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## Landscape and Visual Impact Assessment – Summary of conclusions comparison with previous applications

2012 ES (24 Turbine Layout)	2016 ES (24 Turbine Layout)	2017 Supplementary Information (21 Turbine Layout - Consented Development)	2021 Section 36C Application (21 Turbine Layout with amended access tracks – Revised Consented Development)
<p>The assessment reports significant effects will arise as a result of the proposed Development, during the operational phase, in the Limekiln Coniferous Woodland Plantation LCA, and in localised parts of four other closely surrounding LCAs; from eight viewpoints; in two settlements; and from sections of two routes. Significant cumulative effects are reported to arise in localised parts of two LCAs; from two viewpoints; from one settlement; and from a section of one route.</p>	<p>The assessment reports significant effects will arise as a result of the proposed development, during the operational phase, in the Limekiln Coniferous Woodland Plantation LCT, and in localised parts of four other closely surrounding LCTs; from eight viewpoints; in two settlements; from sections of two routes (including part of NCR1) and from nine core paths. Significant cumulative effects are reported to arise in localised parts of two LCTs; from two viewpoints; from one settlement; from a section of one route (including part of NCR1); and from one short core path.</p>	<p>This SI reports that while the changes sought by THC Planning Officer are beneficial in visual terms, they will not remove or reduce any of the significant effects previously assessed for the Original Layout. The principal benefits will arise in the area to the immediate north of the Development Site where increased separation distances will reduce the apparent prominence, field of view and apparent height of the Proposed Development from some locations. This will be beneficial in landscape and visual terms.</p> <p>The cumulative assessment reports that the Proposed Development will give rise to additional, significant, cumulative landscape and visual effects, including Wild Land effects, in a scenario where the application stage Drum Hollistan Wind Farm is assumed to exist in the baseline.</p>	<p>The assessment reports significant effects will arise as a result of the Revised Consented Development in the Limekiln Coniferous Woodland Plantation LCT, Beinn Ratha Moorland Slopes and Hills and in localised parts of five other closely surrounding LCTs; from seven viewpoints; in two settlements; from sections of two routes, including coinciding parts of NC500 and NCR1 and from nine local core paths.</p> <p>In respect of Cumulative Scenario 1, significant cumulative effects are reported to arise in localised parts of two LCTs; from two viewpoints; in one settlement, from a short section of one route, including coinciding parts of NCR1, and from one core path. In respect of Cumulative Scenario 2, significant cumulative effects are reported to arise in localised parts of four LCTs; from four viewpoints; in one settlement, from short sections of two routes, including coinciding parts of NC500 and NCR1, and from one core path.</p>

## **9. Landscape and Visual Impact Assessment**

### **9.1 Non-technical Summary**

- 9.1.1 The assessment of landscape and visual effects has been carried out to identify the significant effects that are likely to arise as a result of the Revised Consented Development. It has considered the effects on landscape and visual receptors, as well as the cumulative effect of the Revised Consented Development in combination with other wind farm developments on these receptors.
- 9.1.2 The assessment reports significant effects will arise as a result of the Revised Consented Development in the Limekiln Coniferous Woodland Plantation LCT, Beinn Ratha Moorland Slopes and Hills and in localised parts of five other closely surrounding LCTs; from seven viewpoints; in two settlements; from sections of two routes, including coinciding parts of NC500 and NCR1 and from nine local core paths.
- 9.1.3 The cumulative assessment considers the effect of the Development in conjunction with all relevant operational, under construction and consented wind farms in Cumulative Scenario 1, and the effect of the Development in conjunction with all relevant operational, under construction, consented and application stage wind farms in Cumulative Scenario 2. In respect of Cumulative Scenario 1, significant cumulative effects are reported to arise in localised parts of two LCTs; from two viewpoints; in one settlement, from a short section of one route, including coinciding parts of NCR1, and from one core path. In respect of Cumulative Scenario 2, significant cumulative effects are reported to arise in localised parts of four LCTs; from four viewpoints; in one settlement, from short sections of two routes, including coinciding parts of NC500 and NCR1, and from one core path.
- 9.1.4 The landscape of the site comprises low and sweeping hills with a blanket covering of coniferous woodland. The landscape has a scale and depth which makes it suitable for wind farm development and the woodland cover makes the Revised Consented Development appear contained in the wider landscape. The significant effects arise principally as a result of the close proximity of the immediate LCT and closely surrounding LCTs to the large scale turbines of the Revised Consented Development whose influence will alter the character of these LCTs despite there already being an influence from other baseline wind farm developments. These effects on landscape character extend out to a maximum distance of 7 km from the Revised Consented Development.
- 9.1.5 The area surrounding the Revised Consented Development is not covered by the local / regional landscape designation of the Sensitive Landscape Area (SLA) or the national landscape designation of the National Scenic Area (NSA). These designations do, however, occur in the 40 km radius Study Area. Of the two Special Landscape Areas assessed in detail, neither were found to be significantly affected by the Revised Consented Development, owing to a combination of separation distance, limited extents of visibility and a closer association with the coast than the hinterland where the Revised Consented Development will be located. The Revised Consented Development will not have a significant effect on any of the locally or nationally designated landscapes in the Study Area.

- 9.1.6 Visibility of the Revised Consented Development is limited across the landscapes to the west and south owing to the screening effect of the intervening landform which surrounds the close range of the site. These landscapes are rural with little development such that viewpoints and receptors are typically representative of hill top views. Visibility is more extensive across the flatter landscape to the immediate north and east, where the landscape is more settled and the viewpoints representative of roads and settlements. The site marks a transition between the settled landscapes to the north and north-east and the unsettled landscapes to the west and south.
- 9.1.7 Seven of the viewpoints are reported to undergo significant effects as a result of the Revised Consented Development. All seven lie within approximately 5 km of the Revised Consented Development and the significant effects relate principally to the close proximity of the turbines which will appear as large scale structures that will form a focus in the views. The majority of the viewpoints are representative of settlements and routes and lie in the settled landscapes to the north and north-east. The surrounding landscape is not covered by any regional or national designations and there are few obvious viewpoints other than close range hill tops.
- 9.1.8 The significant cumulative effects which arise in respect of Cumulative Scenario 1 relate principally to the combined effect of the Revised Consented Development with Baillie Hill Wind Farm which is situated 4.5 km to the east. The two LCTs, two viewpoints, one settlement, section of one route, including the coinciding part of NCR1, and core path which are significantly affected, are situated in the area which lies between, or in close proximity, to the two developments.
- 9.1.9 The significant cumulative effects which arise in respect of Cumulative Scenario 2 relate principally to the combined effect of the Revised Consented Development with Baillie Hill Wind Farm which is situated 4.5km to the east and Drum Hollistan and Ackron which are situated 3.5 km and 5 km respectively to the north-east. The four LCTs, four viewpoints, one settlement, section of two routes, including the coinciding parts of NC500 and NCR1, and core path, which are significantly affected, are situated in the area which lies between, or in close proximity, to the four developments.
- 9.1.10 An assessment of the effects of the Combined Development comprising the Revised Consented Development and Limekiln Extension has been included for completeness. In respect of the landscape and visual receptors assessed in the main assessment in Sections 9.8, 9.9, 9.10 and 9.11, and the cumulative assessment in Section 9.11, the findings do not change between the assessment of the Revised Consented Development and the Combined Development.
- 9.1.11 In respect of effects on the East Halladale Flows Wild Land Area, **Appendix 9.E** presents a full and detailed assessment. While the assessment shows that the Revised Consented Development will affect the perception of wildness qualities in parts of WLA 39, these effects will arise, in the main, in locations where the wildness qualities are not expressed to their optimum and where other external influences have resulted in a diminution of their strength. In areas where wildness qualities are better expressed and high levels of visibility arise (Viewpoints B and C) the extent of these areas is small and localised, and they

are areas subject to visibility from other wind farms. Importantly, in the parts of WLA 39 which display wildness qualities to their optimum, the Revised Consented Development Wind Farm will not cause any significant effects. On this basis, OPEN considers that the Revised Consented Development will not harm the integrity of WLA 39 as a whole.

- 9.1.12 In respect of effects on Residential Visual Amenity, **Appendix 9.F** presents a full and detailed assessment. The assessment shows that there are no properties within a 2 km radius which is typically the outer extent of a Residential Visual Amenity Assessment following Landscape Institute Guidance (2019). While the effects of the Revised Consented Development will give rise to significant effects in respect of 11 of the 14 properties assessed, none of these will undergo a high magnitude of change, and, therefore, none will reach the 'Residential Visual Amenity Threshold' where effects may become overwhelming or overbearing.
- 9.1.13 While significant and cumulative significant effects are reported to arise within the first 7 km radius of the Revised Consented Development, the remaining receptors will undergo no significant effects or no effects. Not all receptors within a 7 km radius of the Revised Consented Development will be significantly affected.

## 9.2 Introduction

- 9.2.1 This Landscape and Visual Impact Assessment (LVIA) chapter of the Environmental Impact Assessment Report (EIA Report) evaluates the potential landscape and visual effects of the Limekiln Wind Farm Section 36C Variation Application (hereafter referred to as 'the Revised Consented Development'). It has been prepared by chartered Landscape Architects at Optimised Environments Limited (OPEN) on behalf of the Applicant. The LVIA has been undertaken during 2021, with the LVIA for the Consented Development (Infinergy 2020) undertaken during 2015 and 2016, and Supplementary Information (SI) undertaken in 2017. The LVIA considers the effects of the Revised Consented Development on the fabric of the Site, on landscape character and visual amenity, and on the cumulative effects arising from the Revised Consented Development in-conjunction and in-combination with other wind farms.
- 9.2.2 This LVIA contains the following sections:
- Introduction and Overview;
  - Methodology and Approach;
  - Baseline Conditions;
  - Potential Effects;
  - Design Evolution;
  - Scope of the Assessment;
  - Assessment of Landscape Effects;
  - Assessment of Visual Effects;

- Assessment of Cumulative Effects; and
  - Summary of Assessment of Effects.
- 9.2.3 The following seven technical appendices to this LVIA, are included in **Volume 4** of the EIA Report, and these should be read in conjunction with the LVIA.
- **Appendix 9.A:** Landscape and Visual Impact Assessment Methodology.
  - **Appendix 9.B:** Preliminary Assessment of Effects on Landscape Character.
  - **Appendix 9.C:** Preliminary Assessment of Effects on Views.
  - **Appendix 9.D:** Preliminary Assessment of Cumulative Effects.
  - **Appendix 9.E:** Assessment of Effects on Wild Land.
  - **Appendix 9.F:** Residential Visual Amenity Assessment (RVAA).
  - **Appendix 9.G:** Onshore Wind Energy Supplementary Guidance (OWESG) Assessment.

#### Project Description

- 9.2.4 **Chapter 4 Description of the Revised Consented Development** provides descriptions of the site, the main components of the Revised Consented Development, the associated infrastructure and the phases of construction, operation and decommissioning.
- 9.2.5 The Revised Consented Development comprises up to 21 wind turbines, which will have a maximum blade tip height of 149.9 m. A site entrance will be taken from the A836 at the eastern end of Reay and will pass south to connect to a network of new and upgraded forest tracks to access each of the turbines. Other permanent infrastructure will include a sub-station and control building, and temporary infrastructure will include one borrow pit and one construction compound. The site layout is shown in **Figure 4.1**.

#### Project Terminology

- 9.2.6 The terminology used in the LVIA is consistent with that set out in Chapter 1: Introduction of this EIA. It refers to the 'Revised Consented Development' for the Limekiln Wind Farm S36C Variation and the 'Consented Development' for the Limekiln Wind Farm consented in June 2019. At points in the LVIA, it is necessary to refer to individual turbines or groups of turbines, in which case terminology refers to the 'proposed turbines' for the Revised Consented Development turbines. The assessment uses the term 'turbines' when referring generally to wind turbines.
- 9.2.7 Where distances between receptors and the Revised Consented Development are used in this assessment, they refer to the distance from the closest edge of the receptor to the closest proposed turbine, unless otherwise stated.
- 9.2.8 Where the landscape and visual effects of the Revised Consented Development are described, the future tense rather than the conditional tense is used to evaluate the effects predicted rather than to anticipate the outcome of the application process.

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### Comparative Assessment

- 9.2.9 The Consented Development, which was consented in June 2019, is similar to the Revised Consented Development in that they both comprise up to 21 turbines set out in exactly the same layout on the same site. The main difference between them is that the dimensions of the turbines proposed for the Revised Consented Development are larger. In the Consented Development, while all 21 turbines have an 82 m rotor diameter, the hub height of 15 turbines at 98 m gives them an overall blade tip height of 139 m, while the hub height of the remaining 6 turbines at 85 m gives them an overall blade tip height of 126 m. The blade tip height of all 21 of the turbines proposed for the Revised Consented Development is 149.9 m, representing an increase of 10.9 m in respect of 15 of the turbines and 23.9 m in respect of the remaining 6 turbines.
- 9.2.10 The purpose of this LVIA is to identify all significant effects that will arise as a result of the Revised Consented Development. The Revised Consented Development is assessed against a baseline in which the site is assumed to be undeveloped, despite there being a consent for a similar wind farm on the site and the Revised Consented Development is assessed without reference to the Consented Development.
- 9.2.11 At Section 9.13 a brief comparative assessment is, however, presented, which summarises any changes that have occurred within the LVIA between the assessment of the Consented Development and the Revised Consented Development. This is considered to be useful to highlight areas, if any, where the assessment has changed and is supported by a set of comparative wirelines for the 18 viewpoints, presented in **Figures 9.55 to 9.72**. There is also a second set of comparative wirelines, presented in **Figures 9.73 to 9.90** which illustrate the comparison between turbines with a 149.9 m tip height and 117 m rotor and turbines with a 149.9 m tip height and 133 m rotor. The purpose of this latter comparison is to demonstrate how different diameters of turbine rotors – within the same overall height parameter – would appear in the representative viewpoints. The choice of which specific rotor diameter will be utilised in the wind farm will be made on commercial grounds at the point of purchase, to ensure optimum energy efficiency is achieved. While the LVIA is based on a 117m diameter rotor, as the candidate turbine, OPEN has also considered whether a larger, 133m diameter rotor, (within the same 149.9m tip height) would alter the findings of the assessment, insofar as landscape and visual effects are concerned. OPEN is satisfied from this assessment that the larger rotor would not cause any material change to the findings of significance. In particular, it would not cause any not significant landscape or visual effects to become significant.
- 9.2.12 A brief summary of the key findings of the Reporter's Report (16<sup>th</sup> October 2018) are presented below in order to highlight the reasons behind consenting the Consented Development in respect of the critical landscape and visual issues that were considered. This provides a useful measure against which the threshold for significant effects can be assessed.
- 9.2.13 At paragraph 9.12 the Reporter concludes; "Overall, whilst there would be some significant landscape effects, we find these to be relatively localised, and we



conclude that both the immediate (host) and surrounding landscape is capable of satisfactorily accommodating the Limekiln 2 development."

- 9.2.14 While at paragraph 9.13 the Reporter makes the further conclusion; "Similarly, we conclude that significant visual effects would not occur beyond a 6 to 7 kilometre radius from the proposed development. The council and applicant are in agreement over which of the representative viewpoints would be subject to significant visual effects, but are in disagreement over the sensitivity of the principal visual receptors and/ or the magnitude of visual effects." And then at paragraph 9.14 states "...we do not find the Limekiln 2 development would overwhelm views, nor would it unduly detract from the visual amenity of the area more widely, which we consider to be derived more strongly from views of the coast and sea, rather than the relatively unremarkable landward views from along the A836, and from the north side of the application site more broadly."

#### Study Area

- 9.2.15 The LVIA covers a Study Area of 40 km radius, which follows guidance presented in 'Visual Representation of Windfarms Version 2.2' produced by NatureScot (formerly Scottish Natural Heritage (SNH)). The 40 km Study Area is measured beyond an 'enclosing circle' around the proposed turbines, as shown in **Figure 9.1**. Graphic information, including Zone of Theoretical Visibility (ZTV) diagrams, have been produced to cover the 40 km Study Area, as shown in **Figures 9.8a, 9.8b, 9.9a and 9.9b**.
- 9.2.16 The Study Area is not intended to provide a boundary beyond which the Revised Consented Development will not be seen, but rather to define the area within which the Revised Consented Development may have a significant landscape or visual effect. It is considered very unlikely for a significant effect to occur towards the edges of the Study Area and this is confirmed by the assessment undertaken.
- 9.2.17 Cumulative effects are assessed with other existing and proposed wind farms within a Study Area of a 40 km radius, in accordance with relevant cumulative assessment guidance. Cumulative wind farms are shown in **Figure 9.17**.

#### Consultation

- 9.2.18 The Highland Council (THC) and NatureScot (formerly Scottish Natural Heritage) have been consulted during the pre-application stages of this 2021 EIAR, as well as throughout various stages of the previous 2016 EIAR and 2017 Supplementary Information (SI). The detail of these previous consultations is presented in these documents. Consultation has led to agreement on the content of the viewpoint list, content of the cumulative wind farm list and requirements for the graphic production, which is to follow THC's 'Visualisation Standards for Wind Energy Developments' (July 2016) and NatureScot's 'Visual Representation of wind farms Version 2.2' (February 2017). Reference to the iterative layouts and iterative design process which took place prior to the 2016 Environmental Statement (ES) and 2017 SI submissions, is described in more detail in the sections on Design Evolution in these respective documents.
- 9.2.19 A summary of the more recent consultation responses relevant to this LVIA is presented in Table 9.1.



**Table 9.1 – Consultation Response**

Consultee	Consultation Response	Applicant Action
The Highland Council  Pre-application Consultation  7 <sup>th</sup> April 2021	<i>"HwLDP Policy 61 Landscape requires new development to reflect the landscape characteristics and special qualities identified in the relevant Landscape Character Assessments. Our normal advice is to use the recently refreshed and published (2019) Nature Scot Landscape Character Assessments (LCAs); however, the developer indicated at the pre-application meeting an intention to use the 2016 version to ensure comparability to the previous assessment and if that is to be done, we would support the stated intention that in doing so any significant differences would be picked up. The LCAs are a starting point on which to base assessment of landscape and visual impact. It is important to set out who the visual receptors of the development are, what the landscape impacts are and how these two factors relate."</i>	As agreed, the 2016 LCA has been used as the basis of the Assessment of Effects on Landscape Character presented in Section 9.9.
	<i>"Pages 18-20 of the OWESG list ten landscape and visual criteria that the Council will use as a framework for assessing proposals. They are not absolute requirements but set out key considerations of the Council that the developer should be aware of and take into account within design and assessment of the proposal. The criteria should influence the proposals and the supporting documents for any application should include the developer's assessment against these criteria."</i>	<b>Appendix 9.G</b> presents an assessment of the Revised Consented Development against the ten landscape and visual criteria set out in the OWESG.
	<i>"The Council has been undertaking work on appraising the sensitivity of the landscape to onshore wind energy development and identifying strategic capacity. Your site falls within the area covered by the Caithness study, which became part of the Council's adopted suite of Supplementary Guidance in December 2017. The prospective developer should bear it in mind when developing and assessing their proposals. The majority of your site is located within the study 'LCA' referenced CT4 Central Caithness (all but the access, which is in CT9). The</i>	Reference to the 'Offshore Wind Energy Supplementary Guidance – Landscape Sensitivity Appraisal (December 2017) is made in Section 9.4 Baseline Conditions.

Consultee	Consultation Response	Applicant Action
	<i>landscape character type of CT4 is 'sweeping moorland and flows'. You should consider within your assessment the guidance that the appraisal provides for CT4. You should read and have regard to all relevant parts of the appraisal and have regard to what the appraisal says for the adjacent 'LCA'."</i>	
NatureScot Pre-application consultation  21 <sup>st</sup> April 2021	<i>"NatureScot welcome the proposed review of the wild land assessment in line with our guidance, 'Assessing Impacts on Wild Land technical guidance' (2020). We note from the comparative ZTV that the proposed variation to increase the turbine height to 149.9m will likely result in very limited additional visibility over and above the consent Limekiln Wind Farm proposal. NatureScot advise that the proposed variation would therefore have similar significant adverse effects on a nationally important area of wild land, Wild Land Area (WLA) 39 East Halladale Flows as the consented proposal which we previously objected to. In our view these effects cannot be readily mitigated. NatureScot would therefore object to any forthcoming application for the proposed variation."</i>	<b>Appendix 9.E</b> Assessment of Effects on Wild Land presents the detailed assessment of the effects of the Revised Consented Development on East Halladale Flows WLA.
	<i>"We agree that the Kyle of Tongue NSA can be scoped out."</i>	Noted
	<i>"We agree it would be acceptable to remove the Broubster Wind Farm from the cumulative assessment given the inactivity of this application. The status of Broubster should however be checked with THC."</i>	Noted
	<i>"With regards to the assessment for WLA 39, we agree that it will be acceptable to use old photography unless there has been any changes in which case the photography should be updated."</i>	Noted
The Highland Council (THC) Scoping Opinion  23 <sup>rd</sup> April 2021	<i>"It is the Council's position that it is not possible to use panoramic images for the purposes of visual impact assessment. The Council, while not precluding the use of panoramic images, require single frame images with different focal lengths taken with a 35mm format full frame sensor camera – not an 'equivalent.' The focal lengths required are 50mm and 75mm. The former gives an indication of field of view and the latter best represents the</i>	The photomontages in <b>Figures 9.91 to 9.108</b> follow THC Visualisation Standards (2017).

Consultee	Consultation Response	Applicant Action
	<i>scale and distance in the landscape i.e. a more realistic impression of what we see from the viewpoint. These images should form part of the EIAR and not be separate from it. Photomontages should follow the Council's Visualisation Standards."</i>	
	<i>"Separate volumes of visualisations should be prepared to both Highland Council Standards and NatureScot guidance. These should be provided in hard copy. It would be beneficial for THC's volume to be provided in a A3 ring bound folder for ease of use."</i>	Visualisations to both NatureScot and THC Visualisation Standards are provided in hard copy in ring binders.
	<i>"We have recently had dialogue with the applicant on the re-use of photography and we have agreed that new photography should be prepared for all viewpoints within 10km of the site and also VP17. We have advised that, without prejudice to our views on the significance or otherwise of effect, we would be content with the existing photography being used for VP7 (Strathy Point), VP11 (Georgemas Junction) and VP 12 (Spittal), and VP13 (Dunnet Head)."</i>	New photography is provided for all viewpoints within 10 km of the site, including VP17.
	<i>"This assessment should include the expected impact of on-site borrow pits and access roads, despite the fact that the principal structures will be a primary concern."</i>	In Sections 9.7, 9.8 and 9.10 the assessment considers the effects of on-site borrow pits and access roads.
	<i>"We agree that the study area for solus effects should be 40km from the outer most turbines and consider that the assessment of landscape and visual impact should be completed in full across the entire study area. THC do not consider it to be acceptable to screen out viewpoints for a full assessment based upon distance."</i>	While a 40 km Study Area has been used for the preliminary assessment, the detailed assessment focuses on a 20 km radius, where there is potential for significant effects to arise. This approach is supported by the 2016 ES and 2017 SI which found the threshold for significant effects to occur at approximately 7 km.  As distance is a key factor in determining magnitude of change it is fully reasonable for this to be a consideration in screening out viewpoints.
	<i>"There are a number of similar applications in this area which are yet to be determined / concluded in the vicinity"</i>	The list of cumulative wind farms within a 40 km radius of the

Consultee	Consultation Response	Applicant Action
	<i>of this application, the status of these will require to be updated beyond figure 7.2, for example Drum Hollistan Wind Farm resubmission is not included and the status of a number of the other wind farms has changed. This is considered an oversight which must be corrected for the submission of the application, we are happy to advise on the cumulative baseline in due course."</i>	Revised Consented Development was updated on 12th May 2021 and this information has been used to inform the cumulative assessment.
	<i>"The finalised list of Viewpoints (VP) and wireframes for the assessment of effects of a Revised Consented Development must be agreed in advance of preparation of any visuals with THC."</i>	The viewpoint list has been agreed with THC.
	<p><i>"Further the LVIA Chapter of the EIAR should clearly set out the methodology including:</i></p> <ul style="list-style-type: none"> <li><i>• Definitions of each point on the scale of magnitude of change which is used by the applicant in reaching a conclusion on the magnitude of change;</i></li> <li><i>• Definitions of each point on the scale of sensitivity of receptor which is used by the applicant in reaching a conclusion on the sensitivity of receptor;</i></li> <li><i>• The threshold to which the applicant considers a significant effect is reached;</i></li> <li><i>• A clear matrix approach supported by descriptive text setting out how the applicant reaches their conclusion of effect on landscape character, designated landscapes, visual receptors and residential amenity."</i></li> </ul>	<b>Appendix 9.A</b> sets out the full LVIA Methodology that has been applied in the assessment, including the information highlighted in the column opposite.
	<i>"When assessing the impact on recreational routes please ensure that all core paths, the national cycle network, long distance trails are assessed. It should be noted that these routes are used by a range of receptors."</i>	All relevant core paths, long distance trails and national cycle networks are assessed in Section 9.11.
	<i>"The development will further extend the number of proposals of this type in the surrounding area, necessitating appropriate cumulative impact. It is considered that cumulative impact will be a significant material consideration in the final determination of any future application. The Study Area for a cumulative LVIA (CLVIA) should extend to a minimum of 60km."</i>	As stated in guidance (SNH, 2012, p15) "At every stage in the process the focus should be on the key cumulative effects which are likely to influence decision making, rather than an assessment of every potential cumulative effect." Findings from the 2016 ES and 2017 SI established the extent of cumulative effects within

Consultee	Consultation Response	Applicant Action
		a 5 km radius. The requirement to extend the Study Area out to 60 km does not serve a proportional approach, even taking into account the blade tip increase of 10.9m for 15 of the turbines and 23.9m for the remaining six. A 40 km Study Area has been considered appropriate for the cumulative assessment.
	<i>"We expect an assessment of the proposal against the criterion set out in the Council's OWESG to be included within the LVIA chapter of the EIAR."</i>	An assessment of the Revised Consented Development against the OWESG criterion is presented in <b>Appendix 9.G</b> .
	<i>"As the turbine heights are less than 150m to blade tip, aviation lighting is not required by default but may be required by consultees with an aviation interest. If consultees require this then an assessment of the impact of turbine lighting in hours of darkness will be required."</i>	No aviation lighting is required other than the MOD standard aviation safety lighting which is only visible to people wearing night vision goggles. There is no need, therefore, to assess night lighting in the LVIA.
	<i>"In relation to Landscape, there are a number of matters which require to be updated within the scoping report. This includes terminology related to Wild Land Areas and the Landscape Character Assessment should be the 2019 NatureScot assessment. Further in relation to impacts on areas of Wild Land (as identified by NatureScot in 2014), an assessment on the impacts of the qualities of Wild Land requires to be undertaken. The methodology and scope for this assessment should be agreed with THC and NatureScot."</i>	An assessment of the effects on East Halladale Flows Wild Land Area is presented in <b>Appendix 9.E</b> which follows the 2020 NatureScot guidance. As agreed through pre-application consultations with THC and NatureScot, the 2016 Landscape Character Assessment will be referenced to enable comparison with the 2016 ES and 2017 SI.
	<i>"Further an assessment of the proposals impact on the special qualities of the Special Landscape Areas in vicinity of the site must be undertaken. Given the scale of the proposals there may now be visibility of the scheme within National Scenic Areas and the Cairngorms National Park. Assessments of the proposal against</i>	An assessment of the effects on the Farr Bay, Strathy and Port Skerra SLA and Dunnet Head SLA are presented in Section 9.9 of the LVIA.  The ZTV in <b>Figure 9.12</b> shows the very limited extent of visibility on the

Consultee	Consultation Response	Applicant Action
	<i>impacts on these designations must be undertaken."</i>	NSAs occurring at minimum distances of 38 km.  At a range of 126 km it is not considered possible for a significant effect to arise in respect of the Cairngorms National Park and, therefore, this designated area has not been included in the LVIA.
	<i>"It is considered that Residential Visual Amenity should not be scoped out of the EIA."</i>	A Residential Visual Amenity Assessment (RVAA) is presented in <b>Appendix 9.F</b> .
NatureScot 8 <sup>th</sup> April 2021	<p><i>"We welcome the proposed review of the wild land assessment for WLA 39 in line with our guidance, 'Assessing Impacts on Wild Land technical guidance' (2020). We note from the comparative ZTV that the proposed variation to increase the turbine height to 149.9m will likely result in limited additional visibility over and above the consented Limekiln Wind Farm proposal."</i></p> <p><i>"We advise that the proposed variation would therefore have similar significant adverse effects on a nationally important area of wild land, WLA 39, as the consented proposal."</i></p> <p><i>"In our view these effects cannot be readily mitigated. Our advice previously given in relation to the S36 application for the consented proposal, therefore, remains unchanged. We would therefore object to any forthcoming application for the proposed variation."</i></p>	An assessment of the effects on East Halladale Flows Wild Land Area is presented in <b>Appendix 9.E</b> which follows the 2020 NatureScot guidance.
	<p><i>"We agree that the Kyle of Tongue NSA can be scoped out."</i></p> <p><i>"We agree for the other Wild Land Areas to be scoped out."</i></p> <p><i>"We agree it would be acceptable to remove the Broubster Wind Farm from the cumulative assessment given the inactivity of this application. The status of Broubster should however be checked with THC."</i></p> <p><i>"With regards to the assessment for WLA 39, we agree that it will be acceptable to use old photography unless there has</i></p>	Noted.



