick and Tofts would be **'Low'**, and the cumulative effects would be **'Not Significant'**.

7.8.4.10 Castletown

470. Castletown is situated approximately 8 km to the west of the Site. It is a compact nucleated settlement arranged on a grid of streets and extends to the west along the A836 and south east along the B876.

471. The proposed Development would not be visible from the majority of Castletown due mainly to the screening effect of buildings in the village and woodland to the east. Intervening landform would also screen the lower parts of the proposed Development in views from the settlement. There would be glimpsed views from the upper floors of properties. The magnitude of effect is assessed as **'Negligible'**.

472. The effects of the proposed Development on Castletown would be **'Not Significant'**.

473. There are no consented but not yet constructed windfarms that would influence visual amenity at Castletown. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. The influence of cumulative development in Scenario 2 is likely to be restricted to glimpsed views blade tips of Slickly Windfarm from upper floor windows of properties. In Scenario 2 the cumulative magnitude of effect on Castletown would be **'Negligible'** and the cumulative effects would be **'Not Significant'**.

7.8.4.11 Keiss

474. Keiss is situated on the A99 approximately 8 km to the south east of the Site and is represented by Viewpoint 14 (**Figure 7.27**). The settlement has a compact centre on the A99 and extends to the south east along a minor road to the harbour. The settlement includes scattered dwellings beyond the compact centre situated on minor roads. Blade tips of Stroupster Windfarm are discernible on the horizon.

475. **Figure 7.27** indicates that blade tips of wind turbines of the proposed Development would be visible from the main built up area of Keiss. It is likely that a slightly larger proportion of the proposed Development would be visible from properties on slightly higher ground to the north west. The magnitude of effect is assessed as **'Negligible'**.

476. The effects of the proposed Development on Keiss would be **'Not Significant'**.

477. There are no consented but not yet constructed windfarms that would influence visual amenity at Keiss. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. The influence of the proposed Development would be very limited due to screening by landform and due to separation distance. In Scenario 2 Slickly Windfarm would be the more noticeable development and the addition of the proposed Development would result in very limited change. In Scenario 2 the cumulative magnitude of effect on Keiss would be **'Negligible'** and the cumulative effects would be **'Not Significant'**.

7.8.5 Detailed Assessment of Effects on Transportation Routes

478. In this LVIA views from all roads are evaluated as being of **'Low'** value and **'Low'** susceptibility giving a sensitivity of **'Low'**. The exception is those sections of roads that coincide with the NC500. Here views are evaluated as being of **'Medium'** value and **'Medium'** susceptibility giving a sensitivity of **'Medium'**.

479. A sequential cumulative assessment is described for those sections of key transportation routes that coincide with the LVIA study area.

7.8.5.1 A9

480. The A9 passes within 15 km of the proposed Development to the south west. The ZTV shown on **Figure 7.2: Zone of Theoretical Visibility to Blade Tip 30 km** indicates that theoretical visibility of the proposed Development from the A9 would occur along two short stretches of the A9 to the north of Hill of Rangag (Viewpoint 19, **Figure 7.32**) and at Georgemass Junction (Viewpoint 16, **Figure 7.29**). It would also occur on a very short stretch to the south of Thurso.

481. Viewpoints 16 and 19 indicate that the proposed Development would be screened by intervening forestry or would barely be discernible from the A9. The magnitude of change is assessed as **'Negligible'** and the effects of the proposed Development would be **'Not Significant'**.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

482. The CZTVs shown on **Figures 7.9: Cumulative Zone of Theoretical Visibility - Operational** and **7.12: Cumulative Zone of Theoretical Visibility – Operational and Consented** indicate that the addition of the proposed Development would not result in new areas of theoretical visibility coincident with the A9. It indicates there would be theoretical visibility of windfarms in Scenario 1 from the A9 where it coincides with the LVIA study area. Viewpoint 16 (**Figure 7.29**) and Viewpoint 19 (**Figure 7.32**) indicate the proposed Development would barely be discernible in views from the A9 with instances of visibility occurring along short sections of the route at long separation distances. The cumulative magnitude of effect is assessed as **'Negligible'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

Scenario 2 – Sites in Planning

483. Slickly Windfarm is the key development to consider in Scenario 2. Other sites in planning would have a limited influence on sequential effects when the addition of the proposed Development is considered. The CZTV shown on **Figure 7.13** indicates that the proposed Development would be visible from short stretches of the A9 where Slickly Windfarm would not. From those sections the proposed Development would be visible across long separation distances and windfarms in Scenario 1 would be visible. The cumulative magnitude of effect is assessed as **'Negligible'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

7.8.5.2 A99

484. The A99 is also the route of the NC500 and provides a series of varied and everchanging views of the Caithness coast and the vast moorland landscapes of the interior passing within 6.2 km to the east of the proposed Development. The ZTV shown on **Figure 7.2: Zone of Theoretical Visibility to Blade Tip 30 km** indicates that the proposed Development would be visible to the south of Wick represented by Viewpoint 21 (**Figure 7.34**). It would be visible between Wick and Keiss (Viewpoints 14 and 18 on **Figures 7.27** and **7.31**) and between Keiss and John o' Groats represented by Viewpoint 10 (**Figure 7.23**).

485. South of Wick the magnitude of effect would be **'Low'** as the proposed Development would be seen as a distant element on the horizon.

486. Between Wick and Keiss the proposed Development would be more noticeable. There would be sustained views of the proposed Development on the horizon along a stretch of the road between Reiss and Loch of Wester before landform would largely screen it from view as indicated by the hub height ZTV shown on **Figure 7.4:** and Viewpoint 14 (**Figure 7.27**). However, the proposed Development would occupy a relatively small proportion of the view and would be seen in the context of Stroupster Windfarm and the expansive moorland landscape rather than the smaller scale coastal fringe. The magnitude of effect is assessed as **'Low'** between Wick and Keiss.