Consultee	Consultation Response	Applicant Action
	<i>been any changes in which case the photography should be updated."</i>	

### 9.3 Methodology and Approach

9.3.1 This section provides a summary of the methodology used to carry out the LVIA, with the full methodology described in **Appendix 9.A**. This methodology has been specifically devised by OPEN for the assessment of wind farms and complies with 'Guidelines for the Assessment of Landscape and Visual Impacts: Third Edition' (GLVIA3). In addition to GLVIA3, the following sources have been used in the formulation of the assessment methodology and the presentation of graphics:

- The Landscape Institute with the Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition.
- The Highland Council (2016). Visualisation Standards for Wind Energy Developments.
- Scottish Natural Heritage (2017). Visual Representation of Wind Farms Guidance – Version 2.2.
- Landscape Institute (2019). Technical Guidance Note 06/19: Visual Representation of Development Proposals;
- Scottish Natural Heritage (2010). 'The Special Qualities of the National Scenic Areas: Commissioned Report No. 374'
- The Highland Council (2011). 'Assessment of Highland Special Landscape Areas'.
- NatureScot (2020). Assessing impacts on Wild Land Areas – technical guidance.'
- Scottish Natural Heritage (2012). 'Assessing the cumulative impact of onshore wind energy developments'.
- Scottish Natural Heritage (2018). 'Guidance for Assessing the Effects on Special Landscape Qualities' Working Draft and Annexes.
- Land Use Consultants on behalf of SNH and the Countryside Agency (2002). Landscape Character Assessment: Guidance for England and Scotland; and
- Scottish Natural Heritage (2017). Siting and Designing of Windfarms in the Landscape: Version 3a.

#### Receptors to be assessed

9.3.2 The scope of the assessment is based on a preliminary assessment of potential landscape and visual receptors across the Study Area and is presented in **Appendix 9.B** Preliminary Assessment of Effects on Landscape Character and **Appendix 9.C** Preliminary Assessment of Effects on Views. In terms of identifying those receptors which could be subject to a cumulative effect, this is presented in **Appendix 9.D** Preliminary Assessment of Cumulative Effects. These preliminary assessments present a filtering process which identifies those



receptors with potential to undergo a significant effect and, therefore, require to be assessed in more detail in the LVIA, and those which do not and therefore, which can be discounted from the detailed assessment.

#### Effects to be assessed

- 9.3.3 The LVIA identifies the effects that the Revised Consented Development will have on landscape character and visual amenity. For the purpose of the assessment, the potential effects on landscape and visual receptors are grouped into the following five categories.

#### *Effects on physical elements*

- 9.3.4 Physical effects are restricted to the area within the Revised Consented Development site boundary and are the direct effects on the existing fabric of the Site, such as the removal of forestry and alteration to ground cover. This category of effects is made up of landscape elements, which are the components of the landscape, such as heather moorland, that may be directly and physically affected by the Revised Consented Development.

#### *Effects on landscape character*

- 9.3.5 Landscape character is the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and the way that this pattern is perceived. Effects on landscape character arise either through the introduction of new elements that physically alter this pattern of elements, or through visibility of the Revised Consented Development, which may alter the way in which the pattern of elements is perceived. This category of effects is made up of landscape character receptors, which fall into two groups; landscape character areas and planning related landscape designations.

#### *Effects on wild land*

- 9.3.6 The assessment of effects on wild land is allied closely to effects on landscape character and consists of two parts: firstly, the identification of the extent and condition of wild land in the vicinity of the Revised Consented Development based on NatureScot's published Wild Land Areas; and secondly, the assessment of the effect that the Revised Consented Development will have on the Wild Land Areas. The assessment of Wild Land Areas follows the methodology set out in NatureScot's 'Assessing impacts on Wild Land Areas – technical guidance.'

#### *Effects on visual receptors*

- 9.3.7 The assessment of effects on visual receptors is an assessment of how the introduction of the Revised Consented Development will affect the views of people throughout the Study Area. The assessment of effects on visual receptors considers the effects that the Revised Consented Development will have on people's views from notable settlements, roads, railways, paths and other features and attractions found throughout the Study Area. The assessment uses viewpoints to represent the wider visual amenity of residents, road and rail-users, walkers and workers.

#### *Cumulative effects*

- 9.3.8 Cumulative effects arise where the Study Areas for two or more wind farms overlap so that both of the wind farms are experienced at proximity where they

may have a greater incremental effect, or where wind farms may combine to have a sequential effect, irrespective of any overlap in study areas. In NatureScot guidance, cumulative effects are described as follows 'Cumulative impacts can be defined as the additional changes caused by a Revised Consented Development in conjunction with other similar developments or as the combined effect of a set of developments taken together.' In this LVIA, both in-conjunction and in-combination effects are assessed in respect of the cumulative context. When assessing in-conjunction effects, it is the incremental effect of the addition of the Revised Consented Development to the cumulative situation that is being assessed. When assessing in-combination effects, it is the overall cumulative effect of wind farms, including the Revised Consented Development, that is being assessed.

- 9.3.9 In accordance with NatureScot Guidance, the cumulative assessment evaluates the likely effects that will arise from the addition of the Revised Consented Development in-conjunction and in-combination with the baseline windfarms and cumulative wind farm scenarios.
- 9.3.10 A significant cumulative effect will occur where the additional effect of the Revised Consented Development with other existing and/or proposed wind farms will result in a landscape character or view that is defined by the presence of more than one wind farm and is characterised primarily by wind farms. It should be noted that even if the Revised Consented Development itself is assessed to have a significant effect on a landscape or visual receptor, it does not necessarily follow that the cumulative effect will also be significant.
- 9.3.11 To assist the decision maker, the assessment also provides an overview of the likely combined cumulative effects of the Revised Consented Development in-combination with relevant operational and consented windfarms. The purpose of this is to consider whether the resulting pattern of development (including the Revised Consented Development) will result in the redefinition of landscape character or visual receptors. For example, if the existing landscape character displays a 'landscape with windfarms' characteristic, where windfarms are one of a number of defining characteristics, the assessment will consider whether this may be redefined as a 'wind farm landscape' when the addition of the Revised Consented Development means wind turbines become the most prevalent defining characteristic of the landscape. Combined cumulative effects are linked closely to landscape and visual capacity, and the assessment has regard to factors such as the relationship of the combination of wind farms to landscape character types and the overall influence of the ZTV, in reaching an informed opinion as to the extent and nature of any combined cumulative effects.

#### Significance of the effects

- 9.3.12 The objective of the assessment of the Revised Consented Development is to predict the significant effects on the landscape and visual resource. In accordance with 'The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017', the LVIA effects are assessed to be either significant or not significant. The LVIA does not define intermediate levels of significance as the Regulations do not provide for these.

- 9.3.13 The significance of effects is assessed through a combination of two considerations – the sensitivity of the landscape or visual receptor and the magnitude of change that will result from the Revised Consented Development. In accordance with the Landscape Institute’s GLVIA3, OPEN’s methodology requires the application of professional judgement. Although it is not reliant on the use of a matrix, the matrix presented in Table 9.2 has been included to illustrate how combinations of the ratings for sensitivity and magnitude of change can give rise to significant effects, as well as to give an understanding of the threshold at which significant effects may arise.

**Table 9.2 – Illustrative Matrix of Significant Effects**

<b>Magnitude</b>	<b>High</b>	<b>Medium to high</b>	<b>Medium</b>	<b>Medium to low</b>	<b>Low</b>	<b>Negligible</b>
<b>Sensitivity</b>						
<b>High</b>	significant	significant	significant	Significant / not significant	not significant	not significant
<b>Medium to high</b>	significant	significant	Significant / not significant	Significant / not significant	not significant	not significant
<b>Medium</b>	significant	Significant / not significant	Significant / not significant	not significant	not significant	not significant
<b>Medium to low</b>	Significant / not significant	Significant / not significant	not significant	not significant	not significant	not significant
<b>Low</b>	Significant / not significant	not significant	not significant	not significant	not significant	not significant

- 9.3.14 Effects that are assessed within the darker grey boxes in the matrix are significant in terms of the requirements of the EIA Regulations. Those effects that are assessed within the light grey boxes may be significant, or not significant, depending on the specific factors and effect that is assessed in respect of a particular landscape or visual receptor. Those effects that are assessed within the white boxes are not significant. In accordance with GLVIA3, experienced professional judgement is applied to the assessment of all effects and reasoned justification is presented in respect of the findings of each case.

#### *Sensitivity*

- 9.3.15 Sensitivity is an expression of the ability of a landscape or visual receptor to accommodate the Revised Consented Development. The sensitivity is determined through a combination of the value of the receptor, and the susceptibility of the receptor to the Revised Consented Development.
- 9.3.16 The sensitivity of a landscape character receptor is an expression of its ability to accommodate the Revised Consented Development as part of its own character or as part of the visual setting or context to the character receptor. This is

dependent on the value of the landscape receptor and its susceptibility to change.

- 9.3.17 The sensitivity of views and visual receptors is determined by a combination of the value of the view and the susceptibility of the viewer or visual receptor to the Revised Consented Development.
- 9.3.18 Levels of sensitivity - high, medium-high, medium, medium-low, low, and negligible, are applied in order that the judgement used in the process of assessment is made clear. The criteria used to determine sensitivity differ for the effects on landscape receptors and visual receptors, as well as the cumulative effects on both. These criteria are explained in full in **Appendix 9.A**.

#### *Magnitude of change*

- 9.3.19 Magnitude of change is an expression of the extent of the effect on the landscape and visual receptors that will result from the introduction of the Revised Consented Development. The magnitude of change is assessed in terms of the size and scale of the effect and the geographical extent of the area influenced.
- 9.3.20 Levels of magnitude of change - high, medium-high, medium, medium-low and low, are applied in order that the judgement used in the process of assessment is made clear. The criteria used to determine magnitude of change differ for the effects on landscape receptors and visual receptors, as well as the cumulative effects on both. These criteria are explained in full in **Appendix 9.A**.

#### Nature of the effects

- 9.3.21 In relation to many forms of development, the LVIA will identify 'beneficial' and 'adverse' effects by assessing these under the term 'Nature of Effect'. The landscape and visual effects of wind farms are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which the effects of wind farms can be measured as being categorically 'beneficial' or 'adverse'. In some disciplines, such as noise or ecology, it is possible to quantify the effect of a wind farm in numeric terms, by objectively identifying or quantifying the proportion of a receptor that is affected by the Revised Consented Development and assessing the nature of that effect in justifiable terms. However, this is not the case in relation to landscape and visual effects, where the approach combines quantitative and qualitative assessment.
- 9.3.22 It is evident from existing research and publications on public attitudes to wind farms, that public opinion nationally towards wind farms is diverse and that some observers perceive the visual effects of a wind farm as beneficial or neutral, while others may perceive the same effects as adverse. This varied perception often depends on the type of effect, the perception/opinion of the observer and whether the public attitudes surveyed are pre or post construction.
- 9.3.23 The attribution of 'beneficial' and 'adverse' nature of effects is used inconsistently by landscape professionals when preparing LVIA's for wind farms and there is not a consensus of opinion that supports its use for wind farm assessments. Generally, in the development of 'new' wind farms, a precautionary approach is adopted by OPEN, which assumes that significant landscape and visual effects will be weighed on the adverse side of the planning balance. Beneficial effects may, however, arise in certain situations. Judgements

on the nature of effect are based on professional experience and reasoned opinion informed by best practice guidance. Unless it is stated otherwise, the effects considered in this assessment are considered to be adverse in order that a worst-case assessment is represented.

#### Duration and reversibility

- 9.3.24 The effects of the Revised Consented Development are of variable duration, and are assessed as short-term or long-term, and permanent or temporary/reversible. It is proposed that the operational life of the wind farm will be 40 years. The turbines and turbine foundations, site access tracks and substation will be apparent during this time. These effects are considered to be long-term.
- 9.3.25 Other infrastructure and operations, such as the construction processes and plant, the construction compound, and lay down areas, will be apparent only during the initial period of the Revised Consented Development and are considered to be short-term effects. The excavation and use of the borrow pits will also be short-term. At the end of the construction process they will be restored, although the altered ground profile may remain evident in the long-term.
- 9.3.26 The reversibility of effects is variable. While the major effects on the landscape and visual resource, which result from the presence of the turbines are long-term, they are also reversible as the turbines will be removed on decommissioning. The effects that will occur during the construction period and decommissioning of the Revised Consented Development, from the use of tall cranes and heavy machinery, are temporary.
- 9.3.27 Permanent effects include the physical removal of landscape elements required for the construction of the Revised Consented Development, and any residual effects that remain following decommissioning. Underground cabling will remain but will have no permanent landscape and visual effects. The access tracks may be retained at the request of the landowner or otherwise they will be re-graded and local vegetation reinstated from the seed bank material. Turbine foundations will be left in-situ, below ground, and have no residual landscape and visual effects following the restoration of ground cover during decommissioning. In order to avoid repetition, the duration and reversibility of effects are not reiterated throughout the assessment.
- 9.3.28 Scottish Planning Policy at paragraph 170 states "Areas identified for wind farms should be suitable for use in perpetuity. Consents may be time-limited but wind farms should nevertheless be sited and designed to ensure impacts are minimised and to protect an acceptable level of amenity for adjacent communities." Despite the temporary nature of the consent being sought, the assessment has considered the effects of the Revised Consented Development as if the consent were in perpetuity.

#### Graphic Production

##### *Zone of Theoretical Visibility (ZTV)*

- 9.3.29 The ZTVs have been generated using GIS software (ESRI ArcGIS Version 10.5) to demonstrate the number of wind turbines that may theoretically be seen from

any point in the Study Area. The hub height ZTV shows the number of wind turbine hubs of the Revised Consented Development theoretically visible in the Study Area. When used in conjunction with the blade tip ZTV, the hub height ZTV provides an indication of the degree to which the wind turbines may be visible.

9.3.30 There are limitations in this theoretical production, and these should be considered in the interpretation and use of the ZTV:

- The ZTV illustrates the 'bare ground' situation, and does not take into account the screening effects of vegetation, buildings, or other local features that may prevent or reduce visibility;
- The ZTVs are based on theoretical visibility from 2m above ground level;
- All ZTVs are based on Ordnance Survey (OS) Terrain 5 Digital Terrain Model (DTM). Due to the extensive size of the resulting dataset, and to ensure correlation with wireline outputs, the data has been interpolated to a 10m grid resolution;
- The Blade Tip ZTV does not indicate the decrease in visibility that occurs with increased distance from the Revised Consented Development. The nature of what is visible from 3km away will differ markedly from what is visible from 10km away, although both are indicated on the Blade Tip ZTV as having the same level of visibility; and
- There is a wide range of variation within the visibility shown on the ZTV, for example, an area shown on the blade tip ZTV as having visibility of five turbines may gain views of the smallest extremity of blade tips, or of five full turbines. This can make a considerable difference in the effects of the Revised Consented Development on that area. The hub height ZTV should be used in conjunction with the blade tip ZTV to provide an indication of the degree to which the wind turbines are visible.

9.3.31 These limitations mean that while the ZTVs are used as a starting point in the assessment, providing an indication of where the Revised Consented Development will theoretically be visible, the information drawn from the ZTV is checked with wirelines and in the field, to ensure that the assessment conclusions represent the visibility of the Revised Consented Development reasonably accurately.

9.3.32 The LVIA includes a Horizontal Angle ZTV, presented as **Figure 9.10**. This has been generated using Arcmap 10.5 software and the same data as the other ZTVs. The Horizontal Angle ZTV shows in degrees the horizontal field of view that may be affected by views of the Revised Consented Development and serves to provide an indication of the degree to which the magnitude of potential impact may reduce with increased distance from the wind farm. There may be small discrepancies between the areas affected by theoretical visibility when compared with the Blade Tip ZTV. These occur around the edges of the plotted areas where the field of view that may be affected by theoretical visibility of one small blade tip in the ZTV is not picked up by the horizontal angle ZTV. This appears to be as a result of the different analytical processes used by the software to generate this information. This discrepancy is not considered material. As with the Blade



Tip ZTV analysis, the Horizontal Angle ZTV is a helpful starting point for assessment.

### *Visualisations*

- 9.3.33 The viewpoint assessment is illustrated by a range of visualisations, including photographs and photomontages, which accord with NatureScot's Visual Representation of Wind Farms Version 2.2 (SNH, 2017) and THC Visualisation Standards (THC, 2016). Visualisations of wind farms have a number of limitations when using them to form a judgement on a wind farm proposal. These include:
- 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 wind turbines and the distance to them, but can never be 100% accurate;
  - A static image cannot convey wind turbine movement, or lighting from the sun on the wind turbines 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 effects of the wind farm proposal these images are best viewed at the viewpoint location shown; and
  - The visualisations must be printed at the right size to be viewed properly (A1 width or as otherwise specified) and viewed at a comfortable viewing distance.
- 9.3.34 The photographs used to produce the photomontages have been taken using Canon EOS 5D and 6D Digital SLR cameras, with a fixed lens and a full-frame (35 mm negative size) sensor. The photographs are taken on a tripod with a pano-head at a height of approximately 1.5m above ground.
- 9.3.35 To create the baseline panorama, the frames are individually cylindrically projected and then digitally joined to create a fully cylindrically projected panorama using PTGui software. This process avoids the wide-angle effect that would result should these frames be arranged in a perspective projection, whereby the image is not faceted to allow for the cylindrical nature of the full 360-degree view but appears essentially as a flat plane. Tonal alterations are made using Adobe software to create an even range of tones across the photographs once joined. Sections of these panoramas are then cropped and planar projected using PTGui software. These are used in the creation of the 53.5-degree field of view photomontages.
- 9.3.36 Wireline representations that illustrate the wind turbines set within a computer-generated image of the landform are used in the assessment to predict theoretical appearance of the wind turbines. These are produced with Resoft WindFarm software and are based on a terrain model using OS Terrain 5. Where descriptions within the assessment identify the numbers of wind turbines visible this refers to the illustrations generated and therefore the reality may differ to a degree from these impressions.



- 9.3.37 Photomontages have been produced for a number of agreed viewpoints, again using Resoft WindFarm software, to provide a more realistic image of the appearance of the Revised Consented Development. Photomontages show the wind turbines.
- 9.3.38 The baseline photographs and cumulative wireline visualisations shown for each viewpoint cover a 90-degree field of view (or in some cases, up to 360-degree), which accords with NatureScot guidance. These are cylindrically projected images and provide landscape and visual context only.
- 9.3.39 The 53.5 and 63.5-degree field of view photographs, wirelines and photomontages are prepared using a planar projected image and should be viewed flat at a comfortable arm's length. These images are each printed on paper 841 x 297 mm (half A1), which provides for a relatively large-scale image.
- 9.3.40 In the wirelines, the turbines are shown with the central wind turbines facing the viewer directly, with the full rotor diameter visible at its tallest extent. In the photomontages, the wind turbine rotors are shown with a random appearance with the central wind turbines facing the viewer directly.
- 9.3.41 Single frame images have been prepared for all of the viewpoints at the request of THC. These show a photomontage of the Revised Consented Development. The photographs and photomontages are produced at a standard size from a single 50mm fixed lens photographic image (39.6-degree field of view) and also recalibrated to show a 75mm focal length (27-degree field of view) image.
- 9.3.42 The photographs and other graphic material such as wirelines and photomontages used in this assessment are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of what will be apparent to the human eye. The assessments are carried out from observations in the field and, therefore, may include elements that are not visible in the photographs.

#### **9.4 Baseline Conditions**

- 9.4.1 The baseline section of the LVIA records the existing conditions of the Study Area. Establishing a baseline helps to gain an understanding of what makes the landscape distinctive, what its important components or characteristics are, and how it is changing prior to the introduction of the Revised Consented Development.
- 9.4.2 The baseline conditions are presented under the following headings:
- Landscape character;
  - Landscape related planning policies and designations;
  - Visual receptors and views; and
  - Cumulative wind farm developments.
- 9.4.3 Operational and under construction wind farms are regarded as part of the baseline landscape character and visual amenity of the area, such that any changes resulting from the Revised Consented Development are assessed within this context.

## Landscape Character

### *Landscape Character Assessments*

- 9.4.4 Landscape character information, prepared by, or on behalf of NatureScot (formerly SNH), forms the basis of much of the characterisation of the Study Area. NatureScot has recently reviewed and updated the 30 original Landscape Character Assessments (LCAs), produced to cover the whole of Scotland during the 1990s, by creating a single data set in a digital version. In respect of the Study Area, the Landscape Character Types (LCTs) presented in the updated dataset, form a much simpler and less detailed categorisation of landscape character compared to the original LCA. It is proposed that the LCTs presented in the original LCA be used in the LVIA for two key reasons; firstly, to enable a more detailed assessment of local landscape character; and secondly, to enable direct comparison between the findings of the 2016 LVIA, the 2017 SI and this LVIA.
- 9.4.5 Landscape character information is based on SNH Landscape Character Assessment (LCA) documentation. The Study Area lies within the following LCT report:
- Stanton, C. 1998. Caithness and Sutherland landscape character assessment. Scottish Natural Heritage Review No 103.
- 9.4.6 The LCTs identified in the original LCA, and located within the 40 km Study Area, are shown overlaid with the blade tip ZTV in **Figure 9.11. Appendix 9.B** Preliminary Assessment of the Effects on Landscape Character identifies those LCTs with potential to undergo significant effects. These LCTs are assessed in detail in Section 9.8 of this LVIA. The remaining LCTs which do not have potential to undergo significant effects, are discounted from the detailed assessment. The LCTs assessed in detail all lie within a 20 km radius of the Revised Consented Development. This reduced extent reflects the localised extent over which significant effects on landscape character were found to occur in the 2017 SI for the Consented Development.
- 9.4.7 Many of the LCTs are extensive, often covering several areas that are geographically separate, as illustrated in **Figure 9.2**. The effects of the Revised Consented Development can vary widely across a single LCT. In order to distinguish between geographically separate areas of each type, the name of each area is attached to the name of the LCT and this is referred to as a Landscape Character Unit or LCU. Where the effects of the Revised Consented Development vary across an LCU the extent of these different effects have been geographically defined in the assessment.
- 9.4.8 The 40 km Study Area comprises a distinct contrast between the cultivated landscapes in the north-east and the moorland landscapes to the south and west. The cultivated landscapes are classified predominantly as Mixed Agriculture and Settlement and are characterised by an open, broad, and gently undulating landscape with some low hills and shallow glens which contain agricultural land uses and small rural settlements. The moorlands are classified predominantly as Sweeping Moorland and are characterised by an absence of agriculture and settlement, as well as an open and exposed moorland appearance with intermittent Coniferous Woodland Plantations.

- 9.4.9 Coastal scenery occurs as narrow strips along the North Atlantic Coast, comprising of either, High Cliffs and Sheltered Bays, or Long Beaches, Dunes and Links. The coastal influence does not extend far inland with Sweeping Moorland, Mixed Agriculture and Settlement and Open Intensive Farmland meeting these LCTs close to the coastal edge.
- 9.4.10 The site lies in an area of Coniferous Woodland Plantation LCT and is surrounded to the west, south and east by predominantly Sweeping Moorland LCTs. Small pockets of Moorland Slopes and Hills occur to the west and south and an area of Small Farms and Crofts occurs to the east. Further south lies a greater expanse of Flat Peatland interspersed with large areas of Coniferous Woodland Plantation. To the north of the site, an area of Mixed Agriculture and Settlement, and Intensive Farmland occurs along the coast, with nearby Sandside Bay classified as Long Beaches, Dunes and Links.
- 9.4.11 The Sweeping Moorland LCT extends over much of the southern and western parts of the Study Area, interspersed by smaller areas of other landscape types, including Moorland Slopes and Hills, Flat Peatland, Strath, Lone Mountains and Small Farms and Crofts.
- 9.4.12 The assessment of landscape character is based on the classification system identified in a series of NatureScot publications referred to as Landscape Character Assessments (LCAs). Collectively, these classify all of Scotland's landscapes into different Landscape Character Types (LCTs) defined as "*tracts of countryside ...which have a unity of character due to particular combinations of landform and landcover and a consistent and distinct pattern of constituent elements.*" Each LCT shares distinct characteristics that are typical of that landscape.
- 9.4.13 The preliminary assessment carried out in respect of the potential effects of the Revised Consented Development on LCTs is presented in **Appendix 9.B**. This identifies the following LCTs to have potential to undergo significant effects and, therefore, which require to be assessed in detail:
- Coniferous Woodland Plantation LCT: Limekiln;
  - Sweeping Moorland LCT: Broubster / Loch Scye / West;
  - Moorland Slopes and Hills LCT: Beinn Ratha / Beinn nam Bad Mor;
  - Mixed Agriculture and Settlement LCT: North-east; and
  - Small Farms and Crofts LCT: Broubster and Shurrery.
- 9.4.14 Section 9.8: The Assessment of Effects on Landscape Character, considers the effects of the Revised Consented Development on the specific characteristics of each of these LCTs / LCUs. The site lies within the Coniferous Woodland Plantation LCT: Limekiln.

#### Landscape Sensitivity Appraisal

- 9.4.15 In December 2017 THC published 'Landscape Sensitivity Appraisal – Black Isle and Surrounding Hills, Moray Firth Coast, Caithness' which formed an Addendum to their 'Offshore Wind Energy Supplementary Guidance'. This presents THC's appraisal of the sensitivity of the Caithness landscape to the effects of onshore wind energy developments. The site and much of the surrounding area is

included in CT4: Central Caithness. The landscape character sensitivity of CT4 to large scale wind farms is rated at 3 within a range of 1 to 4 where 1 is most susceptible to change. Despite this, the assessment concludes that there is limited scope for larger turbines.

- 9.4.16 The sensitivity of the western part of CT4, where the site of the Revised Consented Development is located is described as follows; *"To the west the relatively abrupt transition from the more rugged Sutherland landscape character to the open flatter landform of Caithness provides a key gateway and is highly sensitive to windfarm development in the immediate and wider landscape (given wide open views) that would erode the clarity of this transition and interrupt experience of moving from one regional landscape to another."*
- 9.4.17 In such a wide open landscape, a 'key gateway' is not readily apparent and while the transition from the open moorland to the cultivated farmland is readily apparent at Drum Hollistan, the introduction of the Revised Consented Development will not erode this transition. An important consideration in the site selection process focussed on siting the Revised Consented Development in this transitional area to minimise the effects on residents and visitors in the settled coastal area as well as contain the extents from encroaching into the wilder open moorlands to the south.

#### Landscape Designations and Wild Land

- 9.4.18 The site itself is not subject to any national or local landscape designations intended to protect landscape quality, as shown in **Figure 9.3**. A number of other landscape designations do, however, occur within the 40 km Study Area, including the nationally important Kyle of Tongue National Scenic Area (NSA) and four Gardens and Designed Landscapes (GDLs). THC's local landscape designation comprises Special Landscape Areas (SLAs), of which, four occur across the Study Area. There are also four Wild Land Areas (WLAs) in the Study Area, which are not landscape designations but a mapped interest.

#### *National Scenic Area*

- 9.4.19 The Kyle of Tongue National Scenic Area (NSA) is located on the eastern edge of the Study Area. The ZTV in **Figure 9.12** shows there to be no theoretical visibility across the majority of the NSA, with the exception of small patches occurring from a minimum distance of approximately 38 km. Through the scoping process, it has been agreed with NatureScot that this NSA be scoped out of the LVIA, largely owing to the very limited extent of visibility within the NSA and its separation distance from the Revised Consented Development.

#### *Gardens and Designed Landscapes*

- 9.4.20 The four nationally important GDLs within the Study Area are Castle of Mey, Tongue House, Dalbeath Castle and Melsetter House. The ZTV in **Figure 9.12** shows there to be no theoretical visibility from Tongue House and Dalbeath Castle, and very limited theoretical visibility from Castle of Mey and Melsetter House at minimum distances of approximately 33 km and 39 km respectively. Through the scoping process, it has been agreed with THC and NatureScot that these four GDLs be scoped out of the LVIA, largely owing to their notable separation distance from the Revised Consented Development and either no, or very limited extents of theoretical visibility.

### *Special Landscape Areas*

- 9.4.21 The HwLDP designates Special Landscape Areas (SLAs) and THC has produced citations for each of the SLAs in its publication 'Assessment of Highland Special Landscape Areas'. SLAs are afforded protection at the local level with the policy context for these SLAs set out in Policy 57: Natural, Built and Cultural Heritage of the HwLDP which also has an appendix item for SLAs.
- 9.4.22 The four SLAs in the Study Area are Farr Bay, Strathy and Port Skerra SLA, Dunnet Head SLA, Ben Griam and Loch nan Clar SLA, and Flow Country and Berriedale Coast SLA. At a minimum range of 9 km, Farr Bay, Strathy and Port Skerra SLA is the closest SLA and although visibility is very patchy, owing to the sensitivity of this area, there is the potential that a significant effect may arise and, therefore, this SLA has been included in the LVIA. At a minimum range of 22 km, Dunnet Head SLA has also been included in the LVIA at the request of NatureScot and THC, despite the limited potential for a significant effect being identified in the preliminary assessment presented in Appendix 9.B.
- 9.4.23 In respect of the remaining two SLAs, the combination of their separation distance from the Revised Consented Development, and the limited extents of visibility, moderates the potential for significant effects to arise. In respect of Flow Country and Berriedale Coast SLA, the closer range cluster of operational wind farms, including Halsary, Causeymire, Achlachan and Bad a Cheo will moderate the effect on the SLA arising from the addition of the Revised Consented Development at a minimum of approximately 16 km. Similarly, the closer range of operational Strathy Wind Farm to Ben Griam and Loch nan Clar SLA, combined with the minimum separation of approximately 22 km will also moderate the effect on this SLA. Through the scoping process, it has been agreed with THC and NatureScot that the remaining SLAs be scoped out of the LVIA.

### *Wild Land*

- 9.4.24 The Revised Consented Development is not located in a Wild Land Area (WLA) but lies close to the northern boundary of the East Halladale Flows WLA as shown in **Figure 9.4**. This WLA is a mapped interest that has been defined by NatureScot.
- 9.4.25 Four Wild Land Areas (WLA) occur in the Study Area; namely, the East Halladale Flows to the immediate west, south-west and south of the Revised Consented Development; the Causeymire - Knockfin Flows WLA to the more distant south; the Ben Klibreck - Armine Forest WLA to the south-west, and the Ben Hope - Ben Loyal WLA to the west.
- 9.4.26 The ZTV in **Figure 9.13** illustrates the extent to which the Revised Consented Development will be theoretically visible across the four WLAs. Through the scoping process, it has been agreed with THC and NatureScot that a full assessment of the effects on East Halladale Flows WLA be carried out as part of the LVIA. It has also been agreed that the other three WLAs be scoped out of the LVIA, as there will be limited potential for a significant effect to arise, owing to a combination of their separation distance from the Revised Consented Development, the limited extents and levels to which the Revised Consented Development will be visible, and the existing influence from operational wind farms, closer to the WLAs than the Revised Consented Development.

- 9.4.27 The effects of the Revised Consented Development on the wildness qualities of the East Halladale Flows WLA are assessed in detail in **Appendix 9.E** of the LVIA, following guidance set out in NatureScot's 'Assessing Impacts on Wild Land technical guidance' (2020) and with reference to NatureScot's 'Description of Wild Land Areas' (2017).

#### Principal Visual Receptors

- 9.4.28 There are a number of principal visual receptors which represent people who may be living in settlements, travelling along roads, railways or paths, or visiting attractions in the Study Area. These have been considered in the assessment, as views from them may be affected by the Revised Consented Development. It is not possible to consider every potential visual receptor in the Study Area due to the geographical extent that it covers. The assessment, therefore, concentrates on the 'principal' visual receptors that may gain visibility of the Revised Consented Development. The principal visual receptors are shown in **Figures 9.5** and **9.6** and in conjunction with the ZTV in **Figures 9.15** and **9.16**.

#### Settlements

- 9.4.29 Due to the predominantly rural nature of the landscape, settlements are relatively limited across the Study Area. There are, however, some villages and rural clusters that require detailed assessment in the LVIA as views from them may be significantly affected by the Revised Consented Development. Settlements are shown in **Figure 9.5** and in conjunction with the ZTV in **Figure 9.15**.
- 9.4.30 **Appendix 9.C** Preliminary Assessment of Effects on Views identifies those routes with potential to undergo significant effects as a result of the Revised Consented Development. This has found that of the 28 settlements considered, Reay/ Isauld, Shebster and Westfield have been found to have the potential to be significantly affected and are assessed in detail in Section 9.11. The remaining 25 settlements were discounted from the detailed assessment based on a combination of their separation distance from the Revised Consented Development, the limited extents and/or levels of visibility, and the baseline influence from other operational wind farms, all of which will moderate the effect of the Revised Consented Development.
- 9.4.31 While individual properties are not assessed in this LVIA, properties that lie within a 2 to 4 km radius of the Revised Consented Development and which have potential to be significantly affected have been included in the Residential Visual Amenity Assessment (RVAA) presented in **Appendix 9.F**. The RVAA has been prepared in accordance with the Landscape Institute's Technical Guidance Note 2/19 'Residential Visual Amenity Assessment' (RVAA). This guidance sets out the 'Steps' to be followed when undertaking a RVAA and highlights how it should be informed by the principles and processes of GLVIA3. The purpose of the RVAA is to identify those properties where the effect of the Development leads to the 'Residential Visual Amenity Threshold' being reached or, in other words, where the effect could be described as overwhelming or overbearing. The Study Area is typically set at a 2 km radius in line with the maximum radius recommended in the technical guidance. There are no properties within a 2 km radius and as the previous assessment extended out to 4 km, the same approach has been



taken to ensure consistency. The RVAA considers the effect on views from each property, as well as views from the associated garden grounds and access tracks.

#### *Roads*

- 9.4.32 It is not possible, or necessary, to assess the potential effects of the Revised Consented Development on every route. However, some of the key routes require consideration in the assessment. Four principal criteria have been used in determining the inclusion of routes in the assessment:
- the extent to which the route traverses the Study Area or extends across a notable part of it;
  - the importance of the route in terms of recognition, signage, traffic volume and usage;
  - the extent of theoretical visibility of the Revised Consented Development from the route; and
  - the potential for cumulative effects along the route.
- 9.4.33 There are a number of routes, including roads, railways, ferry routes and cycle routes, passing through the Study Area, and some of these require detailed assessment in the LVIA as views from them may be affected by the Revised Consented Development. Routes are shown in **Figure 9.5** and in conjunction with the ZTV in **Figure 9.15**.
- 9.4.34 A network of roads occurs across the area to the east and north-east of the development where the landscape is more settled and cultivated. These include the A9, B870 and B874, as well as a network of minor roads. The A836 / NCR1, is the main coastal route, which runs to the north of the development, while to the west and especially the south, there are very few roads owing to the relatively remote and undeveloped nature of the landscape. The North Coast 500, the popular route for motorists and cyclists, follows the route of the A836 along the north coast.
- 9.4.35 **Appendix 9.C** Preliminary Assessment of Effects on Views identifies those routes with potential to undergo significant effects as a result of the Revised Consented Development. Of the 11 routes considered, the A836 and the Shebster minor road between Reay and Thurso have been found to have the potential to be significantly affected and are, therefore, assessed in detail in Section 9.11 of this LVIA. The remaining nine routes have been discounted from the detailed assessment owing to a combination of distance from the Revised Consented Development, no or limited visibility of the Revised Consented Development and influence from other closer range operational wind farms, all of which will moderate the effect of the Revised Consented Development.

#### *Core Paths*

- 9.4.36 There are a number of core paths, within the Study Area, and some of these require to be assessed in detail in the LVIA as views from them may be affected by the Revised Consented Development. Core paths are shown in **Figure 9.6** and in conjunction with the ZTV in **Figure 9.16**. This shows that there is a concentration of paths within the first 10 km radius of the Revised Consented



Development, with a number subject to theoretical visibility of the Revised Consented Development.

- 9.4.37 **Appendix 9.C** Preliminary Assessment of Effects on Views identifies those core paths with potential to undergo significant effects as a result of the Revised Consented Development. This has found that of the 17 local core paths considered, nine have the potential to be significantly affected and have been, therefore, assessed in detail in Section 9.11 of this LVIA. The remaining eight local core paths have been discounted from the detailed assessment owing to a combination of distance from the Revised Consented Development, no or limited visibility of the Revised Consented Development, screening from localised tree cover, and influence from other closer range operational wind farms, all of which will moderate the effect of the Revised Consented Development.
- 9.4.38 The nine core paths assessed in detail include CA11.02 – Achvarasdal Woodland, CA11.03 – Limekiln Forest, CA11.04 – Sandside Head, CA11.05 – Achins / Helshetter, CA11.06 – Reay Roadside Link, CA11.07 – Reay Golf Course via Mary's Cottage, CA11.08 – Reay Golf Course via Clubhouse, CA11.09 – Borlum Circuit, and CA11.10 – Achvarasdal East Drive.

#### Viewpoints

##### *General visibility of the Revised Consented Development*

- 9.4.39 The pattern of theoretical visibility on the ZTV in **Figure 9.8a** and **9.8b** shows a concentration of visibility in the first 5 km radius of the Revised Consented Development and then patches beyond that. The openness of the North Atlantic Ocean means visibility is extensive across the northern half of the Study Area, although the only visual receptors in the North Atlantic Ocean and Pentland Firth will be transitory boats, most notably the Scrabster to Stromness Ferry. Visibility of the Revised Consented Development across the landscape to the west is reduced by the north-south ridge of low hills which effectively screen visibility from much of the adjacent landscapes in this direction. Visibility then reoccurs across the east facing slopes of similar north-south ridges at approximately 10 km and 20 km.
- 9.4.40 To the south, a similar pattern of visibility emerges, whereby the hills to the south of the Limekiln Coniferous Woodland Plantation disperse visibility across the landscapes further south. Patches occur between 6 km and 24 km, beyond which the extent of visibility becomes limited to high summits and ridges. To the east, visibility is more continuous in parts, reflecting the low and gently undulating character of much of this settled and cultivated landscape. Again, bands of visibility generally follow the north-south alignment of the low hill ridges which screen visibility from the intermittent shallow valleys.
- 9.4.41 Theoretical visibility extends as patches out to the 40 km Study Area boundary, although actual visibility is reduced in certain parts by settlement and occasionally by tree cover. **Figure 9.23** comprises a cumulative ZTV that illustrates the additional theoretical visibility of the Proposed Revised Development, over and above that of the Consented Development, to be extremely limited in geographical extent.

### Viewpoint selection

- 9.4.42 The assessment of landscape and visual effects is informed by a series of 18 viewpoints, which are shown in **Figure 9.7** and in conjunction with the blade tip ZTV in **Figure 9.8a** and **9.8b**, with the hub height ZTV in **Figure 9.9a** and **9.9b** and listed in Table 9.3 below. These are selected to cover visual receptors of specific importance, such as recognised viewpoints, settlements, important routes, designated landscapes and remote landscapes including hill tops. Their selection attempts to achieve a good geographic spread, representative of a mix of LCTs and also takes into account visibility of cumulative wind farms. In terms of range, the majority of the viewpoints are within the first 15 km, as this is where it is most likely that significant effects will occur. Representation is also made of more distant viewpoints which are of particular sensitivity. The viewpoint list has been agreed through the scoping process with NatureScot and THC.
- 9.4.43 The process of identifying viewpoints involves extensive investigation to ensure that the final viewpoints are representative of levels of visibility around the Study Area, and that they clearly illustrate the predicted visibility of the Revised Consented Development.

**Table 9 3 – Viewpoint selection**

ID	Viewpoint name	Grid ref. (Preliminary)		Dist. nearest turbine (km)	Description
1	Drum Hollistan Layby, A836	293267	964523	4.90	Road-users
2	Reay Footpath	296149	964385	3.16	Walkers / residents
3	Reay Church, A836	296735	964816	3.34	Road-users / residents
4	Shebster	301776	963941	3.75	Road-users / residents
5	Sandside Bay Harbour	295785	965993	4.81	Walkers / residents
6	A836 / Dounreay Road Junction	299664	966911	5.10	Road-users / workers
7	Strathy Point Car Park	282724	968602	16.01	Walkers / road-users
8	Angler's Car Park, Loch Calder	307144	962277	8.02	Anglers / walkers / road-users

9	Ben Dorrery	306287	955051	8.61	Walkers
10	Minor Road Lythmore Junction	305255	966422	7.99	Road-users
11	Georgemas Junction Station	315546	959421	16.24	Rail-users / road-users
12	A9 north of Spittal	316446	954654	17.99	Road-users
13	Dunnet Head	320519	976504	26.24	Walkers
14	Borlum Hill	297435	963520	1.87	Walkers
15	Beinn Ratha	295424	961314	1.55	Walkers
16	Shurrery	305014	958497	5.94	Walkers / road- users
17	A836, Hill of Forss	305640	969387	10.34	Road-users / Residents
18	Broubster Core Path	301154	960038	1.83	Walkers

- 9.4.44 The viewpoint assessment is used to inform and illustrate the assessment of effects on landscape character, as well as the assessment of effects on views and principal visual receptors. **Appendix 9.C** Preliminary Assessment of Effects on Views provides an initial assessment of the effects on the viewpoints and Section 9.10 Assessment of Effects on Views, provides a more detailed assessment where there is potential for significant effects to arise. The relevant information is extrapolated from the viewpoint assessments, in the assessment of effects on landscape receptors and the assessment of effects on principal visual receptors.

#### Cumulative Wind Farms

- 9.4.45 Both NatureScot and GLVIA3 advise in their guidance that the assessment of the cumulative impacts associated with the Revised Consented Development should encompass the effects of the proposal in combination with existing, under construction, consented and application stage wind farms awaiting determination. Schemes that are at the pre-planning or scoping stage are not generally considered in the assessment of cumulative effects because firm information on which to base the assessment is not available. The only potentially relevant scoping stage site to the Revised Consented Development is Broubster. Both NatureScot and THC have agreed that this site be scoped out of the cumulative assessment.

- 9.4.46 The list of proposals presented in NatureScot guidance (SNH, 2012, p7) is as follows:
- *"existing development, either built or under construction;*
  - *approved development, awaiting implementation; and*
  - *proposals awaiting determination within the planning process with design information in the public domain. Proposals and design information may be deemed to be in the public domain once an application has been lodged, and the decision-making authority has formally registered the application."*
- 9.4.47 The developments to be included within the CLVIA are set out in Table 9.4 below. As stated in guidance (SNH, 2012, p15) "At every stage in the process the focus should be on the key cumulative effects which are likely to influence decision making, rather than an assessment of every potential cumulative effect."
- 9.4.48 The baseline presented in the LVIA will be altered by the introduction of further wind farms and this is assessed in the CLVIA based on cumulative scenarios as follows:
- The first scenario involves the assessment of the addition of the Revised Consented Development to wind farms which have been consented (i.e., approved schemes which may not have been constructed) in addition to under construction and operational wind farms (as identified and included in the LVIA baseline); and
  - The second scenario involves the assessment of the addition of the Revised Consented Development to existing, under construction and consented wind farms, together with valid (but as yet undetermined) wind farm applications.
- 9.4.49 The cumulative situation changes frequently as applications are made or withdrawn, and the layouts of submitted application wind farms are changed. It is, therefore, necessary to agree on a cut-off date when the sites and layouts to be included are fixed, and this is 12<sup>th</sup> May 2021. Any changes in the cumulative situation after this date are not incorporated in the assessment.
- 9.4.50 The scale of wind farm and other development is also of relevance to the CLVIA. The greatest influence as part of the cumulative context will arise in relation to development in close proximity to the Revised Consented Development. The larger the development, the higher the likelihood of a significant cumulative effect.
- 9.4.51 A total of 36 sites lie within a 40 km radius of the Revised Consented Development and these are listed in Table 9.4 below. Although 37 sites are listed in the table, there is a consented application for Strathy South and a resubmission application for Strathy South. In this assessment the resubmission application for Strathy South is considered as it presents the worst case scenario. Limekiln is also included in the table but is not considered in this assessment as both it and the Revised Consented Development could not co-exist as they are located on the same site.
- 9.4.52 Sites that lie outwith a 40 km radius of the Revised Consented Development have been discounted due to their distance from the Revised Consented

- Development which ensures that either one or both will be seen from a considerable distance away and, therefore, will have a very limited effect.
- 9.4.53 Table 9.4 indicates whether or not cumulative wind farms are included in the LVIA and which landscape and visual receptors they may materially affect. Their separation distance from the Revised Consented Development, turbine height and number are the key reasons for excluding sites within the cumulative context as they are considered to not have the potential to contribute to the Revised Consented Development having a significant cumulative effect.
- 9.4.54 Table 9.4 indicates that under Scenario 1, none of the consented developments will have the potential to make a material change to the predicted baseline cumulative situation. This is largely owing to their small number of turbines, relatively small size of turbines, and their close proximity to existing clusters of wind farm developments, all of which will notably moderate their additional influence on the cumulative situation. A Scenario 1 cumulative assessment is, therefore, not included in this LVIA.
- 9.4.55 There are, however, a number of application stage wind farms which are relevant to the cumulative assessment owing to their larger number and size of turbines and their location within a 20 km radius of the Revised Consented Development. The two most relevant application stage wind farms are Drum Hollistan Resubmission at a minimum of approximately 3.5 km to the west, and Ackron at a minimum of approximately 5 km to the west, both of which are set separate from operational wind farms albeit close in proximity to each other. The other application stage wind farms considered relevant to this assessment are Forss III, albeit grouped with the existing Forss Wind Farm at a minimum of approximately 8km to the north-east, and Strathy Wood and Strathy South, albeit grouped with Strathy North at minimum of 15km and 17 km respectively to the south-west. A Scenario 2 cumulative assessment is, therefore, included in this LVIA in order to assess the cumulative effects of the Revised Consented Development in conjunction with these application stage wind farms.
- 9.4.56 Limekiln Extension comprises five turbines, each 149.9 m in blade tip height and is set on the eastern side of the Revised Consented Development. This proposal forms an extension to the Revised Consented Development and is also being proposed by Infinergy. Limekiln Extension is currently at appeal having been refused planning permission by THC in October 2020.
- 9.4.57 In respect of Limekiln Extension, although it is an application stage wind farm at appeal, it is not included as a cumulative development in the Scenario 2 cumulative assessment. This is because Limekiln Extension is reliant on the Revised Consented Development to be built first and, therefore, a situation in which Limekiln Extension forms part of the predicted baseline to which the Revised Consented Development would be added, would never arise.
- 9.4.58 The importance of considering the cumulative effect of the Revised Consented Development in combination with Limekiln Extension is, however, considered in this LVIA to ensure a complete assessment. An in-combination cumulative assessment is included in respect of all the landscape and visual receptors assessed in Sections 9.8: Assessment of Effects on Landscape Character Types, 9.9: Assessment of Effects on Landscape Designations, 9.10: Assessment of

Effects on Representative Viewpoints and 9.11: Assessment of Effects on Principal Visual Receptors. The Revised Consented Development in combination with the Limekiln Extension is referred to as the 'Combined Development'.

- 9.4.59 In Section 9.12: Assessment of Cumulative Effects, an assessment has been included which considers the effects of the Combined Development in respect of all landscape and visual receptors assessed under Cumulative Scenario 1 and Cumulative Scenario 2, that is the additional effect of the Combined Development in respect of all other operational, consented and application stage wind farms.

**Table 9.4 – Cumulative Wind Farms**

Wind Farm	Status	Number of turbines	Size of turbines	Distance (km) and direction	Relevant to CLVIA?
Achairn Farm	Operational	3	100	31.5 / ESE	No – too distant and with very limited inter-visibility.
Baillie Hill	Operational	21	115	4.5 / NE	Yes – forms close range wind farm in cluster to NE.
Buolfuich	Operational	15	75	29.0 / SSE	No – too distant and with very limited inter-visibility.
Camster	Operational	25	121.2	28.0 / SE	No – too distant and with very limited inter-visibility.
Causeymire	Operational	21	100	18.0 / SE	Yes – forms middle range wind farm in cluster to SE.
Flex Hill	Operational	3	93	28.5 / ESE	No – too distant and with very limited inter-visibility.
Wathegar	Operational	5	101	30.5 / ESE	No – too distant and with very limited inter-visibility.
Burn of Whilk	Operational	9	116	34.5 / ESE	No – too distant and with very limited inter-visibility.
Achlachan	Operational	5	115	17.5 / SE	Yes – forms middle range wind farm in cluster to SE.
Bad a Cheo	Operational	13	112	20.0 / SE	Yes – forms middle range wind farm in cluster to SE.