487. Between Keiss and John o' Groats the route of the A99 rises and falls which would result in intermittent views of the proposed Development which would be to the left of people driving north on the A99. It would be partly visible from a stretch of the road between Milltown in the south and Warth Hill in the north. Along this stretch views would be more relevant to southbound travellers as northbound travellers would be at right angles to the proposed Development. It would be seen in the context of the expansive moorland landscape and in combination with operational Stroupster Windfarm. The magnitude of effect is assessed as **'Medium'**.

488. The effects of the proposed Development on the A99 would be **'Not Significant'**. From the majority of the A99 views of the proposed Development would be intermittent or it would be seen as a minor element on the distant horizon. From the section between Keiss and John o' Groats the proposed Development would be more noticeable and would be seen in the context of the large-scale, expansive moorland landscape in which windfarm development is part of the baseline. The proposed Development would not compete with existing focal points or views of lone mountains to the west or Dunnet Head and other coastal features important to the experience of driving the NC500.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

489. The CZTVs shown on **Figures 7.9** and **7.12** indicate theoretical visibility of windfarms in Scenario 1 along most of the A99 between Lybster and John o' Groats. The addition of the proposed Development would result in new areas of theoretical visibility along very short stretches of the A99 at Warth Hill and in the vicinity of John o' Groats. Viewpoint 10 (**Figure 7.23**) shows a view of the proposed Development from Warth Hill which is representative of the additional areas of visibility. Viewpoint 14 (**Figure 7.27**) and Viewpoint 21 (**Figure 7.34**) indicate how the proposed Development would appear in views heading north on the A99. The proposed Development would introduce windfarm development at a location where it is an established component of the view. It would be seen mainly in combination with Stroupster and Lochend Windfarms and in succession with Cogle Moss Windfarm which would be a very noticeable feature from a section of the A99 between Wick and Keiss. From most of the A99 the proposed Development would barely be discernible or would be a minor element in views and would increase in only the northernmost part of the A99 in the vicinity of Warth Hill. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

Scenario 2 – Sites in Planning

490. The CZTV shown on **Figure 7.13** when compared to **Figures 7.9** and **7.12** indicates that Slickly Windfarm would not introduce new areas of theoretical visibility. The proposed Development would be seen in combination with Slickly Windfarm due to the short separation distance between the two proposed developments and the orientation of the road relative to them. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

7.8.5.3 A882

491. The A882 runs between Wick and Georgemas Junction passing within 14.6 km of the proposed Development to the south. The ZTV shown on **Figure 7.2** indicates intermittent theoretical visibility of the proposed Development between Wick and Georgemas Junction. Viewpoint 16 (**Figure 7.29**) and Viewpoint 17 (**Figure 7.30**) indicate that, where visible the proposed Development would be seen as a minor element on the distant horizon and would barely be discernible due to the screening effects of landform and vegetation.

492. The magnitude of effect is assessed as **'Negligible'** and the effects of the proposed Development would be **'Not Significant'**.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

493. Cogle Moss Windfarm is the key development to consider in Scenario 1. It would be a prominent feature in views from the A882 and the proposed Development would be visible in combination with it. However, the CZTV shown on **Figures 7.9** and **7.12** indicate that the addition of the proposed Development would not result in new areas of theoretical visibility of the proposed Development alone along the route of the A882. The road is orientated at right angles to the proposed Development as opposed to being aligned in the direction of the proposed Development. The separation distance between the road and the proposed Development and the fact that it would be introduced into a part of the view where windfarm development is an established component means that the cumulative magnitude of effect would be **'Negligible'** and the effects of the proposed Development would be **'Not Significant'**.

Scenario 2 – Sites in Planning

494. Slickly Windfarm is the key development to consider in Scenario 2. It is 12 km from the A882, and the proposed Development would theoretically be visible in combination with it as indicated by the ZTV shown on **Figure 7.13**. The separation distance between the road and the proposed Development and the fact that it would be introduced into a part of the view where

windfarm development is an established element means that the cumulative magnitude of effect would be **'Negligible'** and the effects of the proposed Development would be **'Not Significant'**.

7.8.5.4 A836

495. The A836 is also the route of the NC500 and passes within 2.4 km of the proposed Development to the north. The ZTV indicates almost continuous theoretical visibility between John o' Groats and Castletown with the hub height ZTV indicating reduced visibility particularly between John o' Groats and Gills. Viewpoint 7 (**Figure 7.20**) and Viewpoint 22 (**Figure 7.35**) provide an indication of views from the A836 to the west where road users would be facing the proposed Development.

496. The magnitude of effect is likely to be greatest where the road passes the junction with the minor road to Rattar and East Mey. The proposed Development would be a very noticeable new feature in views at right angles to the direction of travel along the A836. It would not impinge upon views of Dunnet Head, the Orkney Islands or the coastal fringe which are important to the experience of travelling on the NC500. Where visible it would be seen in the context of existing Lochend Windfarm and the large-scale expansive inland landscape of LCT 134 Sweeping Moorland and Flows. The magnitude of effect is assessed as **'Medium'** along this short stretch of the A836. Elsewhere on the A836 the proposed Development would be noticeable and partly visible to varying degrees in everchanging vistas from the A836 as motorists travel along the route. For the majority of the A836 the magnitude of effect is assessed as **'Negligible'**, **'Low'** or no view.

497. The effects of the proposed Development would be **'Significant'** on a short section of the A836 between the junction with the minor road to Rattar and East Mey. Elsewhere along the A836 effects would be **'Not Significant'**.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

498. Limekiln Resubmission Windfarm is the key consented development that would be visible from the A836. It is 30 km to the west of the proposed Development and would not be visible in combination with it. It would introduce further development into views from the A836 in the vicinity of the operational Baillie Windfarm. While it would be a feature on the route of the A836 and NC500 there would be no direct interaction with the proposed Development The key baseline developments to consider in Scenario 1 are Stroupster, Lochend, Taigh Na Muir Dunnet Windfarms. The ZTVs shown on **Figures 7.9** to **7.11** and Viewpoint 22 (**Figure 7.35**) indicate that Lochend Windfarm has more of an influence than Taigh Na Muir Dunnet and Stroupster Windfarms. **Figure 7.9** indicates that the proposed Development would introduce new areas of theoretical visibility between John o' Groats and Gills. It would be a very noticeable feature in combination with Lochend Windfarm for a short stretch of the road although consented sites would not be visible. The cumulative magnitude of effect would therefore be **'Negligible'**, and the cumulative effect would be **'Not Significant'**.