Wind Farm	Status	Number of turbines	Size of turbines	Distance (km) and direction	Relevant to CLVIA?
Wathegar 2	Operational	9	110	29.5 / ESE	No – too distant and with very limited inter-visibility.
Weydale	Operational	1	66	15.5 / ENE	No – small scale single turbine with limited influence.
Stroupster	Operational	13	110/113	34.0 / E	No – too distant and with very limited inter-visibility.
Lochend Farm	Operational	4	99.5	29.5 / ENE	No – too distant and with very limited inter-visibility.
Taigh na Muir	Operational	1	79.6	28.5 / NE	No – too distant and with very limited inter-visibility.
Bettyhill	Operational	2	119	23.0 / W	No – too distant and with very limited inter-visibility.
Forss	Operational	6	78	8.0 / NNE	Yes – forms close range wind farm in cluster to NE.
Strathy North	Operational	33	110	25.0 / W	Yes – despite distance, visible in sweeping moorland to W.
Halsary	Operational	15	120	20.0 / SE	Yes – forms middle range wind farm in cluster to SE.
Limekiln	Consented	21	125.6 / 139.4	0	No – this would not be built as well as the Revised Consented Development.
Achlachan 2	Consented	3	110	17.5 / SE	Yes – forms middle range wind farm in cluster to SE.
Cogle Moss	Consented	12	100	28.0 / ESE	No – too distant and with very limited inter-visibility.
Hill of Lychrobbie	Consented	3	74	32.5 / SSE	No – too distant and with very limited inter-visibility.



Wind Farm	Status	Number of turbines	Size of turbines	Distance (km) and direction	Relevant to CLVIA?
Osclay Quarry	Consented	1	80	32.0 / SE	No – too distant and with very limited inter-visibility.
Strathy South	Consented	39	135	27.5 / SW	Yes – despite distance, visible in sweeping moorland to W.
Hill of Lybster	Consented	1	99.5	8.0 / NNE	Yes – forms close range wind farm in cluster to NE.
Tacher B	Consented	1	130	22.0 / SE	Yes – forms middle range wind farm in cluster to SE.
Tacher A	Consented	1	130	22.0 / SE	Yes – forms middle range wind farm in cluster to SE.
Golticlay	Appeal	19	130	28.5 / SE	No – too distant and with very limited inter-visibility.
Drum Hollistan 2	Appeal	7	125	4.0 / WNW	Yes – forms close range wind farm in cluster to NW.
Strathy Wood	Application	13	180	24.5 / WSW	Yes – despite distance, visible in sweeping moorland to W.
Bad Fearn	Application	6	149.9	30.0 / SSE	No – too distant and with very limited inter-visibility.
Slickly	Application	11	149.9	32.5 / E	No – too distant and limited inter-visibility
Strathy South S36C	Application	39	200	27.5 / SW	Yes – despite distance, visible in sweeping moorland to W.
Limekiln Extension	Application	5	149.9	0.5 / E	Yes – forms close range extension to immediate E.
Ackron (Re-submission)	Application	12	149.9	5.0 / WNW	Yes – forms close range wind farm in cluster to NW.

Wind Farm	Status	Number of turbines	Size of turbines	Distance (km) and direction	Relevant to CLVIA?
Forss III	Application	2	125	8.0 / NNE	Yes – forms close range wind farm in cluster to NE.
Flex Hill Extension	Scoping	3	Not available	28.5 / ESE	No – scoping stage site.
Hollandmey	Scoping	11	149.9	30.0 / ENE	No – scoping stage site.
Tormsdale	Scoping	16	149.9	17.5 / SE	No – scoping stage site.
Dale Farm (Resubmission)	Scoping	2	150	16.5 / SE	No – scoping stage site.
Armadales	Scoping	23	180	17.0 / W	No – scoping stage site.
Stemster	Scoping	11	200	27.5 / SE	No – scoping stage site.
Loch Tofttingall	Scoping	6	138.5	20.0 / SE	No – scoping stage site.

- 9.4.60 A filtering process is undertaken as part of the initial assessment to identify which landscape and visual receptors have the potential to undergo significant effects. This is documented in **Appendix 9.D** and highlights which receptors are to be assessed in detail in the CLVIA. Those receptors with potential to undergo significant cumulative effects, are assessed in detail in Section 9.11 of this LVIA. Those receptors without potential to undergo significant cumulative effects have been scoped out of the detailed assessment.

## 9.5 Potential Effects

### Description of the Revised Consented Development

- 9.5.1 **Chapter 4 Description of the Revised Consented Development** provides descriptions of the site, the main components and associated infrastructure of the Revised Consented Development, and the phases of construction, operation and decommissioning.
- 9.5.2 The Revised Consented Development comprises up to 21 wind turbines, which will have a maximum blade tip height of 149.9 m. The site entrance will be taken from the A836 at the eastern end of Reay and will pass south to connect to a network of new and upgraded forest tracks to access each of the turbines. Other permanent infrastructure will include a sub-station and control building, and temporary infrastructure will include a borrow pit and one construction compound. The site layout is shown in **Figure 4.1**.

*Phasing of the Revised Consented Development*

- 9.5.3 The Revised Consented Development has three stages during which impacts on the landscape and visual resource will occur: construction, operation and decommissioning. The key operations and potential effects that may occur during these phases are outlined in Table 9.5 below.

**Table 9.5 – Potential Effects**

<b>Activity / Potential Effects</b>	<b>Specific Element</b>	<b>Potential of receptors to be affected</b>
<b>Construction</b>  Short-term physical effects on landscape elements, landscape character and views.  Short-term cumulative effects.	Construction plant; Temporary construction facilities; Tree felling; Construction / upgrading of access tracks; Construction of turbine foundations / crane pads; Presence and activity of cranes; Presence of emerging wind turbines; Earthworks for infrastructure; Excavation of borrow pits; and Movement of associated traffic.	Rough grassland / forestry removed or altered where construction plant and facilities will be located and where tracks, foundations and crane pads will be built.  Landscape character of immediate and surrounding LCTs potentially affected by the addition of construction facilities and plant, the presence and activity of the cranes and emergence of wind turbines.  Viewpoints and principal visual receptors potentially affected by the addition of construction facilities and plant, the presence and activity of the cranes and emergence of wind turbines.
<b>Operation</b>  Long term/reversible effects on landscape character, and views.  Long term/reversible cumulative effects with other wind farms.	Wind turbines; Access tracks; Substation; Construction compounds; Earthworks; and Permanent meteorological masts.	Landscape character potentially affected by the presence of wind turbines and tracks.  Viewpoints and principal visual receptors potentially affected by the presence of wind turbines and tracks.  Landscape and visual receptors potentially cumulatively affected by presence of wind turbines and tracks in conjunction with other wind farm developments.
<b>Decommissioning</b>  Short-term physical effects on landscape elements.  Short-term effects on	Decommissioning plant; Temporary construction facilities; Presence and activity of cranes; and Presence of dismantled wind turbines.	Rough grassland / forestry removed or altered where decommissioning plant and facilities will be located.  Landscape character of immediate and surrounding LCTs potentially affected by the addition of decommissioning facilities and plant, the presence and activity of

Activity / Potential Effects	Specific Element	Potential of receptors to be affected
landscape character.  Short-term effects on views.	Movement of associated traffic.	the cranes and deconstruction of wind turbines.  Viewpoints and principal visual receptors potentially affected by the addition of decommissioning facilities and plant, the presence and activity of the cranes and deconstruction of wind turbines.

## 9.6 Mitigation

- 9.6.1 In respect of the mitigation of landscape and visual effects these are carried out throughout the iterative design process and are therefore embedded in the final layout. **Chapter 4: Description of the Revised Consented Development**, describes the components of the Revised Consented Development and Chapter 2: Scheme Need and Alternatives, describes the iterative design process which was followed in order to prevent, reduce or offset potential landscape and visual effects.
- 9.6.2 The residual effects of the Revised Consented Development, those effects remaining after mitigation that will materialise when the Revised Consented Development is under construction, operation or decommissioning, are assessed in Section 9.8: Assessment of Effects on Landscape Character, Section 9.9: Assessment of Effects on Landscape Designations, Section 6.10: Assessment of Effects on Views, Section 9.11: Assessment of Effects on Principal Visual Receptors and Section 9.12: Assessment of Cumulative Effects.

## 9.7 Assessment of Effects on Landscape Elements

- 9.7.1 The first category of effects covered in the assessment of landscape effects is effects on landscape elements, which are direct effects on the fabric of the site, such as the removal of ground cover vegetation to facilitate construction of the access tracks, crane pads and turbine foundations. Physical effects are found only on the site, where existing landscape elements may be removed or altered by the Revised Consented Development. Owing to the homogenous nature of landcover on and around the site the only landscape element to be affected is coniferous woodland. The methodology for the assessment of physical effects is described in full in **Appendix 9.A**.

### Coniferous Woodland Plantation

- 9.7.2 **Baseline:** The coniferous woodland plantation covers the majority of the site with the exception of the upper slopes of Craig Leathan in the north-east of the site and an open area in the south-west. It comprises predominantly Sitka Spruce that was planted by the Forestry Commission in 1989 and 1990. The forest is managed in blocks known as coupes and these are planted, maintained and felled as individual parcels over a number of years.
- 9.7.3 **Sensitivity:** The forestry to be removed has a low sensitivity. The most important consideration that reduces the sensitivity is the fact that the forestry

has been planted as a commercial crop, with groups of coupes which will be felled and restocked following a rotational cycle between 2018 and 2050. Commercial forestry is relatively easy to replant and any areas removed can be easily reinstated, although growth on the site is slow due to poor ground conditions.

- 9.7.4 The woodland is not indigenous or naturalised and does not contribute to the integrity of the landscape or typify its inherent character. Its geometric form, and the enclosure it creates, detracts from the underlying character of the Sweeping Moorland LCT within which it is located. Furthermore, the forestry does not lie within a designated area, which would imply a greater value due to the protection of the landscape, and it is not rare or historic in landscape terms.
- 9.7.5 **Magnitude of change:** The magnitude of change on the woodland will be medium, as the Revised Consented Development will lead to the partial alteration of a key landscape element through the removal of specific areas of the woodland whilst retaining the majority of the overall cover and also implementing compensatory planting. 199.2 m diameter circles (approximately 3.1 Ha in area) will be removed around each turbine, 15 m around each item of infrastructure (borrow pit, substation compound, and construction compound). Also, an approximate 20 m wide strip will be removed permanently for new tracks..
- 9.7.6 **Significance of the effect:** The effect of the Revised Consented Development on the coniferous forestry will be not significant as the majority of the coniferous woodland plantation will be retained and managed with relatively small areas removed to accommodate the turbines and tracks. This assessment also takes into account the cultivated nature of this forestry and the relative ease with which it can be restored.

#### Summary of physical effects

- 9.7.7 The principal effect that the Revised Consented Development will have on the landscape fabric of the site will be the removal of the coniferous forestry. The limited extent of the removals combined with the limited sensitivity of this landscape element will result in a **not significant** effect.

### **9.8 Assessment of Effects on Landscape Character Types**

- 9.8.1 The second category of effects covered in the assessment of landscape effects is effects on the Landscape Character Types (LCTs), which are the direct and indirect effects on landscape character as defined and described through the LCTs. The detailed methodology for the assessment of effects on landscape character is described in **Appendix 9.A**.
- 9.8.2 It should be noted that levels of magnitude of change on LCTs are generally found to be lower than the magnitude of change on viewpoints that are located within them. This means that if a viewpoint is assessed to undergo a medium-high magnitude of change it does not necessarily follow that the LCT within which it lies will also undergo a medium-high magnitude of change, but may undergo a medium magnitude of change instead, for example.
- 9.8.3 This is because the effects on viewpoints are assessed within the context of a specific outlook of the site and are usually especially selected to gain a direct

view over the site. The Revised Consented Development is the principal consideration in the viewpoint assessment and influences that lie in other areas of the view are considered to a lesser degree. The landscape character of a receptor is not, however, determined so specifically by the outlook over the Revised Consented Development, and there are many other considerations, both visual and perceptual, that combine to give an area its landscape character. This means that the degree of influence of the Revised Consented Development may be slightly less on landscape character than on a specific view. Viewpoints are referred to in this assessment as they give a useful indication of the appearance of the Revised Consented Development from the landscape areas, but the level of magnitude of change may vary between the viewpoint assessment and the landscape character assessment.

- 9.8.4 This is particularly true of areas that lie slightly further away from the site. In the immediate vicinity of the site, up to around 2 km away, the magnitude of change on viewpoints and landscape character is likely to be similar, but beyond this, the magnitude of change on landscape character is found to often diminish more rapidly as the influence of the turbines is subsumed in the many other influences on landscape character.
- 9.8.5 The LCTs that cover the Study Area are shown in **Figure 9.2** and shown in conjunction with the ZTV in **Figure 9.11**. It should be noted that many of the LCTs included in the assessment cover large areas, and that the effects of the Revised Consented Development can, therefore, vary widely across a single LCT. The distinction within single LCTs, where effects may be significant and not significant, is of particular importance in the assessment, and where this is the case, the assessment describes in detail the boundaries which separate these areas.
- 9.8.6 **Appendix 9.B** Preliminary Assessment of Effects on Landscape Character identifies those LCTs with potential to undergo a significant effect as a result of the Revised Consented Development. This filtering process indicates that parts of the following eight LCTs have potential to be significantly affected:
- Coniferous Woodland Plantation LCT: Limekiln;
  - Sweeping Moorland LCT: Broubster / Loch Scye / West;
  - Moorland Slopes and Hills LCT: Beinn Ratha / Beinn nam Bad Mor;
  - Mixed Agriculture and Settlement LCT: North-east; and
  - Small Farms and Crofts LCT: Broubster and Shurrery.
- 9.8.7 The effect on each of these LCTs is assessed in detail below. The other LCTs that cover the Study Area were found through the Preliminary Assessment to not have the potential to be significantly affected and have, therefore, have been discounted from the detailed assessment.

#### Coniferous Woodland Plantation: Limekiln

- 9.8.8 **Baseline:** The Limekiln Coniferous Woodland Plantation LCT lies approximately 2 km south of the North Atlantic Coast and 1 km south of the settlement of Reay. It occupies an area approximately 8 km in length and 6 km in width. The classification has derived from the landcover which is almost continuous



- coniferous woodland plantation across the area. Prior to afforestation, this area would have formed part of the Sweeping Moorland LCT which is predominant across the wider landscape to the east and west. While the gentle undulations of the landscape are still evident, the key characteristics of the open and exposed moorland have been notably altered by the forest cover.
- 9.8.9 The hills are relatively low and undulating and lack any distinctive form or features other than the series of low, but distinctive knolls, which occupy the northern edge of this LCT. The extent of the woodland cover greatly restricts the visibility between the Limekiln LCT and other surrounding LCTs and in so doing, also the influence these LCTs have on the character of the Limekiln LCT. Owing to the woodland cover, the character of this LCT is largely enclosed, and this makes it distinct from the adjoining landscapes. This distinction is marked by the dark green colour and dense texture of the coniferous trees.
- 9.8.10 There is very little built development in this LCT. A concentration of development occurs beyond the northern boundary of the LCT and includes the A836, Dounreay Nuclear Power Plant, Baillie Hill Wind Farm, Forss Wind Farm and a series of small settlements, rural properties and farmsteads. These developments have a limited influence on the character of the Limekiln LCT owing to the enclosure of the forestry and their location in adjoining LCTs. The closer range electricity transmission line, which traverses the Limekiln LCT to the north, can be seen from parts of the LCT. This makes these large constructions, which appear in contrast with the otherwise undeveloped character, a component of the baseline situation.
- 9.8.11 **Sensitivity:** The sensitivity of the Coniferous Woodland Plantation is **medium-low**. The Limekiln LCT is almost continuously covered by coniferous woodland plantation and this characterises the landscape. While the forestry practices have produced a managed landscape, which is cultivated for tree growth, and this appears orderly and well-tended, it also appears as a human intervention with many of the intrinsic characteristics of the underlying sweeping moorland concealed. The single age and single species of the plantation, as well as the geometric edges of the blocks, indicate human influence within this landscape and this moderates the overall sensitivity.
- 9.8.12 The Limekiln LCT is not covered by any national or regional landscape designations which would otherwise denote a recognised scenic value, and this highlights the unremarkable character of this afforested landscape. This LCT does, however, form a transitional landscape between the settled landscapes to the north and the unsettled landscapes to the south, including the East Halladale Flows WLA, and this makes it important in terms of the setting it provides within the wider landscape.
- 9.8.13 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on the Limekiln LCT will be **high**. All 21 of the turbines will be located within this LCT and will have direct effects on the character of the immediate parts where they are to be located and indirect effects on the remaining parts of the LCT. Despite the enclosure of the forestry, from parts of the LCT the turbines will be visible over the tree tops, owing to their height of 149.9 m. 199.2 m diameter 'keyholes' will be cut in the forestry to accommodate the turbines and 20 m width corridors cut to accommodate the tracks. 15 m

buffers will be cleared around infrastructure features such as borrow pits, substation compounds, construction compounds and meteorological masts. These openings will further increase the influence of the Revised Consented Development across the LCT by increasing the extent of visibility. The Revised Consented Development will introduce large scale structures into this afforested landscape and these will alter the existing character. Other features of the Revised Consented Development, such as the access tracks, borrow pits, construction compounds and storage areas, will also have an effect on the character of the landscape, albeit within more localised areas around their location, owing to their smaller scale and the enclosure of the forestry.

- 9.8.14 The magnitude of change as a result of the construction of the Revised Consented Development will also be **high**. The landscape character of the Limekiln LCT will be altered by construction activities including tree felling, the formation of tracks and borrow pits, the erection of temporary construction facilities, and the presence and activity of cranes and the emergence of tall turbines.
- 9.8.15 **Significance of the effect:** The effect of the Revised Consented Development on the Limekiln LCT will be **significant** during its construction phase. The location of the Revised Consented Development in the LCT will mean that it will redefine the character of the LCT by making the turbines the key feature of this landscape, despite the enclosure of the forestry. There will be no effect on the Coniferous Woodland Plantation during the operational phase as there will be no further forestry removals.

*In Combination Assessment with Limekiln Extension*

- 9.8.16 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Limekiln Coniferous Woodland Plantation SLA will remain **high** and the effect will remain **significant** during both the construction and operational phases. The five Limekiln Extension turbines and associated infrastructure will be located in this LCT, along with the proposed turbines and infrastructure of the Revised Consented Development. While Limekiln Extension will add to the magnitude of change on the character of this LCT, the assessment will remain at the highest rating of 'high' for both the construction and operational phases.
- 9.8.17 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the landscape character of this LCT owing to its location in this LCT and the notable effect the large scale turbines and associated infrastructure will have on this Coniferous Woodland Plantation, despite its medium-low sensitivity.

Sweeping Moorland: Broubster

- 9.8.18 **Baseline:** The Broubster LCT is a small area of Sweeping Moorland situated to the east of the Revised Consented Development and which wraps around the east of the Broubster Small Farms and Crofts LCT, with an area of Coniferous Woodland Plantation LCT occupying the area further east. The Broubster LCT forms part of the transition between the settled landscape to the north-east and the unsettled landscape to the south-west. As such, the characteristics of the

- landscape are subtler than is typical of the Sweeping Moorland LCT, with the height of the landscape being lower and the encroachment of farmland-uses being more evident. It does, none-the-less, present a transitional landscape in which moorland, marshland and forestry become more prevalent toward the south, and settlement, roads and agriculture become more prevalent toward the north.
- 9.8.19 The landscape is low lying, ranging between 70 m and 90 m AOD and especially flat around the shallow plain of the Forss Water. The slightly higher elevation of the land occupied by the Limekiln LCT gives it a presence in relation to the Broubster LCT, appearing as a long and low enclosing ridgeline. The distinction between these landscapes is further accentuated by the dark green and enclosing edge of the coniferous plantation, which lies in contrast to the openness and lighter covering of the grasslands of the Sweeping Moorland.
- 9.8.20 The most notable external influence on the character of the Broubster Sweeping Moorland is Baillie Hill Wind Farm which lies approximately 1.6 km to the north-east from the closest edge of the LCT. Theoretical visibility is almost continuous across this LCT, although actual visibility will be reduced around East Shebster where forestry blocks occur. From this relatively close range, the 110 m tall turbines are seen set along the low ridge that runs between Yellow Moss (110 m AOD) and Baillie Hill (80 m AOD) and owing to their close proximity to the Broubster Sweeping Moorland, have a strong influence on the character of this landscape. Forss Wind Farm also has an influence although owing to its more distant location at 6 km, smaller height turbines at 78 m and more limited visibility, this influence will be comparatively less than that of Baillie Hill.
- 9.8.21 **Sensitivity:** The sensitivity of the Broubster LCT is **medium**. This is largely on account of the influence of the settled lowlands, with farming and forestry land uses encroaching into this landscape and neighbouring small and large-scale developments having an influence on its character. The LCT itself is relatively undeveloped and predominantly rural in character and plays an important role as a transitional landscape.
- 9.8.22 The Limekiln LCT is not covered by any national or regional landscape designations which would otherwise denote a recognised scenic value, and this highlights the unremarkable character of this typical rural landscape. This LCT does, however, form a transitional landscape between the settled landscapes to the north and the unsettled landscapes to the south, including the East Halladale Flows WLA, and this makes it important in terms of the setting it provides within the wider landscape.
- 9.8.23 **Magnitude of change:** Visibility of the Revised Consented Development is practically continuous across the whole of the Broubster Sweeping Moorland LCT. The range between the Revised Consented Development and the LCT will be 2.5 km at its closest and 6.6 km at its furthest. The turbines will appear as large-scale structures from the closest range parts of the LCT and medium-scale structures from the furthest.
- 9.8.24 In all instances, the proposed turbines will be seen set within the Coniferous Woodland Plantation of the Limekiln LCT. This will have the effect of setting the Revised Consented Development in a landscape distinct from the Sweeping

- Moorland and in so doing create a sense of separation. This will also have the effect of keeping the turbines contained within a readily identifiable area of woodland and, thus, avoid a sense of turbines spreading into other landscapes.
- 9.8.25 The main flow of the landscape is from south to north, and the broad and shallow valley of the Forss Water forms a loose alignment towards the Baillie Hill Wind Farm. In contrast, the Revised Consented Development sits perpendicular to the flow of the landscape, set behind the low ridge of forestry, and as such, will not appear as such a prominent feature. Across much of this LCT, the Revised Consented Development will provide the closer range example of wind farm development with the exception of the northern part which lies in closer proximity to Baillie Hill Wind Farm. This means that from the majority of the LCT the Revised Consented Development will appear larger in scale. In light of Baillie Hill Wind Farm, the Revised Consented Development will not introduce a new or unfamiliar feature. From the southern part of the LCT it will be located in the same north-west sector. From the middle part of the LCT the Revised Consented Development will be seen to the west and Baillie Hill Wind Farm to the north. From the northern part they will be seen to sit in opposite directions to the south-west and north-east and this will increase the magnitude of change as they will no longer be contained in the same sector.
- 9.8.26 In most instances the proposed turbines will be seen to rise above the skyline and this, along with the slightly higher elevation of the Limekiln Hills where they sit, will increase the influence they have on the character of the adjacent Sweeping Moorland landscape. Seen at a range of 2.5 km to 6.6 km the turbines will appear as large to medium scale structures, seen as human interventions and in contrast with the rural landscape. While the presence of Baillie Hill will temper the effect of the Revised Consented Development, the addition of the Revised Consented Development will increase the extent of the developed landscape, introducing it into the Coniferous Woodland Plantation LCT where previously there has been no wind farm development. Taking all these factors into consideration, the magnitude of change of the Revised Consented Development on the Broubster LCT of Sweeping Moorland will be **medium-high** in the north-west corner and **medium** across the remaining area.
- 9.8.27 The magnitude of change during the construction phase will be **medium** in the north-west corner and **medium-low** across the remaining area. These lower ratings compared to the ratings for the operational development, reflect the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.8.28 **Significance of the effect:** The effect of the Revised Consented Development on the Broubster Sweeping Moorland will be **significant** in parts and not significant in other parts. The area which will be significantly affected can be defined as the triangle of land which lies between the northern and western boundaries of the LCT and the minor road which separates West Shebster and East Shebster. This relates chiefly to the close proximity of this area to the Revised Consented Development and the existing influence from the similarly close-range Baillie Hill Wind Farm, which will be located in the opposite direction.

The remaining areas will undergo an effect which will be **not significant** owing to their more distant range from the Revised Consented Development and, in some instances, the greater influence from Baillie Hill Wind Farm. The Revised Consented Development will, therefore, not redefine the character of these parts of the LCT.

- 9.8.29 During the construction phase, the Revised Consented Development will have effects which will range from medium-low to medium in terms of magnitude of change and will give rise to effects that will be **not significant** on the Broubster Sweeping Moorland LCT, owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In Combination Assessment with Limekiln Extension*

- 9.8.30 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Broubster LCU of the Sweeping Moorland LCT will remain **medium** in the north-west corner and **medium-low** or lower in all remaining areas during the construction phase and **medium-high** in the north-west corner and **medium** or lower in all remaining areas during the operational phase. The effect will be **not significant** during the construction phase and **significant** in the **north-west** corner and not significant across all remaining areas during the operational phase. While the five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, closest to the Broubster LCU, their addition to the magnitude of change will be moderated by the small number of turbines, their containment behind the intervening ridgeline and forestry, their coincidence with the horizontal extents of the Revised Consented Development turbines and their clear association with the Revised Consented Development.
- 9.8.31 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of the north-west part of the LCU owing to its proximity, the extent and levels of visibility and the contrast in character that the Combined Development will present in the context of this rural landscape, despite the existing presence and influence of Baillie Hill Wind Farm.