Scenario 2 – Sites in Planning

499. Slickly Windfarm would be discernible in combination with the proposed Development and mainly blade tips would be visible. The proposed Development would have the greater influence on views and there would be limited interaction with Slickly Windfarm. The cumulative magnitude of effect arising from the addition of the proposed Development to sites in planning would be **'Low'** and the cumulative effects would be **'Not Significant'** on a short section of the A836 between the junction with the minor road to Rattar and East Mey. Elsewhere along the A836 cumulative magnitude of effects would be **'Negligible'** or none and the cumulative effects would be **'Not Significant'**.

7.8.5.5 B876

500. The B876 runs between Reiss to the north west of Wick to Castletown passing within 7.5 km of the proposed Development to the south west. Viewpoint 12 (**Figure 7.25**) gives an indication of the appearance of the proposed Development at the closest point along the route.

501. Travelling north west on the B876 there would be uninterrupted views of the proposed Development between Reiss and Myrelandhorn where the landscape is open and of moorland character. To the west of Myrelandhorn the topography is slightly more undulating and there is a higher proportion of intervening trees, hedges and woodland in addition to the screening effects of landform. Views are also influenced by the modified landscape of pasture, paddocks and scattered dwellings and farmsteads in addition to the industrial development at the inland facility of Subsea 7. To the north west of Bower intervening landform and vegetation would result in intermittent views of the proposed Development which would be partly visible.

502. The magnitude of effect on the B876 is assessed as **'Low'** and the effects of the proposed Development would be **'Not Significant'**.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

503. Cogle Moss Windfarm is the key development to consider in Scenario 1. It would be a prominent feature in views from the A882 and the proposed Development would be visible in combination with it. The ZTV shown on **Figures 7.9** and **7.12** indicates that the proposed Development would not introduce any new areas of theoretical visibility along the B876. Viewpoint 12 (**Figure 7.25**) indicates the proposed Development would be noticeable and seen in combination with Lochend and Stroupster Windfarms. The cumulative magnitude of effect on the B876 is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

Scenario 2 – Sites in Planning

504. As indicated above Slickly Windfarm would add to Stroupster Windfarm overlapping with the operational scheme and intensifying the appearance of windfarm development. The addition of the proposed would increase the amount of development and be slightly more noticeable while maintaining separation with Slickly and Stroupster Windfarms. The cumulative magnitude of effect in Scenario 2 is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

7.8.5.6 B855

505. The B855 connects Dunnet Head with the A836 at Dunnet. It is in Dunnet Head SLA. The ZTV shown on **Figure 7.2** indicates there would be continuous theoretical visibility along the majority of the route. Views from the northern part of the route would be similar to those shown by Viewpoint 4 (**Figure 7.17**). Thereafter the road passes to the east of Burifa' Hill and crosses an area of gently sloping moorland before reaching the outskirts of the village of Brough. There would be very limited or no visibility of the proposed Development along the section of moorland and limited and partial visibility between Brough and the A836.

506. The magnitude of effect is assessed as **'Low'** and the effects of the proposed Development would be **'Not Significant'**.

Cumulative sequential Assessment

Scenario 1 – Operational, Under Construction and Consented

507. Limekiln Resubmission and Cogle Moss Windfarms would be discernible from the B855 although their influence on views would be very limited and their interaction with the proposed Development also very limited. The proposed Development would be introduced into a part of the view where windfarm development is an established feature and to which the cumulative contribution of consented development would be barely discernible. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

Scenario 2 – Sites in Planning

508. Viewpoint 4 indicates that Slickly Windfarm would be noticeable in combination with the proposed Development in addition to Lochend and Stroupster Windfarms. Blade tips of Slickly Windfarm would be visible from southern parts of the road and the addition of the proposed Development would be the greater influence in Scenario 2 and the interaction with Slickly Windfarm would be limited. The cumulative magnitude of effect is assessed as **'Low'** and the cumulative effects of the proposed Development would be **'Not Significant'**.

7.8.5.7 Minor Road between Barrock and Upper Gills

509. The minor road between Barrock and Upper Gills passes within 1.6 km of the proposed Development at its closest point. The proposed Development would be a very noticeable new feature in views to at right angles to the direction of travel. It would be seen in the periphery of vision and associated with Lochend Windfarm and the expansive modified landscape of moorland and forestry.

510. Given the close proximity of the proposed Development to the road and the uninterrupted nature of views the magnitude of effect is assessed as **'High'** and the effects of the proposed Development would be **'Significant'**.

7.8.5.8 Minor Road between Upper Gills and Lyth

511. The minor road between Upper Gills and Lyth passes within 1 km of the proposed Development at its closes point to the east. Viewpoint 9 (**Figure 7.22**) gives an indication of the appearance of the proposed Development to southbound travellers. Northbound travellers would experience views for a longer duration.

512. Given the close proximity of the proposed Development to the road and the uninterrupted nature of views the magnitude of effect is assessed as **'High'** and the effects of the proposed Development would be **'Significant'**.

7.8.5.9 Gills Bay to St Margaret's Hope Ferry

513. Gills Bay to St Margaret's Hope on South Ronaldsay is a ferry route that operates throughout the year. The terminal at Gills Bay is approximately 3.2 km from the nearest wind turbine (T10) of the proposed Development. The proposed Development would not be visible from the ferry terminal due to screening by landform where the terrain rises steeply to the A836. Viewpoint 3 (**Figure 7.16**) gives an indication of views from the route of the ferry which on the day photography was taken passed to the west of the island of Stroma. Stroupster Windfarm is discernible and Taigh Na Muir Dunnet Windfarm is a minor object in a large-scale landscape. The effects of the proposed Development on Viewpoint 3 and that part of the ferry route would be **'Not Significant'**.