Sweeping Moorland LCT: Loch Scye LCU

- 9.8.32 **Baseline:** Loch Scye is situated to the south of the Limekiln Coniferous Woodland Plantation. It is surrounded by a range of LCTs, mostly small in scale and including Moorland Slopes and Hills to the east and west, Small Farms and Crofts to the east, and an expansive area of Flat Peatland to the south. The Loch Scye LCT is less influenced by the Mixed Agriculture and Settlement LCT chiefly owing to the low elevation of this settled landscape which makes it less prominent in respect of the wider and more elevated landscape. The Baillie Hill Wind Farm, which is located in this Mixed Agriculture and Settlement LCT, appears as a medium scale development at a minimum range of 6 km, and a prominent feature with an influence on the wider landscape. The mast on Ben Dorrery is also a readily visible feature from much of the Loch Scye Sweeping Moorland.
- 9.8.33 The Loch Scye Sweeping Moorland is characterised by the low and gently undulating moorland, the blanket covering of heather and grasses, the marshy

and wet condition of the land, and water features, including Loch Scye and other water courses, which appear as contrasting elements in this predominantly heather and grass covered landscape. The character is defined by the openness of the landscape and the comparatively limited influence of human intervention, which together present a simplicity which give this landscape its attraction. The track routed through the southern part of this LCT and the Coniferous Woodland Plantation to the north of the LCT, both limit the sense of wildness and remoteness. With the exception of a few small patches, operational Baillie Hill Wind Farm is already visible from a similar extent of this LCT, albeit at a range of approximately 6 to 10 km.

- 9.8.34 Loch Scye is a small to medium sized LCT and influences on its character are drawn from the surrounding LCT's. Most notable are the small hills which lie to the west and east as Moorland Slopes and Hills. Made distinct from the moorland landscape by their steep sided slopes, Beinn nam Bad Mor and Beinn nam Bad Beag to the west, and Ben Dorrery and Beinn Freiceadain to the east define the extent of the moorland and form distinctive landform features. The Flat Peatland to the south also provides a notable influence on the character of Loch Scye, largely owing to the scale and openness of the landscape and the limited presence of human artefacts or interventions. The Flat Peatland provides a simplicity and sense of remoteness to which the Loch Scye LCT provides an important part of the setting.
- 9.8.35 The Limekiln Coniferous Woodland Plantation lies to the north of Loch Scye, forming an enclosing edge of low hills and dense dark woodland. It has a lesser influence on the character of Loch Scye as it is typical of the wider Coniferous Woodland Plantation type and lacks any remarkable characteristics or features. It is also of a similar elevation and of a similar landform, although the blanket covering of forestry marks an apparent distinction.
- 9.8.36 **Sensitivity:** The sensitivity of the Loch Scye LCT is **medium-high**. While there are no scenic designations which would otherwise denote a particular scenic value, either at the regional or national level, the western part of the LCT is included in the East Halladale WLA and this reflects the distinctive landscape qualities which relate to the largely undeveloped and unmodified character of this landscape. There are, however, wind farm developments and afforested areas with an existing influence on this LCT, which reduce its overall susceptibility to the Revised Consented Development.
- 9.8.37 Loch Scye LCT relates to the wider landscape and in particular is influenced by the expansive and dramatic Flat Peatlands to the south and the Moorland Slopes and Hills to the west and east. The influence from the Coniferous Woodland Plantation is less notable, largely owing to its unexceptional character and lack of distinctive features. The blanket covering of single species forestry marks the human modification of this landscape and this, along with the presence of the track through the LCT; detract from the overall sensitivity which relates chiefly to the largely undeveloped landscapes in the other directions.
- 9.8.38 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the Loch Scye Sweeping Moorland LCT will be **medium** in the northern part and low or negligible in the southern part. The ZTV in **Figure 9.11** shows how visibility occurs as two large patches; one across



Shurrery to the east; and the other adjacent to Loch Scye in the west. It is in these parts that the magnitude of change will be medium. There are two areas with no visibility; one in the centre and one in the south-west corner. The area to the east is situated a minimum of 3 km from the Revised Consented Development and the area to the west a minimum of 3.5 km, such that the turbines will appear large in scale from both areas. The range of proximity increases up to 7.5 km from which the turbines will appear medium in scale.

- 9.8.39 In all instances, the turbines will appear set within the forestry and this will act to separate the Revised Consented Development from the Sweeping Moorland LCT. The close-range trees along the edge of the forest blocks will provide a scale comparison with the more distant range turbines with the effect that this will diminish their perceived scale. From most parts of the LCT the operational Baillie Hill turbines will already have an influence, albeit at a more distant range. These factors combine to reduce the overall magnitude of change.
- 9.8.40 Baillie Hill and Forss wind farms are visible from most parts of the LCT, and this will establish wind farm development as an existing component of the baseline situation. This reduces the magnitude of change as the Revised Consented Development will not be seen as a new or unfamiliar feature. The Revised Consented Development will, however, present a closer range example of wind farm development to the Loch Scye Sweeping Moorland that will have a stronger influence and be seen to extend wind farm development into a previously undeveloped landscape. These factors will add to the magnitude of change and result in an overall medium rating in the northern part.
- 9.8.41 The magnitude of change during the construction phase will be **medium-low** in the northern part and **low** or **negligible** in the southern parts of the Loch Scye LCT. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.8.42 **Significance of the effect:** The effect of the Revised Consented Development on the Loch Scye Sweeping Moorland LCT will be **significant** in the northern parts and **not significant** across all remaining parts during the operational phase. This relates chiefly to the closer range of the Revised Consented Development to this LCT compared to other operational wind farms in the surrounding landscape and the influence that the large turbines will have on this landscape. Those parts of the surrounding landscape which have the strongest influence on character; the Moorland Slopes and Hills to the east and west, and the Flat Peatlands to the south, will remain unaffected.
- 9.8.43 The Revised Consented Development will have a **not significant** effect on the Loch Scye Sweeping Moorland LCT during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.8.44 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Loch Scye

LCU of the Sweeping Moorland LCT will remain **medium-low** in the northern part and **low** or **negligible** in all remaining areas during the construction phase, and **medium** in the northern part and **low** or **negligible** in all remaining parts during the operational phase. The effect will be **not significant** during the construction phase and **significant** in the northern part and **not significant** across all remaining parts during the operational phase. While the five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, closest to the Loch Scye LCU, their addition to the magnitude of change will be moderated by the small number of turbines, their containment behind the intervening ridgeline and forestry, their coincidence with the horizontal extents of the Revised Consented Development turbines and their clear association with the Revised Consented Development.

- 9.8.45 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of the northern part of the LCU owing to its proximity, the extent and levels of visibility and the contrast in character that the Combined Development will present in the context of this rural landscape.

#### Sweeping Moorland: West

- 9.8.46 **Baseline:** The landscape to the west of the Limekiln LCT is classified predominantly as Sweeping Moorland. It is a large area which extends from the High Cliffs and Sheltered Bays on the north coast, south towards the Flat Peatlands of The Flow Country. Beinn Ratha occurs as a small pocket of Moorland Slopes and Hills within the Sweeping Moorland, directly west of the Revised Consented Development. A small pocket of Flat Peatland also occurs further south-west from this.
- 9.8.47 The landscape is very gently undulating, and the profile of the hills is low and smoothly rounded, collectively forming north-south aligned ridges with high points below 250 m AOD. This is a wet landscape with a high water table and large areas of marshland, even in the more elevated parts. Lochs and lochans occur across this landscape, connected by a network of burns, channelling the water gradually northwards towards the Atlantic Ocean.
- 9.8.48 Development in this LCT comprises tracks and electricity transmission pylons which are concentrated along the northern edge, and where also the main coastal route, the A836, crosses the LCT. The remainder of the LCT is largely devoid of development and this adds to the sense of wildness and remoteness, although large scale developments are visible from most parts and have an indirect influence on the character of this LCT. For example, Baillie Hill and Forss wind farms and Dounreay Nuclear Power Plant, are visible to the north-east and these detract from the sense of wildness and remoteness. Baillie Hill is the closest wind farm, which at a range of 6 km appears as a medium scale development set in the neighbouring LCT of Mixed Agriculture and Settlement.
- 9.8.49 The Sweeping Moorland LCT is characterised by its own large scale and openness, to the extent that the influence from surrounding landscapes is diminished, especially towards the core of this LCT. The Limekiln LCT, to the east, is similar in elevation and covered in forestry, and as such forms a subtle

- part of the landscape context rather than a landform feature of prominence and importance. It does, however, have an influence on the close-range parts of the Sweeping Moorland LCT owing to the alignment of the landform, whereby all the land to the east of the north-south ridge faces east towards the Limekiln LCT.
- 9.8.50 The openness and simplicity of the landscape has the effect of distant features and artefacts having a more notable influence on landscape character than they might otherwise do. For example, during clear weather conditions, distant forest blocks and wind turbines are readily apparent, especially as there are few features within the close range which might otherwise present a competing influence.
- 9.8.51 **Sensitivity:** The sensitivity of the Sweeping Moorland West LCT is **medium** in the north and **medium-high** in the south with the northern edge of the Beinn Ratha Moorland Slopes and Hills marking the divide. The largely unspoilt nature of the landscape and lack of development, especially away from the north, leads to some characteristics of wildness and remoteness, and this is reflected in the inclusion of this area in the East Halladale WLA. The landscape is close to its intrinsic state and is typical of many of the key characteristics of the Sweeping Moorland LCT. The area to the north is more readily influenced by the roads and settlements which characterise the north coast, as well as the more intensive land uses of agriculture and forestry. Together these features reduce the sensitivity by making human influence an established part of the baseline situation.
- 9.8.52 The sensitivity is prevented from being high owing to the absence of regional or national landscape designations which would otherwise denote a special value, although the southern part of the LCT is included in the East Halladale WLA. The influence of large-scale developments and commercial forestry in the northern part of the LCT and adjacent LCTs, detract from the sense of wildness and remoteness.
- 9.8.53 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on the Sweeping Moorland West LCT will be **high** in the area directly west, **medium-high** or **medium** in the area to the north and south and **negligible** in the area west of the ridge. The ZTV in **Figure 9.11** shows a pattern of visibility determined by the north-south ridge whereby the east facing slopes gain almost continuous visibility and the west-facing slopes gain almost no visibility. The west facing slopes will therefore be subject to a negligible magnitude of change as there will be very limited influence from the Revised Consented Development.
- 9.8.54 The east facing slopes come within 100 m of the nearest proposed turbines and these close-range parts of the LCT will experience a high magnitude of change, owing to the strong influence on character which the large-scale turbines and associated infrastructure will have in contrast to the largely undeveloped character of the baseline. The ridge of the Sweeping Moorland wraps around the south of the Limekiln Coniferous Woodland Plantation, such that the slopes continue to face towards the Revised Consented Development. Although the range increases up to 4.2 km and the turbines will appear as medium to large, rather than large structures, the orientation of the landform will ensure the influence of the Revised Consented Development remains notable and the

- magnitude of change will be medium-high. In the areas beyond the ridge, the influence of the Revised Consented Development will drop away as the turbines become more distant and the influence of the surrounding landscape becomes more prevalent.
- 9.8.55 The orientation of the landscape to the north of Beinn Ratha is predominantly towards the North Atlantic making the coastal edge the principal external influence. The proximity of this patch of visibility to the Revised Consented Development ranges between 1.2 km and 6.7 km. At 1.2 km the magnitude of change will continue to be high, and this will continue along the eastern boundary of the LCT to Reay as the landscape is low lying and the influence of the Revised Consented Development will continue to be apparent. To the west, where the slope rounds to a northerly direction, the magnitude of change will fall to medium-high, and to the north of the A836 it will fall to medium, as the distance from the Revised Consented Development is greater and the influence from the coastal edge becomes more prevalent. On the coastal edge the magnitude of change will fall to a medium-low or low rating as the coastal landscape and the North Atlantic become the defining features.
- 9.8.56 The Revised Consented Development will not be the only wind farm visible from this LCT. Baillie Hill and Forss wind farms are visible across much the same extent and have established wind farm development as an existing feature of the wider landscape. The closer range of the Revised Consented Development will, however, mean that the influence of the other wind farms will be secondary and that the Revised Consented Development will form the primary influence.
- 9.8.57 The magnitude of change during the construction phase will be **medium-high** across the majority of the LCT, **medium-low** in the area to the north of the A836 and **negligible** in the area to the west of the ridge. These lower ratings compared to the rating for the operational development, reflect the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The close proximity of this LCT and the slightly raised elevation of parts, in relation to the Revised Consented Development, means that the cranes and turbines will form a notable influence.
- 9.8.58 **Significance of the effect:** The effect of the Revised Consented Development on the Sweeping Moorland West LCT will be **significant** across the eastern half of the LCT between the A836 and Beinn nam Bad Mor in the area from which visibility of the Revised Consented Development will be gained, and **not significant** across the remaining parts. This relates chiefly to the proximity of the LCT to the Revised Consented Development, the orientation of parts of the landform towards the Revised Consented Development and the more distant influence from other existing large scale wind farm developments.
- 9.8.59 The effect of the Revised Consented Development on the Sweeping Moorland West LCT during the construction phase will be **significant** across the eastern half of the LCT between the A836 and Beinn nam Bad Mor, in the area from which visibility of the Revised Consented Development will be gained, and **not significant** across the remaining parts. This reflects the close proximity of the LCT which, despite the enclosure of the plantation, means that the erection of

the cranes and turbines will have a significant effect on the character of the landscape.

*In-Combination Assessment with Limekiln Extension*

- 9.8.60 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the West LCU of the Sweeping Moorland LCT will remain **medium-high** in the eastern part, **medium-low** to the north of the A836 and **negligible** in all remaining parts and during the construction phase, and **high** in the eastern part and **medium-high** or **medium** in the areas to the north and south of this and **negligible** in all remaining parts during the operational phase. The effect will be **significant** during the construction and operational phase across most of the eastern extents of this LCU and **not significant** across all remaining parts. The five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, furthest from the West LCU, and their addition to the magnitude of change will be moderated by the small number of turbines, their location behind and their coincidence with the horizontal extents of the Revised Consented Development turbines and their clear association with the Revised Consented Development.
- 9.8.61 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of much of the eastern part of the LCU owing to its proximity, the extent and levels of visibility and the contrast in character that the Combined Development will present in the context of this rural landscape.

Moorland Slopes and Hills: Beinn Ratha

- 9.8.62 **Baseline:** Beinn Ratha Moorland Slopes and Hills LCT occurs as a small circular area centred around Beinn Ratha Hill and amidst the wider area of the Sweeping Moorland West LCT. Beinn Ratha forms a notable landmark feature within the wider landscape. At 242 m AOD it is not a big hill, and it is only in comparison with the low and gently undulating Sweeping Moorland which surrounds it, that its more steeply sided slopes and conical shape make it a distinctive landform feature.
- 9.8.63 Beinn Ratha is characterised by a low covering of heather moorland. The water table is high, and the land is marshy. There is little evidence of human intervention in this LCT other than small blocks of forestry on the eastern slopes and the enclosure of deer fences around them. The proximity to the more developed northern coast does, however, mean that large-scale developments such as Dounreay Nuclear Power Plant, Baillie Hill and Forss wind farms are evident and these do reduce the sense of remoteness, which otherwise occurs in respect of the landscapes to the south.
- 9.8.64 Beinn Ratha forms part of a longer north-south ridge, such that the slopes on either side are either eastwards or westwards facing. While, from the summit and ridgeline, the influence on the character of this LCT comes from the landscapes all around, the eastward slopes relate more directly to the neighbouring Limekiln Coniferous Woodland Plantation LCT and the westward slopes to the neighbouring West Sweeping Moorland LCT.

- 9.8.65 **Sensitivity:** The distinctive form of Beinn Ratha makes it a unique feature within the local landscape. It forms a contrast with the surrounding Sweeping Moorland, and it is in this context that it appears unique, rather than typical, and this adds to its sensitivity. While Beinn Ratha forms a key feature to many of the surrounding landscapes, the influence of the surrounding landscapes on Beinn Ratha varies. The orientation of the eastern slopes towards the Limekiln Coniferous Woodland Plantation forms a notable association with this neighbouring LCT and this increases the sensitivity of the Beinn Ratha LCT to the Revised Consented Development in this landscape.
- 9.8.66 Owing to its undeveloped landscape, the Beinn Ratha LCT is considered to be in good condition and is of scenic value at the local level. The absence of any regional or national designations, however, denotes the lack of scenic value at these higher levels. Beinn Ratha marks the northern extent of the East Halladale Flows WLA, although the large-scale developments to the north and north-east have an indirect influence on the character of the LCT. Furthermore, the presence of forestry on the eastern slopes, and more extensively in the neighbouring Limekiln LCT, denotes the extent of modification and this reduces the susceptibility of the LCT to the Revised Consented Development.
- 9.8.67 The overall rating of a **medium-high** sensitivity reflects the importance of Beinn Ratha as a focal feature within the local landscape as well as the existing influences of nearby developments and land uses on its character.
- 9.8.68 **Magnitude of change:** The magnitude of change which Beinn Ratha Sweeping Moorland will be subject to as a result of the Revised Consented Development will be **medium-high**. The ZTV in **Figure 9.11** shows visibility divided by the north-south ridge, with almost continuous visibility across the eastern slopes and practically no visibility across the western slopes. The eastern slopes lie within the range of 1 to 2 km, from which the proposed turbines will appear as large-scale elements in contrast with the baseline rural landscape. This will give rise to a medium-high magnitude of change on the character of the LCT.
- 9.8.69 From the summit and ridge line, through the Moorland Slopes and Hills LCT, the influences on the character are drawn from many of the surrounding landscapes. Here, although the Revised Consented Development will form a smaller proportion of the wider influences, the close proximity coupled with the elevated perspective across the Revised Consented Development will lead to a medium-high magnitude of change.
- 9.8.70 On the eastern slopes and from the summit and ridge, Baillie Hill and Forss wind farms are visible at minimum ranges of 6 km and 8 km respectively. These are seen set in the Mixed Agriculture and Settlement LCT and Open Intensive Farmland LCT, which, owing to their notably settled characteristics, appear distinct from the largely unsettled landscapes of the Moorland Slopes and Hills and Coniferous Woodland Plantation. This distinction acts to disassociate the two areas and reduce the influences which exist between them. The turbines will, none-the-less appear as medium scale elements which will be readily visible and make wind farm development an established feature of the wider landscape. This prevents the magnitude of change from being rated as high.



- 9.8.71 The magnitude of change during the construction phase will be **medium-high**. The close and elevated location of this LCT in relation to the Revised Consented Development means that views into the plantation are possible and that more of the construction activities will be apparent than from other surrounding LCTs. The construction of the tracks and excavation of the borrow pits will be apparent from parts of the eastern half of the LCT while the emergence of the cranes and wind turbines will form a readily apparent feature during the latter part of the construction phase, also from the eastern half of the LCT.
- 9.8.72 **Significance of the effect:** The effect of the Revised Consented Development on the Beinn Ratha Moorland Slopes and Hills LCT will be **significant** during the operational phase. This relates chiefly to the close proximity of the LCT to the Revised Consented Development and the orientation of the eastern slopes in this direction, as well as the more tempered influence from the other large scale wind farm developments in the area.
- 9.8.73 The effect of the Revised Consented Development on the Beinn Ratha Sweeping Moorland LCT will be **significant** during the construction phase. The significant effect relates chiefly to the close and elevated location of this LCT which means many of the construction activities will be apparent despite the enclosure of the plantation.

*In-Combination Effect with Limekiln Extension*

- 9.8.74 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Beinn Ratha LCU of the Moorland Slopes and Hills LCT will remain **medium-high** during the construction phase and **medium-high** during the operational phase, and the effect will remain **significant** during both phases. The location of this LCT to the west means that the five Limekiln Extension turbines on the south-east side of the Revised Consented Development will be slightly more distant from this LCT. They will sit within the horizontal extents of the Revised Consented Development and, together they will appear collectively as one cohesive development. The small number of additional turbines and their location on the far side of the group will mean they will give rise to only a small increase in the overall effect.
- 9.8.75 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of this LCT for the principal reasons that it will be seen in close proximity and will form the key influence on landscape character.

Moorland Slopes and Hills: Beinn nam Bad Mor

- 9.8.76 **Baseline:** Beinn nam Bad Mor is a small area of Moorland Slopes and Hills situated to the south of the Limekiln Coniferous Woodland Plantation. Similar to Beinn Ratha LCT, it is centred around a single hill which appears pronounced on account of its steep slopes and conical profile amidst the large scale, low-lying expanses of Sweeping Moorland and Flat Peatland.
- 9.8.77 Beinn nam Bad Mor LCT is more distant from the influences of the developments along the northern coastline. For example, the influence of Baillie Hill Wind Farm is diminished by its location approximately 9 km to the north and its separation from the LCT by the large extent of the Limekiln Coniferous Woodland Plantation

LCT which lies between them. Instead, the LCT is more readily influenced by the remote landscapes to the west and south, where the expansive areas of open and very gently undulating marshlands form a dramatic impression. Views in these directions extend out to the Lone Mountains which form a distant and distinctive skyline profile enclosing the wider extent of The Flow Country.

- 9.8.78 There is a sense of remoteness present in this LCT, although features such as the forestry at Limekiln to the north, the track to Loch Tuim Ghlais to the south and the mast on Ben Dorrery to the east are evidence of human intervention in this landscape, albeit all located in neighbouring landscapes. In particular, the straight geometric edge of the forestry appears unsympathetic to the natural form of the landscape. Baillie Hill and Forss wind farms at ranges of approximately 9 km and 14 km respectively, present visible, albeit distant features, seen to be associated with the more developed landscapes of the northern coast. The cluster of operational developments, the closest of which is Causeymire at a range of approximately 15 km are visible to the south-east from this LCT.
- 9.8.79 **Sensitivity:** The sensitivity of the Beinn nam Bad Mor LCT is **medium-high**. There are no regional or national landscape designations which would otherwise denote a particular scenic sensitivity and lead to a high sensitivity rating. The inclusion of this LCT in the East Halladale WLA does, however, denote the wildness qualities and sense of remoteness. The presence of the forestry to the north and the track to the south, as well as visibility of distant developments in neighbouring landscapes, all detract from the susceptibility of the LCT to the Revised Consented Development, and these factors contribute to the medium part of the rating.
- 9.8.80 The Moorland Slopes and Hills form an important landscape feature in relation to the wider landscape, especially to the Flat Peatlands to the south, and this makes this LCT of at least local importance. There is very little close-range influence from large scale developments and the landscape remains largely unmodified and close to its intrinsic state. These factors contribute to the high part of the rating.
- 9.8.81 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on the Beinn nam Bad Mor Moorland Slopes and Hills will be **medium** on the northern side and **negligible** on the southern side. The ZTV shows that theoretical visibility is continuous across the northern half of the LCT while completely screened from the southern half by the hill itself. The northern slopes are orientated towards the Revised Consented Development and this increases the association between the two. The turbines will be seen between a range of 3.5 km from the northern boundary and 5.5 km from the ridgeline and will appear as medium scale structures which will not overwhelm the scale of the landscape.
- 9.8.82 From the Beinn nam Bad Mor LCT, the majority of the turbines will be visible and seen set behind the depth of Coniferous Woodland Plantation LCT which covers the Limekiln Hills. There is sufficient breadth and depth in the landscape to accommodate the turbines and the plantation will appear as an appropriate location. Scale comparisons will emerge between the trees on the outer edge of the forest blocks and the more distant turbines, and these will act to reduce the

perceived scale of the turbines and in so doing will reduce the magnitude of change. The Revised Consented Development will occupy only a small proportion of a much wider view of the surrounding landscapes and although it will create a new focus, the landscapes to the south and west will continue to form the main influence in respect of the wider landscape setting.

- 9.8.83 The presence of Baillie Hill and Forss wind farms has a variable effect on the magnitude of change. Their existing presence reduces the magnitude of change by ensuring that the Revised Consented Development will not appear as a new or unfamiliar feature within the wider landscape. The Revised Consented Development will, however, be seen to increase the extent of wind farm development and in a landscape which was previously undeveloped, and this will increase the magnitude of change. The Revised Consented Development will appear closer in range and despite the scale comparisons with the forestry, in comparison with the other more distant developments, the turbines will appear as medium scale structures.
- 9.8.84 The magnitude of change during the construction phase will be **medium-low** across the northern half of the LCT and **negligible** across the southern half. These lower ratings, compared to the ratings for the operational development, reflect the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.8.85 **Significance of the effect:** The effect of the Revised Consented Development on the Beinn nam Bad Mor LCT will be **significant** during the operational phase across the northern part of the LCT and **not significant** across the southern part. The significant effect relates principally to the distance between the LCT and the influence of the Revised Consented Development, which will appear at variance with the largely undeveloped character of this LCT.
- 9.8.86 During the construction phase, the Revised Consented Development will have a **not significant** effect on the Beinn nam Bad Mor Moorland Slopes and Hills LCT owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.8.87 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Beinn nam Bad Mor LCU of the Moorland Slopes and Hills LCT will remain **medium-low** in the northern part and **negligible** in all remaining areas during the construction phase, and **medium** in the northern part and **negligible** in all remaining parts during the operational phase. The effect will be **not significant during** the construction phase and **significant** in the northern part and **not significant** across all remaining parts during the operational phase. While the five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, their addition to the magnitude of change will be moderated by the small number of turbines, their containment behind the intervening ridgeline and forestry, and their clear association with the Revised Consented

Development, despite an incremental extension to the horizontal extents to the east.

- 9.8.88 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of the northern part of the LCU owing to its proximity, the extent and levels of visibility and the contrast in character that the Combined Development will present in the context of this rural landscape, despite the existing presence and influence of Baillie Hill Wind Farm.