514. Approaching Gills Bay the proposed Development would appear as a more noticeable feature on the horizon before being lost from view at the ferry terminal. Within 5 km of the proposed Development the magnitude of effect on the ferry route is assessed as **'Medium'** and the effects would be **'Significant'** along a short stretch of the route given the importance of the ferry as a visitor destination.

515. There are no consented but not yet constructed windfarms that would influence visual amenity from the Gills Bay to St Margaret's Hope ferry. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would be **'Not Significant'**. In Scenario 2 the proposed Development would be visible sequentially with Hoy Windfarm which would be approximately 10 km to the west of the ferry route at its closest point. Blade tips of Slickly Windfarm would be discernible. The proposed Development would be seen in the context of existing and emerging windfarm development on mainland Scotland associated with large-scale landscapes with a horizontal emphasis where windfarm development is an established feature of views. Hoy Windfarm would be in a noticeably different context of steep hills and seascapes. In Scenario 2 the addition of the proposed Development would result in a **'Low'** cumulative magnitude of effect and the cumulative effects would be **'Not Significant'**.

7.8.5.10 John o' Groats to Burwick Ferry

516. John o' Groats to Burwick ferry is a seasonal route that carries passengers only during the summer months. The John o' Groats ferry terminal is approximately 8 km from the nearest wind turbine of the proposed Development. The proposed Development would be a noticeable new feature on the horizon in views from the ferry route. It would not be a dominant focal point and would not impinge upon views of Dunnet Head or lone mountains to the west or south.

517. The magnitude of effects is assessed as **'Low'** and the effects would be **'Not Significant'**.

518. There are no consented but not yet constructed windfarms that would influence visual amenity from the John o' Groats to Burwick ferry. The cumulative magnitude of effect would therefore be none in Scenario 1 and the cumulative effects would not be **'Significant'**. In Scenario 2 blade tips of Slickly Windfarm would be visible and have a very limited influence on views. Hoy Windfarm would be visible at a distance of approximately 17 km and would have a very limited influence. In Scenario 2 the cumulative magnitude of effect would be **'Low'**, and the cumulative effect would be **'Not Significant'**.

7.8.6 Detailed Assessment of Effects on Recreational Routes

519. Views from recreational routes are considered to be of **'Medium'** value and **'High'** susceptibility giving a sensitivity of **'Medium-High'**.

7.8.6.1 National Cycle Network Route 1 (NCN1)

520. NCN1 is a national route that runs from Dover to Shetland. It passes along the north coast of Sutherland from Tongue to the east of the study area and follows the A836 to Reay before passing along minor roads and the A836 to John o' Groats before continuing on to South Ronaldsay. This LVIA focuses upon the section between Castletown and John o' Groats. There would be views of the proposed Development for eastbound cyclists on emerging from Castletown (Viewpoint 22, **Figure 7.35**) and it would become an increasing focal point in views between Greenland and Inkstack and would be visible to the right of the direction of travel between Inkstack and Upper Gills. The magnitude of effect between Castletown and Greenland would be **'Low'** to **'Medium'** and between Greenland and approximately the entrance to the Site it would be **'High'**, and the effects would be **'Significant'**.

521. For west bound cyclists the proposed Development would be discernible on the skyline between John o' Groats and Canisbay with reducing visibility as Canisbay is approached due to screening by landform. Between Canisbay and the eastern part of Upper Gills visibility would be restricted by Hill of Warse. The proposed Development would be noticeable between Hill of Warse and the forestry plantation to the east of the Site entrance and the magnitude of effect would be **'High'** and the effects would be **'Significant'**.

522. In Scenario 1 Limekiln Resubmission Windfarm is the key consented development that would be visible from the NCN1. The route of NCN1 does pass within approximately 6 km of consented Limekiln resubmission which is 30 km east-north east of the proposed Development. and would not be visible in combination with it. It would introduce further development into views from the NCN1 in the vicinity of the operational Baillie Windfarm. NCN1 would pass between Baillie and Limekiln Resubmission Windfarms and while Limekiln Resubmission Windfarm would be a feature on the route of NCN1 there would be no direct interaction with the proposed Development The cumulative magnitude of effects would therefore be **'Negligible'**, and the cumulative effect would be **'Not Significant'**. The distance between NCN1 and consented windfarm developments of Cogle Moss and Achlachan 2 is generally too great for those developments to have an influence on views in combination or succession with the proposed Development. The cumulative magnitude of effect between Castletown and Greenland would be **'Low'** to **'Medium'** and between Greenland and approximately the entrance to the Site it would be **'High'**, and the effects would be **'Significant'**. For west bound cyclists the proposed Development would be noticeable between Hill of Warse and the forestry plantation to the east of the Site entrance and the cumulative magnitude of effect arising from the addition of the proposed Development to consented sites would be **'High'**, and the effects would be **'Significant'**.

523. In Scenario 2, Slickly Windfarm is the key development to consider. Cumulative effects would occur at similar points along the route to Scenario 1 and while the proposed Development would intensify development when seen in combination with Slickly, Stroupster and Lochend Windfarms the cumulative magnitude of effects and significance of effect would be the same as Scenario 1.