Mixed Agriculture and Settlement: North East

- 9.8.89 **Baseline:** This is the largest single LCT in the Study Area, covering much of the north-eastern part of Caithness. The closest part of the LCT lies adjacent to the northern boundary of the Limekiln Coniferous Woodland Plantation LCT, where the small settlement of Reay and the surrounding farms are situated. The LCT extends to the east, north-east and south-east where, with distance from the Limekiln LCT, the association between these landscapes weakens. This LCT is extensive with many different internal and external influences acting on the character of the landscape. For the purposes of this assessment those parts of the LCT which lie within a 10km radius of the Revised Consented Development have been assessed in detail. This defines an area from Reay to Bridge of Forrs and round to the eastern slopes of Loch Calder. It is considered unlikely that significant effects will arise as a result of the Revised Consented Development outwith this radius owing to the distance between the receptor and the Revised Consented Development, as well as the closer range influence of Baillie Hill Wind Farm on these parts of the LCT.
- 9.8.90 The character of Mixed Agriculture and Settlement LCT is typified by the cultivation of the land, the development of small settlements and farmsteads, and a road network of main and minor roads. The landform is gently sloping with low rounded hills separated by broad shallow valleys. There is a strong horizontal emphasis and a sense of openness which accentuates the influence of the sky in the overall character of the landscape.
- 9.8.91 The simplicity of the underlying landform is confused by the extent of human interventions in the form of field patterns, electricity transmission lines, settlements, roads and railways, which have added a geometric pattern to the natural landscape. This presents a more complex relationship between the landscape and the human interventions which occupy it. The most notable elements are the Baillie Hill wind turbines, which are located in this LCT and which have a strong influence across the Mixed Agriculture and Settlement LCT, as well as adjacent LCTs. They establish wind farm development as a component of the landscape, and this has altered the character by introducing large scale development where previously there was only small-scale rural development.
- 9.8.92 There is a lack of enclosure in this LCT. While small hills such as Baillie Hill and Lieurary Hill form local landform features, there are no big hills which would otherwise act to define and enclose the low-lying landscapes. The comparatively low elevation of the hills in the Limekiln LCT to the south-west, limits their influence on the character of the Mixed Agriculture and Settlement LCT, appearing from much of the LCT as a low and long ridge. The blanket covering

of the coniferous woodland makes the Limekiln LCT a distinct feature in the wider landscape by colouring the hills a dark green and marking out a contrasting skyline. From the area of the Mixed Agriculture and Settlement to the immediate north, the closer proximity gives the Limekiln Hills more prominence and the hummocky landform of Borlum and Creag Leathan in the foreground makes them a distinctive feature. From the immediate east, they form a long and low ridge which sits above the low and shallow valley of the Forss Water, giving some enclosure and achieving some prominence.

- 9.8.93 **Sensitivity:** The sensitivity of this LCT is **medium-low**. This landscape has been modified through the cultivation of the landscape and the development of small settlements and a road network. This has altered the landscape from its natural state and makes it less sensitive to the effects of development, than if development were being introduced as a new feature. The Limekiln LCT, where the Revised Consented Development is proposed, is distinct because of its slightly higher elevation, extensive coniferous woodland and apparent absence of built development. This landscape has an influence on the character of the localised parts of the Mixed Agriculture and Settlement to the north and east, and as a result these parts will be more sensitive to changes in this landscape.
- 9.8.94 There are no landscape designations covering this landscape which would otherwise denote a particular sensitivity recognised at the regional or national level. The landscape is managed through farming and forestry practices and so although well-tended, has lost its intrinsic character and condition. Built development is relatively sparse and well dispersed and appears as an integral part of this rural settled landscape. The presence of the large-scale elements of the Baillie Hill Wind Farm and the electricity transmission line, within the LCT, and Forrs Wind Farm and Dounreay Nuclear Power Plant, outwith the LCT make these features an existing influence on the character of this landscape.
- 9.8.95 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the Reay / Shebster Mixed Agriculture and Settlement LCT will range from **medium-high** through to **negligible**, depending chiefly on the occurrence of visibility, the distance from the Revised Consented Development, and the proximity to, and influence from, Baillie Hill Wind Farm.
- 9.8.96 A **medium-high** magnitude of change will occur in the area of the Mixed Agriculture and Settlement LCT situated to the north of the Revised Consented Development. This area lies within a 0.5 km to 3.8 km range of the closest turbine, and in many instances all the turbines will be visible. Their location, set behind the hummocky knolls which separate the Revised Consented Development from this LCT, will give rise to awkward comparisons, which will increase the perceived scale of the turbines.
- 9.8.97 The **medium-high** rating will extend to cover the area around Isauld, owing to its close proximity to the Revised Consented Development, while further north-east around Upper Dounreay, the rating will drop to **medium**. The closer range of the electricity transmission line in this part of the LCT will form a scale comparison that will diminish the perceived scale of the turbines and this effect in combination with the slightly more distant range of 4 km will reduce the overall magnitude of change.

- 9.8.98 Further south-east, the Hill of Shebster forms a divide whereby the north-west and north facing slopes will be subject to a **medium** magnitude of change as, owing to their orientation, these areas relate more to the coastal edge. The west and south facing slopes will be subject to a **medium-high** magnitude of change as they are orientated towards the landscape where the Revised Consented Development will be located, and this forms a closer association. The **medium-high** rating extends around Shebster, but beyond this is reduced to **medium** as a result of the very close proximity of Baillie Hill Wind Farm which will act as the primary influence. This will diminish the comparative influence of the Revised Consented Development partly owing to the increasingly distant influence it will have on this part of the LCT.
- 9.8.99 Over the remaining parts of the north-east Mixed Agriculture and Settlement LCT the magnitude of change will drop to **medium-low** and **low** as distance from the Revised Consented Development increases and the influence of Baillie Hill Wind Farm on the character of the landscape also increases.
- 9.8.100 The magnitude of change during the construction phase will be **medium** in the close-range parts of the LCT between Reay and Shebster, and **medium-low**, **low** and **negligible** in the remaining areas. These lower ratings compared to the rating for the operational development, reflect the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.8.101 **Significance of the effect:** The effect of the Revised Consented Development on the North-east Mixed Agriculture and Settlement LCT will be **significant** in part and **not significant** in part. The significant parts occur to the north of the Revised Consented Development, around Reay and Isauld and extending on to the area around Shebster to the north-east. The not significant parts include the area around Upper Dounreay where the influence of Baillie Hill Wind Farm and Dounreay Nuclear Power Plant are more immediate, the distance from the turbines is greater and the scale comparisons reduce the perceived scale of the Revised Consented Development turbines, and the orientation of the landform is more towards the coastal edge. Beyond these areas, and beyond Shebster, the remaining areas will also be not significant, owing to their greater distance from the Revised Consented Development and / or the greater influence from Baillie Hill Wind Farm.
- 9.8.102 Those parts of the LCT that will be significantly affected are those in close proximity to the north and north-east of the Revised Consented Development, out to a maximum range of approximately 4 km in the direction of Shebster. The turbines will appear as large-scale elements whose influence will be sufficient enough to redefine the character of these parts of the landscape.
- 9.8.103 The effect of the Revised Consented Development on the North-East Mixed Agriculture and Settlement LCT will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.



*In-Combination Assessment with Limekiln Extension*

- 9.8.104 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the North-East LCU of the Mixed Agriculture and Settlement LCT will remain **not significant** during the construction phase owing to magnitude of change ratings from **medium, medium-low, low** or **negligible**. During the operational phase there will be **significant** effects out to 4 km owing to magnitude of change ratings of **medium-high** and **medium**, and then medium or lower ratings beyond giving rise to not significant effects. While the five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, closest to the North-East LCU, their addition to the magnitude of change will be moderated by the small number of turbines, their containment behind the intervening ridgeline and forestry, their coincidence with the horizontal extents of the Revised Consented Development turbines and their clear association with the Revised Consented Development.
- 9.8.105 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of the western part of the LCU owing to its proximity, the extent and levels of visibility and the contrast in character that the Combined Development will present in the context of this rural landscape, despite the existing presence and influence of Baillie Hill Wind Farm.

Small Farms and Crofts: Broubster

- 9.8.106 **Baseline:** The Broubster LCT of Small Farms and Crofts lies to the east of the Limekiln Coniferous Woodland Plantation LCT. It is a relatively small area situated within a wider area of Sweeping Moorland, from which it is made distinct by the small farms and crofts and surrounding farm fields of mostly rough pasture. The historic division of the land into these small holdings has created a pattern in which the farmsteads and crofter's cottages are intermittently located along the minor road which links Shebster with the B870 and Halkirk. Many of the properties marked on the OS mapping lie abandoned, providing evidence that many of the original crofts disappeared a long time ago, and have since been amalgamated or incorporated into larger landholdings.
- 9.8.107 This landscape is distinguished from the Mixed Agriculture and Settlement LCT to the north principally on account of its less productive soils, which have led to less intensive agricultural practices. This is evident in the lesser extent of improved pasture and crop growing, and wider extent of rough and semi-improved pasture. The fields are less intensively cultivated, generally larger and often poorly enclosed. There are areas of marshland around Lochan Ealach which add to the uncultivated appearance. The lesser extent of artificial improvements has meant the landscape appears closer to its intrinsic state and more closely associated with the Sweeping Moorland. The exception to this occurs where the forestry blocks encroach into the margins of this landscape and denote a more modified landscape.
- 9.8.108 The LCT is positioned along a shallow valley and the gentle undulations of the surrounding landscape means that there is generally a lack of enclosure. The lower elevation does, however, mean that this LCT is afforded some enclosure

as a result of the Limekiln Coniferous Woodland Plantation LCT to the west. The slightly higher elevation of this LCT provides some containment, with the strong linear edge of the forestry blocks providing a contrast to the otherwise open and sweeping nature of the moorland.

- 9.8.109 Development in this landscape is sparse and small scale, comprising minor roads and tracks and dispersed isolated properties. There is an existing external influence from the Baillie Hill Wind Farm, situated 4 km to the north of the northern LCT boundary. The scale and extent of this development has altered the rural character of the Broubster LCT, whereby, previously only small-scale development was readily visible and now large-scale development is visible across its extent, which is in contrast with the scale of the hills and local rural development. Forss Wind Farm is also visible in the same north-easterly direction as Baillie Hill Wind Farm, although, at a range of 8 km and with notably smaller turbines, they appear as more medium scale structures, their prominence diminished by their position behind the skyline.
- 9.8.110 **Sensitivity:** The sensitivity of the Broubster Small Farms and Crofts is **medium-low**. The landscape is typical of this type which occurs in pockets around the margins of the North-east Mixed Agriculture and Settlement LCT. The landscape lacks any special scenic qualities or features, and this is reflected in the absence of any national or regional designations across this, and neighbouring LCTs. The presence of forestry denotes human intervention in this landscape and detracts from its intrinsic character by notably altering the natural vegetation cover.
- 9.8.111 Although the landscape lacks any special qualities, development is relatively sparse and away from the blocks of forestry, the areas more akin to the characteristics of the surrounding Sweeping Moorland, present a simple, but attractive character, of local value to those who live, work and travel through this landscape. These factors give the landscape the medium part of the rating.
- 9.8.112 **Magnitude of change:** Visibility of the Revised Consented Development is patchy across this LCT, with visibility occurring across the southern half, eastern edge and northern edge, but not in the central core around Broubster where the land is at its lowest. This lower elevation, combined with the rise in elevation of the landform to the west, leads to the screening of the Revised Consented Development. In the other parts of the LCT, where visibility does occur, it is mostly of a limited number of turbines. The ZTV in **Figure 9.11** shows the largest band of visibility occurring as 13 to 16 turbines and only on the margins are all 21 turbines visible. The intervening landform partially screens the Revised Consented Development such that fewer turbines are visible and also to a lesser extent, whereby towers and sometimes nacelles are screened. This limited visibility reduces the magnitude of change.
- 9.8.113 The landform and forestry creates a divide between the Broubster Small Farms and Crofts LCT and the Revised Consented Development, such that the proposed turbines are seen as part of a neighbouring LCT and, therefore, do not have such a strong influence on the character of this LCT. The Revised Consented Development lies at a range of 3.2 km from the closest boundary of the Broubster Small Farms and Crofts LCT, and from which the turbines will appear as medium to large scale structures.

- 9.8.114 The lower elevation of the Broubster Small Farms and Crofts LCT, and its partial containment by the low hills and woodland plantation at Limekiln, means that there is no strong association between these landscapes. Furthermore, the orientation of the Broubster LCT from north to south is parallel to that of the Limekiln LCT and as a result the influence between them is not as great as if one ran perpendicular to the other, directing the flow in that direction. As such the turbines will appear as features oblique to the main orientation of the Broubster LCT and this partially reduces the magnitude of change. The turbines will be seen behind a depth of woodland and comparisons will arise between the close-range trees and more distant range turbines, which will act to diminish their perceived scale.
- 9.8.115 The presence of Baillie Hill Wind Farm and, to a lesser extent Forss Wind Farm, reduces the magnitude of change as these operational wind farms have already established this type of development as an influence on the character of the Broubster LCT. Visibility of Baillie Hill Wind Farm is almost continuous across the Broubster LCT. The Revised Consented Development will extend wind farm development from the Mixed Agriculture and Settlement LCT into the Coniferous Woodland Plantation LCT. From Broubster LCT, the Revised Consented Development will be seen to the north-west while Baillie Hill Wind Farm is seen to the north-east, thus increasing the influence from a wider range of directions. The developments will be seen at similar ranges, although the orientation of the landform towards Baillie Hill Wind Farm will increase the association between these landscapes and conversely the location of the Revised Consented Development behind the woodland and enclosing ridge will weaken the association.
- 9.8.116 The magnitude of change on the Broubster Small Farms and Crofts will be **medium**. This relates chiefly to the proximity of the LCT to the Revised Consented Development as well as the limited relationship between the LCTs, the limited extent and levels of visibility of the Revised Consented Development, the location of the Revised Consented Development behind the ridgeline and forestry and the existing influence of Baillie Hill Wind Farm.
- 9.8.117 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.8.118 **Significance of the effect:** The effect of the Revised Consented Development on the Broubster Small Farms and Crofts will be **not significant** during the operational phase. The LCT has no special sensitivities in terms of value and character and despite the proximity of the turbines to the LCT, the magnitude of change is prevented from rating high on account of the limited association between the Broubster LCT and the Limekiln LCT, the limited extent and levels of visibility of the Revised Consented Development, and the position of the turbines set behind a depth of woodland and an enclosing ridgeline.
- 9.8.119 The effect of the Revised Consented Development on the Broubster Small Farms and Crofts LCT will be **not significant** during the construction phase owing to

the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.8.120 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Broubster LCU of the Small Farms and Crofts LCT will be **medium-low** during the construction phase and **medium** during the operational phase, and not significant during both phases. While the five Limekiln Extension turbines will be located on the eastern side of the Revised Consented Development, closest to the Broubster LCU, their addition to the magnitude of change will be moderated by the small number of turbines, their containment behind the intervening ridgeline and forestry, their coincidence with the horizontal extents of the Revised Consented Development turbines and their clear association with the Revised Consented Development.
- 9.8.121 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will not redefine the character of this LCU owing to the containment and partial screening provided by the intervening landform and forestry, the limited association between this LCU and the Coniferous Woodland Plantation LCT in which the Combined development will be located and the small proportion of the wider landscape context which the Combined Development will occupy.

Summary of effects on landscape character

- 9.8.122 The assessment of effects on landscape character has assessed what effects the Revised Consented Development will have on the character of the LCTs and designated areas throughout the Study Area. The assessment has found that there will be significant changes to the landscape character of:
- Coniferous Woodland Plantation: Limekiln LCT;
  - Sweeping Moorland: Broubster LCT in part;
  - Sweeping Moorland: Loch Scye in part;
  - Sweeping Moorland: West LCT in part;
  - Moorland Slopes and Hills: Beinn Ratha LCT;
  - Moorland Slopes and Hills: Beinn nam Bad Mor in part; and
  - Mixed Agriculture and Settlement: North East LCT in part.
- 9.8.123 In considering the in-combination effects of the Revised Consented Development with Limekiln Extension, the same extent and levels of effect were found to occur, highlighting the incremental increase that the Limekiln Extension will give rise to in respect of the effect already attributed to the Revised Consented Development.

## **9.9 Assessment of Effects on Landscape Designations**

- 9.9.1 The second group of receptors covered in the assessment of effects on landscape character are the landscape designations that cover the Study Area as shown in **Figure 9.3** and shown in conjunction with the ZTV in **Figure 9.12**.

- 9.9.2 It should be noted that many of the designated areas and WLAs included in the assessment cover large areas, and that the effects of the Revised Consented Development can, therefore, vary widely across each of these areas. The distinction within these areas, where effects may be significant and not significant, is of particular importance in the assessment, and where this is the case, the assessment describes in detail the boundaries which separate these areas.
- 9.9.3 Through the scoping process, it has been agreed with NatureScot and THC that the following two landscape designations be included in the detailed assessment:
- Farr Bay, Strathy and Port Skerra SLA; and
  - Dunnet Head SLA.
- 9.9.4 The effect on each of these SLAs is assessed below. It has been agreed with NatureScot and THC that the NSAs and other SLAs in the Study Area be discounted from the detailed assessment owing to the limited potential for a significant effect to arise. **Appendix 9.B** Preliminary Assessment of Effects on Landscape Character presents a preliminary assessment of the potential effects of the Revised Consented Development on all designated landscapes in the 40 km Study Area.

#### Farr Bay, Strathy and Port Skerra SLA

##### *Assessment of Highland Special Landscape Areas*

- 9.9.5 THC's 'Assessment of Highland Special Landscape Areas' provides a citation for the Farr Bay, Strathy and Port Skerra SLA, which lists out its key landscape and visual characteristics, as well as its special qualities. This provides a useful basis on which to establish the sensitivity of the SLA and to determine the magnitude of change the Revised Consented Development may have on the SLA.

##### *"Key Landscape and Visual Characteristics*

- *Deeply-indented coastline characterised by a repetitive rhythm of alternating rocky headlands and sheltered bays, closely related to the underlying geological structure.*
- *Impressive assemblage of hard/rocky coastal landforms including cliffs, headlands, stacks, arches, caves and ravines.*
- *Fine sandy beaches in the largest and most sheltered bays which form foci that contrast in colour, form and texture to the rocky coastal cliffs.*
- *Elevated areas on the intervening high ground between the bays close to the sea provide expansive views both along the coast and out to sea, contrasting with a more enclosed, intimate visual character within the major bays. Views south to the inland mountains are a notable feature of this stretch of coast.*
- *The large scale of the landscape, combined with often rapidly changing weather and the distinctive coastal light, creates dynamic and dramatic visual effects.*
- *The immediate coastline is often not visible from the adjacent inland areas due to convex nature of slopes and the vertical cliffs which screen views.*

*Consequently views tend to focus upon the waters of the Pentland Firth with its strong tides and currents which are clearly visible from many locations.*

- *Patterns of land cover and settlement within crofting areas form a complex mosaic with moorland areas, although occurring predominantly as linear strips or isolated patches, closely associated with physical conditions including soil type and topography. Crofting and farming is largely confined to the slopes around the bays and their subtle field patterns contrast with the simple vegetation backcloth of the inland hills.*
- *The moorland landscapes, with rolling slopes and hills and a characteristic combination of convex slopes and simple vegetation cover with rocky outcrops, become noticeably more open and sweeping in character moving eastwards towards Caithness.*
- *Abandoned and ruined buildings occur in places, partly a reflection of the harsh, uncompromising nature of the exposed coastal landscape. These form distinctive visual elements, together with the harbours and jetties which occur at regular intervals along the coast, and evoke a sense of history.*
- *Trees and scrub are rare, mainly restricted to crofts and settlements or in steeper glens.*

9.9.6 The SLA covers the north coast of Sutherland between Bettyhill in the west and Melvich in the east, as well as the immediate hinterland of moorland and crofting areas. This area is characterised by its dramatic, deeply indented coastline of rocky headlands and sheltered bays, backed by a mosaic of moorland and crofting landscapes. Views extend west along the coast to Cape Wrath and east to Dunnet Head, as well as north across the Atlantic Ocean and north-east across the Pentland Firth to the Orkney Islands.

9.9.7 The key landscape and visual characteristics listed above describe a landscape that is defined by the coastal character, with the principal views being drawn out to sea or along the coast. While the citation makes reference to the immediate hinterland and its influence on coastal character, there are no references to the Sweeping Moorland LCT where the Revised Consented Development will be located. The citation does, however, make reference to the views south to the inland mountains which are described as 'a *notable feature of this stretch of coast*'.

#### *Sensitivity*

9.9.8 Table 9.6 below, lists out the sensitivities to change identified in the 'Assessment of Highland Special Landscape Areas' and describes how the Revised Consented Development may affect these sensitivities.

**Table 9.6 – Farr Bay, Strathy and Port Skerra SLA Sensitivity to change**

<b>Sensitivity to change (as described within 'Assessment of Highland Special Landscape Areas')</b>	<b>Susceptibility in relation to Revised Consented Development</b>
<i>"Development on or near the exposed cliff top landscape could interrupt the linear</i>	The Revised Consented Development will not be located on or near the exposed cliff



Sensitivity to change (as described within 'Assessment of Highland Special Landscape Areas')	Susceptibility in relation to Revised Consented Development
<i>nature and open views or compromise the intricate nature of the coast.</i>	top landscape and will, therefore, have no effect in respect of this sensitivity.
<i>Infrastructure within and around existing settlements (e.g. street lighting, kerbs, signs, pavements) could individually erode their inherently rural character and collectively have a widespread impact on the area.</i>	The Revised Consented Development will not be located within or around existing settlements associated with the SLA and will, therefore, have no effect in respect of this sensitivity.
<i>Visitor facilities, other than very low-key elements, within sheltered bays could erode the existing tranquillity and sense of remoteness.</i>	The Revised Consented Development is not a visitor facility and, therefore, will have no effect in respect of this sensitivity.
<i>Tall vertical structures or large-scale buildings could be visible in views along the coast and could be inappropriate in scale in relation to the domestic scale of existing buildings and settlements.</i>	The Revised Consented Development will introduce tall vertical structures and so will have an effect on this sensitivity, albeit located in the hinterland to the south-east of the SLA and not along the coast.
<i>Marine developments could affect existing views from the coastal cliffs to an uninterrupted expanse of sea below."</i>	The Revised Consented Development is not a marine development and will, therefore, have no effect in respect of this sensitivity.

- 9.9.9 The table above demonstrates that the Revised Consented Development has potential to affect one of the five identified sensitivities to change, which relates to views featuring tall vertical structures, although they will be located in the hinterland to the south-east and not along the more sensitive coast as the citation describes.
- 9.9.10 The value of the Farr Bay, Strathy and Port Skerra SLA is medium-high. The SLA is a scenic designation used by THC to denote the local value of a landscape. The 'high' rating is preserved for national scenic designations such as NSAs. While the distinctive character of the coast presents an important example of this type of landscape, other SLAs of similar character occur along the north coast.
- 9.9.11 The susceptibility of the SLA to the Revised Consented Development will be medium, largely owing to the minimum separation of approximately 9 km to the south-east. This rating is moderated by the extent to which the landscape has been modified by land use practices and the existing influence of wind farm developments such as Strathy North at a minimum of approximately 5 km to the south and Bettyhill at a minimum of approximately 2.5 km to the south of the SLA.
- 9.9.12 The combination of the value of the SLA and its susceptibility to the Revised Consented Development leads to an overall **medium-high** sensitivity.

- 9.9.13 Table 9.7 below sets out the special qualities of the SLA, using them as the basis to assess the magnitude of change as a result of the Revised Consented Development.

**Table 9.7 – Farr Bay, Strathy and Port Skerra SLA Special Qualities**

Farr Bay, Strathy and Port Skerra SLA special qualities (as described within 'Assessment of Highland Special Landscape Areas')	Magnitude of change / Significance of the effect
<b>Dramatically Intricate Coastline and Forceful Sea</b>	
<p><i>"This is a distinctive stretch of rocky coastline which is typically viewed from the cliff tops and enclosed sandy beaches or from the sea by passing vessels. It is deeply eroded by the sea to form a complex assemblage of headlands, cliffs, promontories, stacks, arches, caves and ravines which combine to form unique features along the coastal edge.</i></p> <p><i>This coast can be an awe-inspiring, particularly during extreme weather or heavy oceanic swells. Access to the cliffs and coast line is readily available and allows opportunities to experience the sea's force and scale at close proximity.</i></p> <p><i>By contrast the sandy bays which alternate with the harsher cliffs and headlands provide a more focussed and tranquil setting due to their low lying location and the shelter afforded by flanking cliffs.</i></p> <p><i>The lighthouse at Strathy is a popular attraction to visitors and is approached via the minor road which serves the string of crofts and houses along the eastern side of the promontory.</i></p> <p><i>Traditional netting stations now largely abandoned elsewhere in Highland are still notable around Strathy."</i></p>	<p>The Revised Consented Development will have no direct effect on the special qualities of the dramatically intricate coastline and forceful sea, owing to its location outwith the SLA, at a minimum of approximately 9 km to the south-east. The Revised Consented Development will have no direct effect on the coastline of rocky headlands and sandy bays, or on access to these features, nor will it have direct effects on the lighthouse or netting station.</p> <p>While there is the potential that the Revised Consented Development could have indirect effects on some of these special qualities, owing to its presence within the wider hinterland setting, these effects will be limited by the following factors. Firstly, its notable separation distance from the SLA of a minimum of approximately 9 km; secondly, the limited extents and levels of visibility as shown on the ZTV in <b>Figure 9.12</b>; thirdly, the relatively weak association between the SLA and the hinterland, where the Revised Consented Development will be located; and fourthly, the existing influence from operational Strathy North and Bettyhill wind farms, a minimum distance of approximately 5 km and 2.5 km respectively to the south.</p> <p>Taking these factors into account, the magnitude of change will be <b>low</b> and the effect will be <b>not significant</b>, despite the medium-high sensitivity.</p>
<b>Moorland and Crofting Mosaic</b>	
<p><i>"Rolling landforms trending towards the coast and opening out over bays provide a distinctive contrast of sequential views and experience of the landscape - enclosed or exposed, framed or open, intimate or expansive.</i></p>	<p>The Revised Consented Development will be located in the hinterland at a minimum distance of approximately 9 km south-east, such that it will have no direct effect on the moorland and crofting mosaic. Indirect effects on the views of the coastal landscape will be moderated by the</p>

Farr Bay, Strathy and Port Skerra SLA special qualities (as described within 'Assessment of Highland Special Landscape Areas')	Magnitude of change / Significance of the effect
<i>There is a rich tapestry of moorland and crofting settlements with the pattern of buildings and various land cover creating a diverse mix of colour, texture, and form."</i>	<p>notable separation distance, the limited extents and levels of visibility across the SLA, as shown on the ZTV in <b>Figure 9.12</b>, the stronger association of the SLA with coast, rather than the hinterland where the Revised Consented Development will be located, and the existing influence of operational Strathy North and Bettyhill wind farms a minimum of approximately 5 km and 2.5 km respectively to the south.</p> <p>Taking these factors into account, the magnitude of change will be <b>low</b> and the effect will be <b>not significant</b>, despite the medium-high sensitivity.</p>
Big Skies and Extensive Views	
<p>There is a distinct perception and experience of immense space and dynamism, strongly influenced by the combination of big skies, and the distinctive coastal light, and the constantly changing influence of the weather. Fine conditions allow impressive and extensive views to Orkney and along the coast to Cape Wrath and Dunnet Head while in contrast poor weather restricts views and highlights the sense of remoteness of the landscape. The buildings and structures at Dounreay form prominent features in views from Strathy Point.</p>	<p>The Revised Consented Development will have no effect on the special qualities associated with the big skies, distinctive coastal light or constantly changing influence of the weather. In terms of extensive views, the effect of the Revised Consented Development will be limited by its location within the hinterland and not on the more sensitive coastal edge, and the minimum separation distance of approximately 9 km which will ensure the proposed turbines appear as relatively distant structures. Furthermore, the Revised Consented Development will be seen in the context of a number of existing developments, including operational Strathy North and Bettyhill wind farms, which will moderate the overall effect.</p> <p>Taking these factors into account, the magnitude of change will be <b>medium-low</b> and the effect will be <b>not significant</b>, despite the medium-high sensitivity.</p>
Historical Dimension	
<p>The remains of Borge Castle situated on a natural promontory with a defensive bank built across the neck and with some ramparts and some masonry from the keep walls still visible, is one of the few surviving medieval (c.16th-17th century) defended promontory forts in this part of the north coast.</p>	<p>The Revised Consented Development will have no effect on Borge Castle or its setting. The ZTV in <b>Figure 9.12</b> shows that the Revised Consented Development will not be visible from this location or the surrounding area from which it may be viewed in its coastal setting.</p> <p>The Revised Consented Development will have <b>no effect</b> on this special quality.</p>

*Significance of effect*

- 9.9.14 The effect of the Revised Consented Development on the special qualities of the SLA will be **not significant** during both the construction and operational phases. The location of the Revised Consented Development a minimum of approximately 9 km means that it will have no direct effects on the SLA, only indirect effects in respect of its visibility as seen within the wider landscape setting. These indirect effects will be moderated by the relatively weak association between the SLA and the distant Sweeping Moorlands of the hinterland where the Revised Consented Development will be located. The ZTV in **Figure 9.12** shows the limited extents and levels to which the Revised Consented Development will be visible across the SLA, with large parts of the SLA showing no visibility. Furthermore, there are closer range developments that will further moderate the indirect effect of the Revised Consented Development, including Strathy North and Bettyhill wind farms at a minimum of approximately 5 km and 2.5 km respectively, to the south.