7.8.6.2 Core Paths

524. There are eight core paths within 5 km of the proposed Development, and these are shown on **Figure 7.7**. Of these there is the potential for **'Significant'** effects on CA05.15 as the proposed Development would be a new focal point in views from the route. The effects on other core paths are assessed as **'Not Significant'** for the following reasons:

- CA05.12. The ZTV shown on **Figure 7.7** indicates no visibility from this core path;
- CA05.16. Tall hedges on either side of the route and forestry plantation in the northern part of the Site would screen the proposed Development in views;
- CA05.17. The land rises from north to south screening the proposed Development. Blade tips may be discernible from the eastern part of the route. The focus of views is likely to be upon coastal scenery and Castle of Mey;
- CA05.20 and CA05.21. These core paths are in forestry plantation. There would potentially be glimpsed and intermittent views of the proposed Development through gaps in trees. The focus of views from the core paths is likely to be on the immediate surroundings of forest and westward to Dunnet Bay;
- CA07.12. The proposed Development would be visible from the open section of the route that follows the unclassified road south east from Canisbay. It would occupy a medium proportion of the field of view with lower parts of the wind turbines screened by forestry plantation and landform. It would not be seen in the direction of travel along the core path and would not impinge on views to Gills Bay, St John's Point and the Pentland Firth;
- CA07.14. There is a slight rise in landform from north to south and there would be screening by road embankments in the eastern part of the route. Screening by vegetation and buildings in the west of the route also prevents views; and
- CA08.07. The core path uses an access track to Stroupster Windfarm. Stroupster Windfarm is the focal point of existing views north west from the core path in the direction of the proposed Development. The composition of views is therefore strongly influenced by windfarm development and while the proposed Development would add to this it would not be uncharacteristic of views from the route.

525. The addition of the proposed Development to cumulative development in Scenarios 1 and 2 would not result in an increase in magnitude or significance of effect assessed above.

7.9 Assessment against OWESG Criteria

7.9.1 Introduction

526. In their scoping response THC advised that the LVIA should include an assessment of the proposed Development against criteria in the OWESG that the Council would use to review the effects of the proposed Development. **Table 7.6** sets out the criteria as described in the OWESG and provides an assessment of the proposed Development which is based on that described elsewhere in this LVIA. Where relevant the assessment refers to the viewpoints shown on **Figures 7.14** to **7.36.**

Table 7.6: Assessment of the proposed Development against OWESG criteria

OWESG criterion	OWESG measure	Assessment of the proposed Development
Criterion 1		
Relationship between Settlements/ Key locations and wider landscape respected.	The extent to which the proposal contributes to perception of settlements or key locations being encircled by windfarm development	The proposed Development is adjacent to Lochend Windfarm which is a small linear array and 3.4 km from Stroupster Windfarm. The proposed Development would be visible from key locations such as Dunnet Head, Duncansby Head and nearby settlements. The effect would be of a noticeable increase in development in a discrete area rather than a perception of encirclement.
Development should seek to achieve a threshold where:	Turbines are not visually prominent in the majority of views within or from settlements/ key locations or from the majority of its access routes.	The LVIA indicates that the proposed Development would be a very noticeable new feature in views from parts of Barrock and Inkstack (Viewpoint 8) from Gills and Upper Gills and from Mey. It would not be visually prominent from key locations such as Dunnet Head (Viewpoint 4), Duncansby Head (Viewpoint 6), Warth Hill (Viewpoint 10) or Castle of Mey GDL (Viewpoint 5).
Criterion 2		
Key Gateway locations and routes are respected.	The extent to which the proposal reduces or detracts from the transitional experience of key Gateway Locations and routes	Key gateway locations include: • Warth Hill on the A99 (Viewpoint 10); • Ben Dorrery (Viewpoint 15) at the transition between open, flat Caithness moorland and the more undulating and rugged landscapes of Sutherland; • Dunnet Head (Viewpoint 4) which contributes to gateway views to the Orkney Islands; • High cliffs of Dunnet Head (Viewpoint 4) and Duncansby Head (Viewpoint 6); and • High point at Scrabster Hill on the A836 west of Thurso (Viewpoint 7). The assessment indicates effects at these locations would be Not Significant. Key routes include: • A9 between Latheron and Causeymire and Ord Point; • A99 between Freswick and John o' Groats (Viewpoint 10); • A836 between Drum Hollistan (east of Melvich) and John o' Groats (Viewpoints 7 and 22); • Minor road (B855) between Brough and Dunnet Head (Viewpoint 4); • Orkney ferries from Scrabster and Gills Bay (Viewpoints 2 and 3); and • Forsinard to Scotscalder train (Viewpoint 23). The assessment indicates effects would be Significant on a short section of the A836 between Rattar and East Mey. Effects on a short section of the Gills Bay to St Margaret's Hope ferry would potentially be Significant.
Development should seek to achieve a threshold where:	Wind turbines or other infrastructure do not overwhelm or otherwise detract from landscape characteristics which contribute the distinctive transitional experience found at key gateway locations and routes.	It is considered that the proposed Development would not overwhelm landscape characteristics. There would be adverse effects on views that contribute to the transitional experience. However, with the exception of the two routes mentioned above the effects would be Not Significant and where effects are Significant these would occur in a discrete area and the transitional experience would be partly affected and the integrity of the experience would be unaffected.
Criterion 3		
Valued natural and cultural landmarks are respected	The extent to which the proposal affects the fabric and setting of valued natural and cultural landmarks	The assessment indicates that the effects on views from Dunnet Head (Viewpoint 4), Duncansby Head (Viewpoint 6), Warth Hill (Viewpoint 10) and Ben Dorrery (Viewpoint 15) would be Not Significant and effects on Dunnet Head SLA and Duncansby Head SLA would be Not Significant. The proposed Development would not impinge upon views towards the two SLA and the Orkney Islands and Pentland Firth to the extent that these features would become inferior to the proposed Development. The assessment indicates that the effects on Castle of Mey GDL would be Not Significant in the context of its contribution to landscape character.
Development should seek to achieve a threshold where:	The development does not, by its presence, diminish the prominence of the landmark or disrupt its relationship to its setting.	The proposed Development would not breach this threshold.
Criterion 4		
The amenity of key recreational routes and ways is respected.	The extent to which the proposal affects the amenity of key recreational routes and ways (e.g. Core Paths, Munros and Corbetts, Long Distance Routes etc.)	The assessment indicates there would be Significant effects on core path CA05.15. Effects on other core paths within 5 km of the proposed Development would be Not Significant. There would be Significant effects on of NCN1 between Barrock and Upper Gills.
Development should seek to achieve a threshold where:	Wind turbines or other infrastructure do not overwhelm or otherwise Significantly detract from the visual appeal of key routes and ways.	While the proposed Development would result in Significant effects on a core path and NCN 1 the majority of core paths in the area would not be Significantly affected and the majority of the part of NCN1 coincident with the LVIA study area would not be Significantly affected.
Criterion 5		