*In-Combination Effect with Limekiln Extension*

- 9.9.15 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Special Qualities of the Farr Bay, Strathy and Port Skerra SLA will remain **medium-low** or **low** and the effect will remain **not significant** during both the construction and operational phases. The location of the SLA to the north-west means that the five Limekiln Extension turbines will be slightly further compared to the Revised Consented Development, albeit appearing collectively as one cohesive development and with containment by the ridgeline ensuring there will be no sense of encroachment. While they will give rise to an increase in the effect on this view, especially as they form a slight increase to the horizontal extents on the left side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.
- 9.9.16 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of the SLA for the following reasons; the separation distance of approximately 9 km will ensure that the turbines will be seen as medium scale elements; the location behind a low-lying a ridgeline will moderate their prominence in the view; they will form a well-contained group occupying a small proportion of a wider panorama; they will be seen in a wider landscape in which wind farm development already has a presence and an influence, most notably with Baillie Hill Wind Farm and Forss along the coast; and lastly, they will be seen in the hinterland with no direct effect on the key views along the coastline and out across the North Atlantic.

Dunnet Head SLA*Assessment of Highland Special Landscape Areas*

- 9.9.17 THC's 'Assessment of Highland Special Landscape Areas' provides a citation for Dunnet Head SLA, which lists out its key landscape and visual characteristics, as well as its special qualities. This provides a useful basis on which to establish the

sensitivity of the SLA and to determine the magnitude of change the Revised Consented Development may have on the SLA.

*"Key Landscape and Visual Characteristics*

- *A peninsula offering a spectacular panorama both seaward and inland to distant mountain peak.*
- *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."*

9.9.18 The SLA covers the most northerly point of Scotland, where Dunnet Head projects out from the Caithness coast into the Pentland Firth. This SLA is characterised by its prominent headland, its dramatic vertical cliffs and its hinterland of moorland and crofting areas. With the sea wrapping around this exposed headland, there is a strong maritime influence. Key views extend out over the Pentland Firth to Orkney, as well as westwards along the coast to Strathy Point and Cape Wrath, and eastwards to Duncansby Head. The focus of views inland is drawn southwards to the distant, isolated mountains including Morvern, Maiden Pap and Scaraben.

*Sensitivity*

9.9.19 Table 9.8 below, lists out the sensitivities to change identified in the 'Assessment of Highland Special Landscape Areas' and describes how the Revised Consented Development may affect these sensitivities.

**Table 9.8 – Dunnet Head SLA Sensitivity to change**

Sensitivity to change (as described within 'Assessment of Highland Special Landscape Areas')	Susceptibility in relation to Revised Consented Development
<i>"Development could impinge on either the views towards the headland from the east and west or the expansive panorama seen from Dunnet Head itself."</i>	The Revised Consented Development will not be located on or near the exposed cliff top landscape and will, therefore, have no effect in respect of this sensitivity. It will, however, be visible in the expansive panorama from Dunnet Head.
<i>"Development could disrupt the gentle curve of Dunnet Bay and disturb its qualities of seclusion."</i>	The Revised Consented Development will be located more than 22 km from Dunnet Bay and, therefore, will not disrupt the gentle curve of the bay nor disturb its qualities of seclusion and generally have no effect in respect of this sensitivity to change.
<i>"Large-scale structures on or near to the headland could compromise its perceived large scale and the seeming extensive character of the interior moorland in addition to the peninsula's distinctive landmark qualities."</i>	The Revised Consented Development will be located approximately 25 km from the headland and, therefore, will not compromise its perceived large scale or distinctive landmark qualities. It will also be sufficiently well recessed in the interior moorland to have only a very limited effect on the extensive character of the interior moorland.

- 9.9.20 The table above demonstrates that the Revised Consented Development has potential to affect one of the three identified sensitivities to change, which relates to its presence and influence in panoramic views from Dunnet Head, as well as other parts of the SLA.
- 9.9.21 The value of the Dunnet Head SLA is medium-high. The SLA is a scenic designation used by THC to denote the local value of a landscape. The 'high' rating is preserved for national scenic designations such as NSAs. While the distinctive character of the coast presents an important example of this type of landscape, other SLAs of similar character occur along the north coast.
- 9.9.22 The susceptibility of the SLA to the Revised Consented Development will be medium-low, largely owing to the minimum separation of approximately 22 km to the south-west. This rating is moderated by the limited association between Dunnet Head and the hinterland of Sweeping Moorland where the Revised Consented Development will be located.
- 9.9.23 The combination of the value of the SLA and its susceptibility to the Revised Consented Development leads to an overall **medium** sensitivity.
- 9.9.24 Table 9.9 below sets out the special qualities of the SLA, using them as the basis to assess the magnitude of change as a result of the Revised Consented Development.

**Table 9.9 – Dunnet Head SLA Special Qualities**



Dunnet Head SLA special qualities (as described within 'Assessment of Highland Special Landscape Areas')	Magnitude of change / Significance of the effect
<b>Panoramic Views from Prominent Headland and Striking Cliffs</b>	
<p><i>"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."</i></p> <p><i>"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."</i></p> <p><i>"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."</i></p> <p><i>"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."</i></p>	<p>The Revised Consented Development will have no direct effect on the special qualities of the SLA's coastal landscape, owing to its location outwith the SLA, at a minimum of approximately 22 km to the south-west. The Revised Consented Development will have no direct effect on the coastal landscape or views of it.</p> <p>While there is the potential that the Revised Consented Development could have indirect effects on some of the SLA's special qualities, owing to its presence within the wider hinterland setting, these effects will be limited by the following factors. Firstly, its substantial separation distance from the SLA of a minimum of approximately 22 km; secondly, the limited extents of visibility as shown on the ZTV in <b>Figure 9.12</b>; thirdly, the relatively weak association between the SLA and the hinterland, where the Revised Consented Development will be located. While reference is made to the Lone Mountains to the south, there is no reference to the Sweeping Moorlands to the south-west, where the Revised Consented Development will be located.</p> <p>In terms of operational wind farms, Baillie Hill and Forss will be seen to the fore of the Revised Consented Development, at a minimum of approximately 16 km and 15 km respectively, and their existing influence will moderate the magnitude of change introduced.</p> <p>Taking these factors into account, the magnitude of change will be <b>low</b> and the effect will be <b>not significant</b>, despite the medium-high sensitivity and the extent of high level visibility along the western coastline.</p>
<b>Isolated Moorland and Lochans</b>	
<p><i>"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."</i></p> <p><i>"The moorland seems extensive, even though it is actually quite small in extent, as its edges are typically not seen from its interior,</i></p>	<p>The Revised Consented Development will have no direct or indirect effects on the special qualities of the isolated moorland and lochans, owing to its location outwith the SLA and at a minimum of approximately 22 km. While the Revised Consented Development will feature as part of the wider setting to the isolated moorland and lochans, its influence will be especially limited by the separation distance, which will mean that the proposed turbines will appear as small and distant structures. Furthermore, they will be seen in the</p>

Dunnet Head SLA special qualities (as described within 'Assessment of Highland Special Landscape Areas')	Magnitude of change / Significance of the effect
<i>and there is a lack of comparable size indicators."</i>	context of existing closer range operational wind farms.
<b>Contrasting Bay and Cliff Landscapes</b>	
<i>"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."</i>	The Revised Consented Development will have no direct or indirect effects on the special qualities of the contrasting bay and cliffs landscape owing to its location outwith the SLA and at a minimum of approximately 22 km. While the Revised Consented Development will feature as part of the wider setting to the contrasting bay and cliffs landscape, its influence will be especially limited by the separation distance, which will mean that the proposed turbines will appear as small and distant structures. Furthermore, they will be seen in the context of existing closer range operational wind farms.

#### Significance of effect

- 9.9.25 The effect of the Revised Consented Development on the special qualities of the SLA will be **not significant** during the construction and operational phases. The location of the Revised Consented Development a minimum of approximately 22 km means that it will have no direct effects on the SLA, only indirect effects in respect of its visibility within the wider landscape setting. These indirect effects will be moderated by the relatively weak association between the SLA and the distant Sweeping Moorlands of the hinterland where the Revised Consented Development will be located. The ZTV in **Figure 9.12** shows the limited extents to which the Revised Consented Development will be visible across the SLA, albeit with visibility occurring along the western coast. Furthermore, there are closer range developments that will further moderate the indirect effects, including Baillie Hill and Forss, seen to the fore of the Revised Consented Development.

#### In-Combination Effect with Limekiln Extension

- 9.9.26 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on the Special Qualities of Dunnet Head SLA will remain **low** and the effect will remain **not significant** during both the construction and operational phases. The additional effect of the Limekiln Extension on this SLA will be very limited owing to there being only five additional turbines, seen at a separation distance of over 22 km and clearly associated with the Revised Consented Development.
- 9.9.27 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of the SLA for the following reasons; the separation distance of approximately 22 km will ensure that the turbines will be seen as small scale elements; they will occupy a small proportion of a much wider view; the key

attraction in that wider view will continue to be along the coastal edge and out across the Pentland Firth and not inland to the Combined Development; and they will be seen in a wider landscape in which wind farm development already has a presence and an influence, most notably with Baillie Hill Wind Farm and Forss along the coast.

## 9.10 Assessment of Effects on Representative Viewpoints

### Introduction

- 9.10.1 Effects on views are the changes to views that result from the introduction of the Revised Consented Development. The assessment of effects on views includes effects on the viewpoints which represent visibility of the Revised Consented Development from around the 40 km radius Study Area and effects on principal visual receptors such as settlements and routes. The assessment of effects on views has been carried out through comprehensive site survey along with the use of wirelines, photomontages and the ZTV, following the full methodology described in **Appendix 9.A**.
- 9.10.2 The viewpoint locations are shown in conjunction with the blade tip ZTV in **Figures 9.8a** (A3 size) and **9.8b** (A0 size). The hub height ZTVs are in **Figures 9.9a** and **9.9b**.
- 9.10.3 The viewpoints are illustrated in **Figures 9.37 to 9.54** where baseline photographs of each view are accompanied by computer-generated cumulative wirelines. These have been prepared using cylindrical projection to show the landscape and visual context and show fields of view of 90, 180, 270 or 360 degrees as required. In addition, baseline wirelines and computer-generated photomontages have also been prepared using planar projection with fields of view of 53.5 degrees. The limitations of planar projection images do not allow for substantially wider views to be prepared to accurately represent the Revised Consented Development. Where the Revised Consented Development does not fit in one 53.5 degree view then more than one 53.5 degree panorama has been provided to illustrate its full extent.
- 9.10.4 In the wirelines, the Revised Consented Development wind turbines are shown in red, operational and under-construction wind farms are shown in blue, consented wind farms in purple and application stage wind turbines are shown in orange. Scoping stage wind turbines are not shown in the wirelines.
- 9.10.5 Relevant components of the Revised Consented Development infrastructure have been montaged into visualisations for those views where infrastructure makes a notable contribution to the effects of the Revised Consented Development. Infrastructure has been modelled in the photomontages for Viewpoint 15: Beinn Ratha (**Figure 9.51**) and Viewpoint 14: Borlum Hill (**Figure 9.50**).
- 9.10.6 **Appendix 9.C** identifies the viewpoints and principal visual receptors that have the potential to undergo significant effects and, therefore, require further assessment. The effect on each of these viewpoints and principal visual receptors is assessed below. The other viewpoints and principal visual receptors were found through the initial assessment in **Appendix 9.C** to not have the potential to undergo a significant effect, although in many cases there is likely to be some

visibility of the Revised Consented Development. These viewpoints and principal visual receptors have, therefore, not been assessed in any further detail.

#### Effects on Representative Viewpoints

##### Viewpoint 1 – A836 Drum Hollistan Layby

- 9.10.7 Grid reference:293267/964523 Distance from nearest turbine: 4.90km
- 9.10.8 **Viewpoint selection:** This viewpoint is situated at one of the few laybys on the A836 - the route that runs along the north coast of Scotland from Tongue to John O' Groats. The viewpoint has been selected to represent the view of road users and will be apparent to those travelling eastbound.
- 9.10.9 **Baseline:** The view will be experienced almost exclusively by road users. There are no provisions for pedestrians along this rural section of the A836 and it is unlikely that pedestrians would use it. The route is used by a range of road-users including tourists, locals and commercial drivers, and it is perhaps the tourists who will have the highest expectations in terms of experiencing scenic views along the route. This section of the A836 forms part of National Cycle Route 1 connecting Land's End to John O' Groats and is used frequently by cyclists, the majority of whom will be travelling eastbound. It also forms part of the North Coast 500, which is a popular coastal route for motorists and cyclists alike.
- 9.10.10 The view will be experienced by east-bound and not west-bound road-users who, by this point, will have already passed the Revised Consented Development and be continuing to travel in the opposite direction. The layby comes just after the road rounds a rise in the landform identified on the map as Drum Hollistan and from where views open out south-eastwards across the Sweeping Moorland LCT and eastwards into the Mixed Agriculture and Settlement LCT. From this point, the transition between these landscapes becomes evident and the Revised Consented Development site becomes the focus of this wider panorama.
- 9.10.11 The immediate landscape is characterised by a very typical image of the Sweeping Moorland LCT with its dark-coloured ground cover of heather moorland blanketing the open and undulating sweep of low hills. Beinn Ratha is made distinct by its steeper hill slopes in contrast to the low and gently undulating moorlands which surround it. Fence posts and transmission poles stand out as distinct vertical elements amidst an otherwise featureless expanse. In the centre of the view, a swathe of dark green coniferous woodland covers the low ridge and this marks the horizon.
- 9.10.12 To the left of centre, a very different character can be seen where the Mixed Agriculture and Settlement LCT occurs. The landscape is a colourful green as a result of improvements to the fertility of the fields for agricultural practices. The land pattern appears more varied with divisions and intermittent tree cover visible. There is also small-scale development visible, seen as groups of houses set into the landscape, and large scale developments, seen as Dounreay Nuclear Power Plant; a complex of large light coloured buildings situated in a prominent position on the coast, and Forss Wind Farm, seen as a group of white turbines to the left of Dounreay Nuclear Power Plant and appearing less imposing on the view. Baillie Hill Wind Farm also forms part of the baseline view, situated to the left of centre on the low hill behind the village of Reay, it will be seen as 20

turbines, which at a height of 110 m and at a distance of 8.7 km from the viewpoint will appear as medium to small scale elements set against the skyline.

- 9.10.13 **Sensitivity:** The sensitivity of this view is **medium**. It will be experienced by road users, many of whom will be travelling at speed, but some of whom will stop to take a break and in so doing experience the view for a longer duration. There are few other laybys along the road and this layby appears to be well used with an interpretation board provided. The direction of the view is out towards the Limekiln Coniferous Woodland Plantation although there are no strong focal features to emphasis this area as the focus. Road-users will be aware of the presence of Baillie Hill Wind Farm and this will reduce their susceptibility to the introduction of the Revised Consented Development into the view.
- 9.10.14 While the view is defined by an area of largely undeveloped Sweeping Moorland, the structures of the electricity transmission line detract from the natural qualities of the landscape. The neighbouring areas of Coniferous Woodland Plantation LCT and Mixed Agriculture and Settlement LCT mark human modification of the wider landscape for farming and forestry practices. These features have altered the landscape from its intrinsic state, and this reduces the overall sensitivity of the view. While the view is expansive and presents an attractive outlook across the simple and featureless moorland, it lacks any special scenic qualities and this is reflected in the absence of landscape designations covering either the viewpoint or the extent of the view, and which would otherwise denote a special landscape value.
- 9.10.15 **Magnitude of change:** The wireline and photomontage in **Figure 9.37** shows that all 21 of the turbines will be visible from this viewpoint; 12 seen at, or close to, their full height, while the bases of the remaining nine turbines will be partially screened by the intervening landform. The turbines will be seen as medium to large scale elements, their vertical form accentuated by the strong horizontal plane of the Sweeping Moorland landscape.
- 9.10.16 The magnitude of change that the Revised Consented Development will have on the view from Drum Hollistan will be **medium-high**. It will be expected from the 4.90 km range of this viewpoint that the magnitude of change will be medium. There are, however, two key factors which increase the magnitude of change to medium-high. Firstly, the alignment of the layby towards the Revised Consented Development is such that views for road-users stopping at the layby or passing along this stretch of the A836 are directed towards the Revised Consented Development and this increases the prominence of the Revised Consented Development in the view. Secondly, the scale of the turbines in relation to the surrounding landform has an effect on their perceived scale. The surrounding hills are low, and this makes the turbines look comparatively bigger. This effect is further accentuated by the presence of low hummocky knolls visible to the north of the Revised Consented Development, which form a further basis for scale comparisons to make the turbines appear comparatively larger than they might otherwise do.
- 9.10.17 The existing presence of Baillie Hill Wind Farm and, to a lesser extent, Forss Wind Farm, means that the Revised Consented Development will not appear as a new or unfamiliar feature in the view. The Revised Consented Development will be seen in the same sector of the view as these existing developments,



ensuring a relatively contained extent and keeping views, north to the Atlantic Ocean and south to the Sweeping Moorlands, unaffected. The Revised Consented Development will, nonetheless, be seen to extend the influence of wind farm development into the Coniferous Woodland Plantation LCT, which has previously been undeveloped, and this will increase the magnitude of change.

- 9.10.18 The magnitude of change during the construction phase will be **medium**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.19 **Significance of the effect:** The effect of the development on the view from the Drum Hollistan Layby will be **significant** during the operational phase. This relates chiefly to the perceived scale of the turbines which will appear large in comparison to the surrounding landform, as well as the alignment of the layby along this section of the A836, which is towards the development and which will increase its prominence in views.
- 9.10.20 The effect of the Revised Consented Development on the view from the Drum Hollistan layby will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

#### *In-Combination Assessment with Limekiln Extension*

- 9.10.21 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 1: Drum Hollistan Layby will remain **medium** during the construction phase and **medium-high** during the operational phase, and the effect will remain **not significant** during the construction phase and **significant** during the operational phase. This finding reflects the location of the five Limekiln Extension turbines on the far side of the Revised Consented Development. While they will give rise to an increase in the effect of this view, this will be moderated by the small number of additional turbines and their greater separation from the viewpoint, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.10.22 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The combined Development will redefine the character of this view during the operational phase owing principally to its close proximity and the alignment of the view from this section of the A836 and the layby towards it.

#### Viewpoint 2 – Reay Footpath

- 9.10.23 Grid reference: 196149/964385 Distance from nearest turbine: 3.16 km
- 9.10.24 **Viewpoint selection:** Reay Footpath has been selected to represent the view which could potentially be experienced by residents of Reay from properties along the southern boundary of the settlement or from streets which afford open views towards the south. Views from the southern edge of Reay will be partially obscured by close range landform and so the viewpoint was taken approximately



50 m down the track which extends from the settlement boundary of Reay. This was in order to present a less obstructed view. Two properties sit at the northern end of the track, although neither face towards the development.

- 9.10.25 **Baseline:** The track forms a strong linear feature which initially draws the viewer's eye in the direction of the band of coniferous woodland which runs across the centre of the view. Without any focal feature in this direction, the focus of the view shifts to Beinn Ratha, the hill on the right of the view which acts as the main attraction on account of its distinctive form and higher elevation in comparison to the low sweep of the surrounding landscape. With the exception of the forestry on the lower slopes, Beinn Ratha is one feature in this landscape which appears relatively un-modified by human intervention. The track, the wall and fencing, the electricity transmission line, the forestry and the improved pasture are all evidence of human influence in this landscape. In particular, the electricity transmission line introduces a feature which contrasts with the otherwise rural character of the landscape, appearing man-made, large in scale, and with the vertical stature of the towers contrasting with the largely horizontal emphasis of the landscape.
- 9.10.26 The view is typical of the Mixed Agriculture and Settlement LCT with small fields of rough grazing for sheep bounded by fences or stone walls. The Coniferous Woodland Plantation at Limekiln has encroached into this agricultural area and is visible as a broad band stretching across the middle ground of the view. Apart from Beinn Ratha, there are few distinctive features visible from this viewpoint. The view does, however, have local value in terms of the visual amenity of residents and the open outlook this view offers from their properties and gardens.
- 9.10.27 **Sensitivity:** The sensitivity of this view is **high** on account of the importance of the visual amenity of residents in Reay. Their views have the potential to be longer in duration especially in instances where the Revised Consented Development aligns with views from the internal living spaces of residents. The baseline views are not of an undeveloped landscape; electricity transmission towers and lines are already visible in views from the southern boundary edge. These tall vertical structures establish electricity infrastructure as an existing feature, and this reduces the sensitivity of the view.
- 9.10.28 There are no other wind farms visible from this viewpoint. Electricity transmission towers are visible in this view and these detract from what will otherwise be a rural landscape with only small-scale human artefacts, such as walls and fencing, evident. The absence of wind turbines in the baseline view increases the susceptibility of residents to the proposed introduction of these structures as they will appear as new elements at contrast with the existing character.
- 9.10.29 The view itself is unexceptional, comprising predominantly low-lying farmland and woodland plantations, typical of this area. The view is not extensive and in its contained extent, Beinn Ratha forms the most notable feature. This landscape is not designated at either the national or regional level. This denotes a lack of scenic value which moderates the overall value of the viewpoint.

- 9.10.30 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on this view will be **high**. While the wireline in **Figure 9.38** shows that all 21 turbines will be theoretically visible, the photomontage shows that woodland cover will screen the majority of the turbines such that only 10 will be actually visible, with one seen as a blade and one as a tip.
- 9.10.31 All the turbines are concealed to some degree by the low ridge of forestry which runs through the north of the site. As a result, none of the turbines will be seen at their full height and this not only reduces their prominence in the view, but also separates the Revised Consented Development from the immediate landscape. Their position within a trough with the land rising on either side, acts to contain the turbines. Furthermore, this diminishes their scale by forming a scale comparison in which the hills appear larger from this perspective. The presence of the electricity transmission towers has a similar effect as they are closer range to the viewpoint and, therefore, appear comparatively larger thus reducing the perceived scale of the turbines. The forestry will conceal parts of the turbines and reduce the extent to which the towers are visible. The turbines will form a relatively contained group with fairly well spaced turbines.
- 9.10.32 Despite these factors moderating the prominence of the turbines, from this range of 3.16 km the turbines will still be seen as large-scale moving structures which will appear new and unfamiliar in this view. The perspective of the track and wall will accentuate the Revised Consented Development as the new focus of the view by drawing the viewer's attention in this direction. The blades will be seen to move above the cover of the forestry and this movement will contrast with the relative stillness of the view.
- 9.10.33 The magnitude of change during the construction phase will be **medium-high**. This lower rating compared to the rating for the operational phase, reflects the extent to which the cover of the coniferous plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The close proximity to the viewpoint does, however, mean that despite the short duration, the effect of the cranes and turbines being constructed will have a medium-high magnitude of change on the view.
- 9.10.34 **Significance of the effect:** The effect of the Revised Consented Development on this view will be **significant** during the operational phase. This significant effect does not relate to any special sensitivity of the view itself, but instead the sensitivity of the viewers who will be experiencing it. These will be mostly local residents in their homes, gardens or on local public roads and footpaths. The significant effect also relates to the close proximity at which the turbines will be seen which means that they will appear as large-scale elements, although this scale will be somewhat diminished by comparisons with the electricity transmission towers, the surrounding hills and the forestry.
- 9.10.35 The effect of the Revised Consented Development on the view from Reay footpath will be **significant** during the construction phase owing to the close proximity of the cranes and turbines despite them only being visible towards the end of the construction phase.