OWESG criterion	OWESG measure	Assessment of the proposed Development
The amenity of transport routes is respected	The extent to which the proposal affects the amenity of transport routes (tourist routes as well as rail, ferry routes and local road access)	The assessment indicates effects would be Significant on a short section of the A836 between Rattar and East Mey. Effects on a short section of the Gills Bay to St Margaret's Hope ferry would potentially be Significant.
Development should seek to achieve a threshold where:	Wind turbines or other infrastructure do not overwhelm or otherwise Significantly detract from the visual appeal of transport routes	While there would be Significant effects as mentioned above the effects would occur on short sections of two routes in the LVIA study area. The proposed Development would be visible from other routes including other parts of the NC500, but effects are assessed as Not Significant on most of the routes and the majority of the length of routes assessed.
Criterion 6		
The existing pattern of Wind Energy Development is respected.	The degree to which the proposal fits with the existing pattern of nearby windfarm development, considerations include: • Turbine height and proportions; • Density and spacing of turbines within developments; • Density and spacing of developments; • Typical relationship of development to the landscape; • Previously instituted mitigation measures; and • Planning Authority stated aims for development of area	The proposed Development would be situated adjacent to Lochend Windfarm which is a regular linear array of four wind turbines each 91 m in height. The proposed Development would be 3.5 km to the north west of Stroupster Windfarm which comprises 13 wind turbines each 110 m in height to tip in an irregular array. The proposed Development would be perceived as a separate development to Lochend Windfarm although it would achieve a degree of integration with the smaller scheme. The proposed Development would appear similar in layout and size to Stroupster Windfarm and would be present in a similar large-scale modified landscape.
Development should seek to achieve a threshold where:	The proposal contributes positively to existing pattern or objectives for development in the area.	The proposed Development would add to operational development in the area and would appear consistent with the pattern of existing development by its location in a large-scale modified landscape. Its contribution to the existing pattern would be positive as it maintains separation with Stroupster Windfarm while maintaining a buffer to smaller scale landscapes to the north.
Criterion 7		
The need for separation between developments and/ or clusters is respected	The extent to which the proposal maintains or affects the spaces between existing developments and/ or clusters	The proposed Development would be adjacent to Lochend Windfarm and the separation distance between the two schemes would be short. The separation to Stroupster Windfarm would be maintained and the two developments would be perceived as separate windfarms.
Development should seek to achieve a threshold where:	The proposal maintains appropriate and effective separation between developments and/ or clusters	Lochend Windfarm is a small development and a small separation distance is appropriate. The separation distance from the proposed Development is appropriate as the two developments although similar can be read as distinctly separate.
Criterion 8		
The perception of landscape scale and distance is respected	The extent to which the proposal maintains or affects receptors' existing perception of landscape scale and distance.	The proposed Development would be visible from a long distance across the relatively level landscape of Caithness. Nearby landscape components such as forestry and further afield dwellings and farmsteads provide a scale comparison.
Development should seek to achieve a threshold where:	The proposal maintains the apparent landscape scale and/ or distance in the receptors' perception.	The large-scale landscape with its horizontal emphasis can absorb the proposed Development without adverse scale comparisons or alteration of perception of distance.
Criterion 9		
Landscape setting of nearby windfarm developments is respected	The extent to which the landscape setting of nearby windfarm developments is affected by the proposal.	Lochend Windfarm is at the western edge of the unit of LCT 134 Sweeping Moorland and Flows in which the proposed Development is located. The proposed Development would be in a similarly modified large-scale landscape.
Development should seek to achieve a threshold where:	Proposal relates well to the existing landscape setting and does not increase the perceived visual prominence of surrounding wind turbines	The proposed Development can be accommodated at the Site without increasing the visual prominence of Lochend and Stroupster Windfarms.
Criterion 10		
Distinctiveness of Landscape character is respected	The extent to which a proposal affects the distinction between neighbouring LCTs, in areas where the variety of character is important to the appreciation of the landscape.	The proposed Development is in a unit of LCT 134 Sweeping Moorland and Flows. It is set back from the adjacent smaller scale landscape pattern of LCT 143 Farmed Lowland Plain and LCT 144 Coastal Crofts and Small Farms.
Development should seek to achieve a threshold where:	Integrity and variety of LCAs are maintained.	The distinction between LCT 134 Sweeping Moorland and Flows, LCT 143 Farmed Lowland Plain and LCT 144 Coastal Crofts and Small Farms would be maintained due to the separation distance between the nearest wind turbines of the proposed Development and the smaller scale landscapes

7.10 Summary and Statement of Significance

7.10.1 Introduction

528. This LVIA has assessed the potential for **'Significant'** effects on landscape and visual receptors within a study area extending 45 km from the proposed Development in all directions. A detailed study area of 30 km in all directions has also been used. The proposed Development would be located in a large-scale landscape of moorland and forestry plantation with smaller areas of improved grassland, which it is considered could accommodate the proposed Development. The majority of the proposed Development would be in forestry plantation and this would be partly felled to accommodate access tracks and wind turbine foundations with 'keyholing' to reduce the total amount of felling. The majority of the forestry plantation would remain. Forestry plantation is a characteristic of the LCT 134 Sweeping Moorland and Flows in which the proposed Development would be located. It makes a very limited contribution to landscape character of the LCT as a whole and the loss of areas of forestry plantation would not redefine the landscape at the Site. Areas of moorland would be lost at the Site. While the loss is limited to areas of the Site, the effects would be **'Significant'** in a limited area.

7.10.2 Landscape Effects

529. The proposed Development would be located in a unit (CT3) of LCT 134 Sweeping Moorland and Flows with some ancillary development located in LCT 143 Farmed Lowland Plain. The LVIA has identified **'Significant'** effects on localised parts of

CT3, LCT 143 Farmed Lowland Plain and a unit of LCT 144 Coastal Crofts and Small Farms. Effects on LCT 134 Sweeping Moorland and Flows (CT3) would be **'Significant'** in the north-western part of the unit where it is located and where it would have a greater influence on landscape character. Its influence would be less and **'Not Significant'** in the eastern and south-eastern part of CT3. Viewpoints 9, 10 and 11 are located in CT3 and the LVIA indicates there would be **'Significant'** effects on Viewpoints 9 and 11. The effects on other units of LCT 134 Sweeping Moorland and Flows coinciding with the LVIA study area would be **'Not Significant'**

530. The wind turbines of the proposed Development would influence views across the northern part of LCT 143 Farmed Lowland Plain between East Mey and St John's Loch and between Barrock and Greenland. **'Significant'** effects are assessed on a localised area of LCT 143 Farmed Lowland Plain at that location. Viewpoints 5, 7, 8, 12, 13, 16 and 17 are located in LCT 143 Farmed Lowland Plain and of those **'Significant'** effects are predicted at Viewpoints 5 and 8.

531. There are three units of LCT 144 Coastal Crofts and Small Farms within 10 km of the proposed Development. The assessment indicates there would be **'Significant'** effects on the western part of the north-eastern unit where it would be a new focal point in views.

532. In Scenario 1 cumulative effects would relate primarily to the addition of the proposed Development as the nearest consented but not constructed sites are at distance of greater than 11 km with the majority over 20 km and would have a limited influence. In Scenario cumulative effects relate mainly from the addition of the proposed Development to Slickly Windfarm which would be approximately 2.6 km to the south east. This would increase the influence of windfarm development in a limited area and the cumulative magnitude of effects on landscape character are similar to those of the proposed Development in the current baseline. **'Significant'** effects therefore relate to the addition of the proposed Development to operational and under construction sites with consented but not yet constructed sites having less importance in Scenario 1.

533. **'Significant'** effects of the proposed Development on landscape character occur at the LCT in which the proposed Development would be located and in the surrounding locality in a limited area. The proposed Development would influence views across the landscape from adjacent areas. With increasing distance from the proposed Development, the effects on landscape character reduce to **'Not Significant'**. The influence of the proposed Development on key characteristics lessens and the prevailing character of the landscape endures with limited or very limited influencing factors associated with proposed Development.

7.10.3 Visual Effects

534. The assessment of effects on views and visual amenity is informed by the 23 viewpoints shown on **Figures 7.14** to **7.36**. In addition, survey work was undertaken in the LVIA study area to assess the visual baseline and assess the potential effects of the proposed Development. The assessment identified **'Significant'** effects at the following viewpoints:

- Viewpoint 3 Gills Bay Ferry (not at the viewpoint but within 5 km of the proposed Development);
- Viewpoint 8 Barrock;
- Viewpoint 9 Brabster; and
- Viewpoint 11 Lochend.

535. Cumulative effects would be **'Significant'** at these viewpoints in relation to Scenario 2 operational, under construction, consented and application development.

536. Settlements, transport routes and recreational routes were also assessed as part of the visual assessment. **'Significant'** effects are predicted on the following settlements:

- Barrock and Inkstack;
- Gill and Upper Gills; and
- Mey.

537. **'Significant'** cumulative effects would also occur on these settlements.

538. **'Significant'** effects are predicted on a short section of the A836 between the junction with minor road to Rattar and East Mey, on the minor road between Barrock and Upper Gills and on the minor road between Upper Gills and Lyth. **'Significant'** effects are also predicted on the route of the Gills bay to St Margaret's Hope ferry where it passes within 5 km of the proposed Development. **'Significant'** cumulative effects would also occur on these transport routes.

539. **'Significant'** effects are predicted on two recreational routes: a section of NCN route 1 between Greenland and Upper Gills and on core path CA05.15 to the north west of Barrock. **'Significant'** cumulative effects would also occur on these recreational routes.

540. The RVAA described in **Technical Appendix 7.2**, assessed the effects on 41 residential properties and identified **'Significant'** effects on 14 of them. The RVAA concluded that the effects of the proposed Development would not meet the residential visual amenity threshold whereby effects are of such a nature or magnitude that living conditions at a residential property could be affected.

541. **'Significant'** effects on views and visual amenity would occur mainly to the north and west of the proposed Development and within a distance of approximately 5 km.

7.10.4 Statement of Significance

542. The LVIA has assessed the effects of the proposed Development on landscape, visual amenity and views. It has identified that **'Significant'** effects would occur within approximately 5 km of the proposed Development. The **'Significant'** effects would be localised and would not affect any locally or nationally designated landscapes.

543. It is considered that the large-scale, modified landscape of the Site and adjacent landscapes could accommodate a development of the scale proposed. The proposed Development would be set back from the smaller scale landscapes of LCT 144 Coastal Crofts and Small Farms to the north and while there would be **'Significant'** effects on a small part of one unit of this LCT the underlying key characteristics and qualities of the LCT would endure. Visual effects are assessed as **'Significant'** within a limited area and relate primarily to short distance views in which the amount of change resulting from the proposed Development would be large although not overwhelming in the context of the expansive nature of baseline views. The large-scale of the landscape at the Site and the wider area mean that the proposed Development is seen in the context of long views with a horizontal emphasis where adverse scale comparisons with landform are not an influencing factor on significance of effects.

544. The proposed Development would be introduced into an area where windfarm development is an established component of views. Lochend and Stroupster Windfarms are nearby and the application site of Slickly Windfarm would be a short distance to the south east. There would be sufficient separation between the proposed Development and Stroupster and Slickly Windfarms to avoid over-intensification of development.

Table 7.7: Summary of effects

Receptor	Receptor sensitivity	Proposed Development in current baseline		Cumulative scenario 1		Cumulative scenario 1	
		Magnitude of effect	Significance of effect	Magnitude of effect	Significance of effect	Magnitude of effect	Significance of effect
Physical landscape effects							
Forestry / moorland mosaic	Low	**High**	**Significant**	No effect	Not Significant	No effect	Not Significant
Improved grazing	Low	Low	Not Significant	No effect	Not Significant	No effect	Not Significant
Landscape character effects							
LCT 134 Sweeping Moorland and Flows (CT3)	Medium	**High at the Site**	**Significant**	**High**	**Significant**	**High**	**Significant**
		Medium beyond 5 km	Not Significant	Medium	Not Significant	Medium	Not Significant
LCT 134 Sweeping Moorland and Flows (CT5)	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 134 Sweeping Moorland and Flows (CT6)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 134 Sweeping Moorland and Flows (CT4)	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 143 Farmed Lowland Plain	Medium	**Medium**	**Significant**	**Medium**	**Significant**	**Medium**	**Significant**
		Low beyond 5 km	Not Significant	Low	Not Significant	Low	Not Significant
LCT 144 Coastal Crofts and Small Farms (north-eastern unit)	Medium	**Medium in west**	**Significant**	**Medium in west**	**Significant**	**Medium in west**	**Significant**
		Low elsewhere	Not Significant	Low elsewhere	Not Significant	Low elsewhere	Not Significant
LCT 144 Coastal Crofts and Small Farms (western unit)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 144 Coastal Crofts and Small Farms (south-eastern unit)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 140 Sandy Beaches and Dunes (western unit)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 140 Sandy Beaches and Dunes (south-eastern units)	Low-Medium	Negligible	Not Significant	Negligible	Not Significant	Negligible	Not Significant
LCT 141 High Cliffs and Sheltered Bays (western unit)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
LCT 141 High Cliffs and Sheltered Bays (eastern unit)	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Effect on landscape designations							
Castle of Mey (Barrogill Castle) GDL	Medium-High	Low	Not Significant	Low	Not Significant	Low	Not Significant
Dunnet Head SLA	Medium-High	Low	Not Significant	Low	Not Significant	Low	Not Significant
Duncansby Head SLA	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Effects on views and visual amenity							
Viewpoint 3 Gills Bay Ferry	Medium	**Medium within 5 km**	**Significant**	Low	Not Significant	Low	Not Significant
	n/a	Low elsewhere	Not Significant	n/a	n/a	n/a	n/a
Viewpoint 4 Dunnet Head	High	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 5 Caste of Mey Entrance	High	Low	Not Significant	No effect	Not Significant	No effect	Not Significant
Viewpoint 6 Duncansby Head	Medium-High	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 7 A836 West of Thurso	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 8 Barrock	Medium	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
Viewpoint 9 Brabster	Low	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
Viewpoint 10 A99 Warth Hill	Low-Medium	Medium	Not Significant	Medium	Not Significant	Medium	Not Significant
Viewpoint 11 Lochend	Medium	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
Viewpoint 12 Bower	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 13 Lyth	Medium	Medium	Not Significant	Medium	Not Significant	Medium	Not Significant
Viewpoint 15 Ben Dorrery	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 18 Noss Head	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 20 Badlipster	Low	Low	Not Significant	Low	Not Significant	Low	Not Significant

Receptor	Receptor sensitivity	Proposed Development in current baseline		Cumulative scenario 1		Cumulative scenario 1	
		Magnitude of effect	Significance of effect	Magnitude of effect	Significance of effect	Magnitude of effect	Significance of effect
Viewpoint 21 Thrumster	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Viewpoint 22 A836 East of Castletown	Low-Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Barrock and Inkstack	Medium	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
Gills and Upper Gills	Medium	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
Canisbay	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Mey	Medium	**High**	**Significant**	**High**	**Significant**	**High**	**Significant**
East Mey	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Scarfskerry and Rattar	Medium	Medium	Not Significant	Medium	Not Significant	Medium	Not Significant
Dunnet and West Dunnet area	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Lyth	Medium	Medium	Not Significant	Medium	Not Significant	Medium	Not Significant
Bower	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Freswick and Tofts	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
Castletown	Medium	Negligible	Not Significant	Negligible	Not Significant	Negligible	Not Significant
Keiss	Medium	Negligible	Not Significant	Negligible	Not Significant	Negligible	Not Significant
A9	Low	Negligible	Not Significant	Negligible	Not Significant	Negligible	Not Significant
A99 (NC500)	Medium	Low to Medium	Not Significant	Low to Medium	Not Significant	Low to Medium	Not Significant
A882	Low	Negligible	Not Significant	Negligible	Not Significant	Negligible	Not Significant
A836 (NC500)	Medium	**Medium (Rattar to East Mey)**	**Significant**	**Medium (Rattar to East Mey)**	**Significant**	**Medium (Rattar to East Mey)**	**Significant**
		Negligible to Low elsewhere	Not Significant	Negligible to Low elsewhere	Not Significant	Negligible to Low elsewhere	Not Significant
B876	Low	Low	Not Significant	Low	Not Significant	Low	Not Significant
B855	Low	Low	Not Significant	Low	Not Significant	Low	Not Significant
Minor road between Barrock and Upper Gills	Low	**High**	**Significant**	n/a	n/a	n/a	n/a
Minor road between Upper Gills and Lyth	Low	**High**	**Significant**	n/a	n/a	n/a	n/a
Gills Bay to St Margaret's Hope ferry	Medium	**Medium within 5 km**	**Significant**	**Medium within 5 km**	**Significant**	**Medium within 5 km**	**Significant**
		Low elsewhere	Not Significant	Low elsewhere	Not Significant	Low elsewhere	Not Significant
John o' Groats to Burwick, South Ronaldsay ferry	Medium	Low	Not Significant	Low	Not Significant	Low	Not Significant
NCN route 1	High	**High between Upper Gills and Greenland**	**Significant**	**High between Upper Gills and Greenland**	**Significant**	**High between Upper Gills and Greenland**	**Significant**
Core path CA05.15	High	**Medium**	**Significant**	**Medium**	**Significant**	**Medium**	**Significant**

7.11 References

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