*In-Combination Assessment with Limekiln Extension*

- 9.10.36 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 2: Reay Footpath will remain unchanged from that presented above in respect of the Revised Consented Development. The wireline in **Figure 9.38b** shows that theoretical visibility will comprise only one blade of the Limekiln Extension, while the accompanying baseline photograph shows that this blade will be screened by intervening tree cover. The effect of the Combined Development will, therefore, be effectively the same as that assessed for the Revised Consented Development, with a **medium-high** magnitude of change during the construction phase, **high** magnitude of change during the operational phase and **significant** effects during both phases.

Viewpoint 3 – A836, Reay Church

- 9.10.37 Grid reference:296735/964816 Distance from nearest turbine: 3.34km
- 9.10.38 **Viewpoint selection:** This viewpoint is located close to the main entrance to Reay Parish Church which is situated in an elevated position in the centre of the village. With an open aspect to the south, clear views towards the Revised Consented Development will be gained. It is representative of the view which will be experienced by church-goers, as well as road-users travelling along the A836.
- 9.10.39 **Baseline:** Reay Parish Church presents a prominent landmark feature in the context of the settlement and local landscape. It is situated on a natural rise in the village landscape, exposed in views from the west by the openness of the adjacent cemetery and golf course, and prominent in views from the east where the land falls away before rising again towards Isauld. The bright white render and small square tower make it a distinctive feature of the village.
- 9.10.40 The openness of the land to the south means that views are drawn out in this direction across the open fields of improved grassland and hummocky low hills to the Coniferous Woodland Plantation of Limekiln. The view lacks the simplicity of the open moorlands typical of the wider landscape, and this is partly due to the intervention of human features such as the walls and fences around the fields, the individual properties and their access tracks, the street-lights and, most notably, the electricity transmission line which spans much of the middle range of the view. The apparent complexity is also partly due to the contrast between the hummocky hills, which appear larger than they actually are, on account of their rugged form and appearance, and the broad extent of the forestry plantation on the low and gently undulating ridgelines to the rear. On account of its comparative scale, Beinn Ratha forms the most notable landscape feature, seen to the right of the view.
- 9.10.41 Baillie Hill Wind Farm is visible from this viewpoint, seen at a range of 5.26km from the viewpoint and set behind the downslope to the left of the Hill of Shebster. The wireline shows 19 turbines will be theoretically visible, although all will be partially concealed by the intervening landform such that most turbines will be seen as either blades or blades and nacelles. A comparison with the photo shows that actual visibility will be reduced by the houses at Isauld which sit in the foreground of the turbines and block visibility. The five turbines higher up

the slope will be visible albeit set behind the electricity transmission line which will partly obscure visibility and also present a scale comparison which will diminish the perceived scale of the turbines.

- 9.10.42 **Sensitivity:** The sensitivity of this view is **medium**. There is no resident population at the church and although a focal feature of the village, church goers will only experience this view for short durations whilst passing in and out of the grounds. Church goers will already be aware of the Baillie Hill Wind Farm visible to the east and this will reduce their susceptibility to the Revised Consented Development as this type of development is already a feature in this view.
- 9.10.43 The view itself is characterised by the nearby Mixed Agriculture and Settlement LCT and Coniferous Woodland Plantation LCT. These landscapes are cultivated and, therefore, lack the more natural landscape characteristics of the wider Sweeping Moorland LCTs. The view is of local, and not regional or national, value and this is reflected by the absence of any regional or national scenic designations. The sensitivity of the view would be higher if there was less evidence of human intervention in this landscape. As it is, there are extensive woodland plantations, an electricity transmission line, an operational wind farm, roads and settlements all of which reduce the sensitivity of the viewpoint.
- 9.10.44 **Magnitude of change:** The magnitude of change on this view as a result of the Revised Consented Development will be **high**. 20 of the 21 turbines will be visible, set a minimum of 3.34 km to the south of the viewpoint. The majority of the turbines will be seen to be located in the Coniferous Woodland Plantation which is set between Borlum Hill on the left and the series of small and exposed knolls to the right. Five of the turbines will be set behind Borlum Hill which obscures their towers, leaving visibility of only three blades and two tips. The remaining turbines are almost all seen at their full height, albeit with the bases of the towers increasingly screened by intervening landform and forestry, with distance from the viewpoint.
- 9.10.45 From this close range of 2.93 km to the nearest turbine, the turbines will be seen as large-scale moving structures. Despite the limited visibility of Baillie Hill Wind Farm, the turbines will be discernible and will prevent Limekiln from appearing as a new or unfamiliar feature in this view. Although the proposed turbines and the electricity transmission towers will both appear as large-scale constructions, the movement of the blades, their solid form and their light colour will make them appear distinct. While the proposed turbines will appear taller than the transmission towers, the closer proximity of the towers will mean they appear comparatively taller than the turbines and this will reduce the perceived scale of the turbines. Conversely, the scale comparison between the turbines and the coniferous trees in which they are located, will make the turbines appear very large in scale. In summary, the scale of the turbines from this viewpoint will appear large although somewhat diminished by the comparison with the transmission towers.
- 9.10.46 The location of the turbines in a comparatively low-lying section of the view and 'book-ended' by the knolls on either side, which owing to their closer range appear to be higher relative to the turbines than they actually are, acts to reduce the prominence of the turbines in the view. With the exception of the turbines

set behind Borlum Hill, they appear as a well contained group and clearly associated with the Coniferous Woodland Plantation LCT.

- 9.10.47 With the longest extent of the development being from north to south, the view from Reay Church has the effect that both close range and more distant range turbines are seen together, and this gives rise to a perceived disparity in their height. There are also instances of overlapping turbines although most of them are fairly evenly spaced. These visual complexities compromise what would otherwise be a balanced and unified composition and in so doing increases the magnitude of change, as it becomes a less compatible feature.
- 9.10.48 The magnitude of change during the construction phase will be **medium-high**. This lower rating compared to the rating for the operational phase, reflects the extent to which the cover of the coniferous plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The clear and close visibility of the cranes and turbines means that despite the short duration, the effect of the cranes and turbines being constructed will have a medium-high magnitude of change on the view.
- 9.10.49 **Significance of the effect:** The effect of the Revised Consented Development on the view from Reay Church will be **significant** during the operational phase. The close proximity of the turbines to the viewpoint means that they will appear as large-scale elements which will create a clear focus, and in so doing, redefine the character of this view.
- 9.10.50 The effect of the Revised Consented Development on the view from Reay Church will be **significant** during the construction phase, owing to the close proximity of the cranes and turbines despite them only being visible towards the end of the construction phase.

*In-Combination Assessment with Limekiln Extension*

- 9.10.51 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 3: Reay Church will remain unchanged from that presented above in respect of the Revised Consented Development. The wireline in **Figure 9.39c** shows that Limekiln Extension will be largely screened by intervening landform such that only one blade and three tips will be visible. The effect of the Combined Development will, therefore, be effectively the same as that for the Revised Consented Development owing to the limited additional effect of the Limekiln Extension, with a **medium-high** magnitude of change during the construction phase, **high** magnitude of change during the operational phase and **significant** effects during both phases.

Viewpoint 4 – Shebster

- 9.10.52 Grid reference: 301776/963941 Distance from nearest turbine: 3.75km
- 9.10.53 **Viewpoint selection:** This viewpoint at Shebster has been selected to represent the visual amenity of residents occupying properties in this small settlement, as well as the visual amenity of road users travelling along the minor

road between the B874 at Glengolly and the A836 at Isuald. The viewpoint is taken close to the bus shelter on the northern side of the road.

- 9.10.54 **Baseline:** Shebster is a small cluster of properties situated principally along the northern edge of the minor road. Shebster lies on the cusp between the landscape to the north, west and east, which is classified as Mixed Agriculture and Settlement, and the landscape to the south, which is classified as Sweeping Moorland and beyond which, the Limekiln Coniferous Woodland Plantation occurs. While the Mixed Agriculture and Settlement landscape is typical of its type in the sense that it is characterised by open fields of improved pasture and intermittent roads, small settlements and farmsteads, the Sweeping Moorland to the south appears marginal to its type with the encroachment of agricultural fields and roads detracting from the less modified character. The presence of the coniferous plantations across the Limekiln hills further detracts from the sense of remoteness or wildness typically associated with the Sweeping Moorland landscape.
- 9.10.55 The majority of the properties face south with views over the immediate fields towards the forestry at East Shebster. Views towards Limekiln Coniferous Woodland Plantation occur at an oblique angle such that they are unlikely to be apparent from within the properties but will be apparent from gardens and from the minor road to west-bound road-users. The woodland plantation marks a dark green and bold edge along the skyline ridge, its cultivated origins evident in the straight boundary edges and single species crop. There is no strong focus in this view.
- 9.10.56 The existing development, visible in the view and around the viewpoint, is all small in scale and typical of a rural location such as this. In the opposite direction to the view, large scale development is visible in the form of Baillie Hill Wind Farm. It is set behind the hill ridge to the north-east of the settlement and although the properties do not face out onto it, it will be readily visible from the road and potentially visible from gardens and rear views from properties.
- 9.10.57 **Sensitivity:** The sensitivity of the residents' views is **high** because of the importance of their visual amenity, whereby views have the potential to be experienced over longer durations. The sensitivity of the road-users' views is **medium** because of the speed at which they will be travelling and, therefore, the transitory nature of the views and the inability to focus on the surrounding landscape with the same degree of attention as static viewers.
- 9.10.58 The surrounding landscape is not covered by any regional or national scenic designations which would otherwise denote a special value. The view presents a typical mix of farmland and forestry and lacks any special landscape features which would otherwise give it more distinction. It is, nonetheless, a landscape of local value and the view out towards the Sweeping Moorland, albeit diminished in character by the farmland and forestry, contributes to the setting of the settlement of Shebster. The view in the opposite direction is defined by the presence of Baillie Hill Wind Farm which establishes wind farm development as a feature of the wider view, and this reduces the susceptibility of residents to the Revised Consented Development.



- 9.10.59 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the view from Shebster will be **medium-high**. The wireline in **Figure 9.40** shows that theoretically 20 of the 21 turbines will be visible from this viewpoint, most of which will be seen set along, or behind, the long and low afforested ridge of the Limekiln Hills. The photomontage in **Figure 9.40** shows that only 17 of the 21 turbines will actually be visible and many more seen to a lesser extent owing to the screening effect of the intervening forestry.
- 9.10.60 At a minimum range of 3.75 km, the turbines will be seen as medium to large scale elements, their vertical scale contrasting markedly with the strong horizontal emphasis of the long ridge and, in so doing, accentuating their prominence. Those proposed turbines seen most fully, will appear taller than the height of the hills on which they sit, and this comparison will increase their perceived scale. The turbines will also be scaled against the trees along the woodland edge, although the closer proximity of the trees means that the comparison will partially diminish the perceived scale of the turbines.
- 9.10.61 The position of the turbines on, or over the ridge, and the clothing of the bases of the towers by the forestry helps to make the turbines appear contained within the forestry and prevent the sense that the Revised Consented Development will be spreading across many different landscape types. The turbines will be relatively evenly spaced, and this will help to present a generally unified appearance, although small clusters and gaps occur, and along with instances of turbines set at different heights, these reduce the overall continuity of the composition.
- 9.10.62 The Revised Consented Development will be seen to add a further wind farm development within a wider view already characterised by Baillie Hill Wind Farm. It's location in the opposite direction to Baillie Hill Wind Farm increases the extent of wind farm development into this opposite sector and this may give the impression of wind farm development surrounding the viewpoint.
- 9.10.63 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational phase, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.64 **Significance of the effect:** The effect of the Revised Consented Development on the views of residents and road-users in Shebster will be **significant** during the operational phase. This relates chiefly to the proximity of the Revised Consented Development to the viewpoint, the sensitivity of the residential viewers and the relatively undeveloped outlook of the view.
- 9.10.65 The effect of the Revised Consented Development on the view from Shebster will be **significant** for residents and **not significant** for road-users during the construction phase, reflecting the higher sensitivity of residents to potential changes in their views.

*In-Combination Effects with Limekiln Extension*

- 9.10.66 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 4: Shebster will remain **medium-low** during the construction phase and **medium-high** during the operational phase, and the effect will remain **not significant** during the construction phase and significant during the operational phase. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer and appear slightly larger in scale, any sense of encroachment will be counteracted by their containment by the landform, as shown in the wireline in **Figure 9. 40d** and their containment by the forestry, as shown in the accompanying baseline photograph. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.10.67 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of this view during the operational phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the most open aspect of the view.

Viewpoint 5 – Sandside Bay Harbour

- 9.10.68 Grid reference: 295785/965993 Distance from nearest turbine: 4.81km
- 9.10.69 **Viewpoint selection:** Sandside Bay Harbour has been selected to represent the view of visitors to this location, as well as residents who live here. The viewpoint is located at the harbour, which is accessed from a short track leading down from the small formal car park at the end of the access road.
- 9.10.70 **Baseline:** The view presents an attractive outlook across Sandside Bay, characterised by its sandy beach, the low enclosure of the dunes and the lapping waves of the North Atlantic. Beinn Ratha and the surrounding low hills and knolls form a background setting, which offers some enclosure to the view and a contrast with the coastal scenery. The Limekiln Hills can be seen as the low ridge in the centre of the photo, clothed in the dark green of the woodland cover and with exposed knolls sitting on either side. development is seen as small clusters of properties set back from the coastal edge and appearing small enough in scale and numbers not to detract from the rural character. The electricity transmission line forms a more incongruous feature, the towers occurring periodically, with their vertical scale exposed where they sit above the open skyline. There is no clear focus in this view, although the beach appears as the most attractive feature.
- 9.10.71 The greatest influence on this viewpoint, although located to the left of the view, is the presence of Dounreay Nuclear Power Plant. Not only does it present a focus in views from Sandside Bay Harbour, but warning signs also make visitors aware of the risk to personal health as a result of radio-active contamination present at Sandside Bay beach. This 'presence' detracts from the enjoyment of what would otherwise be an attractive view. Dounreay Nuclear Power Plant is located less than 2 km from the viewpoint and from this range, while the

- complex of buildings is diminished from its actual scale, it still appears large in comparison to the coastal setting. They present an industrial character to the coastal view and this detracts from the underlying rural character.
- 9.10.72 Two wind farm developments are also visible from this viewpoint; operational Forss Wind Farm, set along the coast with the turbines to the left of Dounreay seen as relatively small scale structures; and Baillie Hill Wind Farm with turbines seen set behind Shebster Hill to the right of Dounreay as medium scale structures and an apparent feature in the view. These three developments are all contained in the same eastern sector of the view.
- 9.10.73 The view to the right reveals the harbour with its walls dropping down to the sea to enclose and shelter a small body of water where a few fishing boats are moored. The small cluster of houses appears as an integral part of the harbour, on account of their similar age and stonework. The houses face out to the east with no views to the south. Views from the harbour itself are drawn out towards the sea and on a clear day extend to Orkney and its many small, surrounding islands. Views back towards Reay and the Limekiln Coniferous Woodland Plantation are less dramatic, although the elevated landform of the Sweeping Moorland provides a contrasting character, which complements the character of the coastline.
- 9.10.74 **Sensitivity:** The sensitivity of the viewpoint is **medium**. Sandside Bay presents an attractive feature in the view and, although not covered by any national or regional designations, which would otherwise denote a special landscape and scenic value, it is of local importance. Views out to the North Atlantic and the Orkney Islands add interest and scenic value. Also, the Harbour contributes to the character of the location by presenting an historic architectural feature which is appropriate to this coastal location. The provision of the car park and toilet block highlight the fact that visitors are drawn to this location.
- 9.10.75 In terms of the susceptibility of viewers, the biggest detractor is the presence of Dounreay Nuclear Power Plant, which not only adds an industrial character to the wider view but also presents a perceived threat in terms of personal health and safety. Furthermore, the presence of Baillie Hill and Forss wind farms to the right of the view, and the electricity transmission line across the wider view, establish large-scale vertical structures as a component of the baseline view.
- 9.10.76 **Magnitude of change:** The magnitude of change on the view from Sandside Harbour as a result of the Revised Consented Development will be **medium-high**. The wireline and photomontage in **Figure 9.41** show that all 21 of the turbines will be visible, seen to occupy the low ridge which lies between the coastal knolls to the west and east, with some proposed turbines extending beyond the knolls on the western side.
- 9.10.77 The proposed turbines, seen at a minimum range of 4.81 km, will appear as medium to large scale elements. The largest scale turbines will appear of a comparable scale to Beinn Ratha, which sits on the right of the view. Beinn Ratha appears larger than it actually is, because it is a low hill but its elevation is accentuated by the low-lying landscapes which surround it, and as a result the scale comparison between it and the turbines will accentuate their scale. This is true also of scale comparisons with the knolls, the electricity transmission line

and the forestry on the Limekiln Hills, all of which will reaffirm the perception of the turbines appearing as large scale elements. The closest turbines will appear particularly prominent on account of their scale comparison with the more distant range turbines, in relation to which they will appear twice the height.

- 9.10.78 The proposed turbines will, however, be seen as a relatively well contained group occupying only a portion of a much wider panorama. They will be seen to be largely associated with the Coniferous Woodland Plantation, although the proposed turbines at either end will be seen more closely associated with the open knolls in the middle-ground of the view. The Revised Consented Development will not appear as a new or unfamiliar feature as the turbines at Baillie Hill and Forss wind farms are already visible and so will be associated with these existing and similar developments. The Revised Consented Development will, however, be seen as a further large-scale development, extending the influence of wind farms into a different LCT. The addition of the Revised Consented Development will have a medium-high magnitude of change, largely owing to the perceived scale of the turbines in comparison to other landscape features and artefacts in the view.
- 9.10.79 The magnitude of change during the construction phase will be **medium**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the woodland plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.80 **Significance of the effect:** The effect of the Revised Consented Development on the Sandside Bay will be **significant** during the operational phase. Although the sensitivity of the view is rated as medium and the distance between the Revised Consented Development and viewpoint is not especially close range, it is the perceived horizontal scale of the turbines in relation to the surrounding context which will make them appear as a prominent feature, making them the new focus of the view and in so doing, redefining its character.
- 9.10.81 The effect of the Revised Consented Development on the view from Sandside Bay Harbour will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the plantation.

#### *In-Combination Effect with Limekiln Extension*

- 9.10.82 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 5: Sandside Bay Harbour, will remain unchanged from that presented above in respect of the Revised Consented Development. The wireline in **Figure 9.41c** shows that Limekiln Extension will be largely screened by intervening landform such that all five blades will be visible, but that hubs and towers will be concealed. While the visibility of the blades will increase the horizontal extent of the Combined Development to the left, this increase will be insufficient to alter the original assessment in which the magnitude of change will be **medium** with a **not significant** effect during the construction phase, and **medium-high** with a **significant** effect during the operational phase. The effect of the Combined Development will, therefore, be effectively the same as that for the Revised

Consented Development owing to the limited additional effect of Limekiln Extension.

- 9.10.83 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of this view during the operational phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the open view, back across the bay.

Viewpoint 6 – A836, Dounreay Road Junction

- 9.10.84 Grid reference: 299664/966811 Distance from nearest turbine: 5.10km
- 9.10.85 **Viewpoint selection:** This viewpoint has been selected to represent the view of workers at the Dounreay Nuclear Power Plant as they pass in and out of the access route to their work. It is also representative of the view which other road-users will gain travelling westbound along the section of the A836 between Bridge of Forss and Reay.
- 9.10.86 **Baseline:** Although the view is directed in a westerly direction towards the Limekiln Coniferous Woodland Plantation, in the absence of any strong focus in this direction, the attention of viewers is drawn north towards the Dounreay Nuclear Power Plant and south-east towards Baillie Hill Wind Farm, despite both being outwith the 72-degree frame of the photo. Dounreay Nuclear Power Plant presents a close-range, large-scale development. The complex of buildings, including the iconic dome, introduces a distinctly industrial character to this, otherwise, remote coastal location.
- 9.10.87 Wind farm development is already a visible component of the wider landscape with the operational wind farm at Forss, visible in the opposite direction, and at Baillie Hill, visible to the left and set behind the downslope of Shebster Hill. All six of the Forss turbines are visible along with 20 of the Baillie Hill turbines. They are seen associated with this settled and cultivated landscape and form foci in the wider view. Baillie Hill Wind Farm is situated just 2.6 km from the viewpoint, making it a close-range example, in which turbines appear as large-scale structures and at variance with the small scale of the low hills and land use patterns.
- 9.10.88 The landscape is characterised by the relatively flat and low-lying Mixed Agriculture and Settlement LCT which typifies the north-east of Caithness. Large fields of improved pasture are subdivided by post and wire fences and hedgerows, and farmsteads occur at intervals across the landscape. There is some low scrub, but very few trees, making the landscape appear open and exposed, and accentuating the prominence of the sky.
- 9.10.89 The Sweeping Moorland LCT can be seen as a long and low ridge in the background of the view, providing some contrast and visual interest, with Beinn Ratha appearing as the high point and more mountainous than it actually is. The occurrence of Coniferous Woodland Plantations in the moorland adds dark swathes from the forest cover, which contrast with the lightness of the open grasslands of the moorland.
- 9.10.90 **Sensitivity:** The sensitivity of the viewpoint is considered to be **medium-low**. The presence of the Dounreay Nuclear Power Plant diminishes the sensitivity of

this view by making large-scale industrial development a strong influence on the visual experience. Visibility of Baillie Hill and Forss wind farms, although outwith the 72-degree frame of the photo are both readily visible features from the viewpoint and establish wind farm development as a component of the baseline view. These developments will reduce the susceptibility of road-users to the Revised Consented Development.

- 9.10.91 The landscape is unexceptional in scenic terms and this is reflected by the absence of any national or regional designations covering the landscapes which occupy the view. The view will be experienced by road-users travelling along the A836, and in and out of Dounreay. They will mostly be in transit and, therefore, unlikely to experience the view for long durations. Travelling west-bound, however, the road directs the view of road-users towards the Revised Consented Development for a section of approximately 70 m before it becomes increasingly oblique to the left. This 'guiding' of the view increases the sensitivity to a degree by making the Revised Consented Development more of a focus. The other factor which prevents the sensitivity from being rated low, relates to the relative prominence of the skyline, which in contrast to the unremarkable appearance of the surrounding landscape appears as something of a focal feature in the view.
- 9.10.92 **Magnitude of change:** The magnitude of change will be **medium**. The wireline and photomontage in **Figure 9.42** show that all 21 of the proposed turbines will be visible from this viewpoint, seen set behind the knolls to the left of Beinn Ratha. They will form an association with the more elevated landscape which has the landform of the Sweeping Moorland LCT although classified as Coniferous Woodland Plantation owing to the forest cover.
- 9.10.93 There are a number of factors which increase the perceived scale of the proposed turbines from this viewpoint. Firstly, there is the actual height, which at 149.9 m means that they will appear as medium to large scale structures, even from the not so close range viewpoints such as Dounreay at 5.10 km, where the expectation would be for them to appear as medium scale elements. Secondly, there is the scale comparison with the knolls in the skyline which appear larger scale than they actually are and which will have the comparative effect of making the turbines appear larger than they actually are. Thirdly, a comparison occurs in which the turbines will be seen to rise well above the height of Beinn Ratha and this will add to the increase in their perceived scale.
- 9.10.94 The prominence of the proposed turbines in the view is further increased by the location of the turbines along the skyline as this already creates a visual draw which the turbines will further emphasise. The road directs viewer's attention in this direction and this will reinforce the Revised Consented Development as the new focus of the view.
- 9.10.95 The magnitude of change is, however, reduced most notably by the presence of the existing developments of Dounreay Nuclear Power Plant, and Baillie Hill and Forss wind farms. The wind farms, especially, establish this type of development as part of the baseline view, such that further wind farm development will no longer add a new or unfamiliar feature and, therefore, this will moderate the magnitude of change. Baillie Hill Wind Farm, at a range of 2.65 km, will be seen as a closer range example of wind farm development and although at an oblique



- angle to much of the A836, will, nonetheless, diminish the comparative scale and prominence of the Revised Consented Development.
- 9.10.96 The magnitude of change will be further reduced by the containment of the turbines within a small proportion of a much wider skyline where the view extends around 360 degrees and within which the turbines only occupy less than 30 degrees. The turbines will be seen to be contained within the clearly defined LCT of the Coniferous Woodland Plantation and this helps to prevent the perception of development spreading across many different LCTs.
- 9.10.97 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the woodland plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form an apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.98 **Significance of the effect:** The effect of the Revised Consented Development on the view from Dounreay will be **not significant** during the operational phase. While the scale of the proposed turbines will appear large in comparison to the scale of the surrounding landform, the closer proximity of Baillie Hill Wind Farm and the diminishing effect this will have on the scale and prominence of the Revised Consented Development, coupled with the lack of any particular sensitivity attached to this view, will limit the effect on this view. The Revised Consented Development will not redefine the character of the view which will continue to be defined by the baseline characteristics of the wider landscape, Dounreay Nuclear Power Plant and Baillie Hill Wind Farm.
- 9.10.99 The effect of the Revised Consented Development on the view from Dounreay will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the plantation.

*In-Combination Effect with Limekiln Extension*

- 9.10.100 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 6: A836 Dounreay junction, will remain **medium-low** during the construction phase and **medium** during the operational phase, and the effect will remain **not significant** during both phases. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer and appear slightly larger in scale, any sense of encroachment will be counteracted by their containment by the landform, as shown in the wireline in **Figure 9. 42d** and their containment by the forestry, as shown in the accompanying baseline photograph. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.10.101 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the following reasons; the presence and influence of nearby Dounreay Nuclear Power Plant and Baillie Hill Wind Farm will moderate

the additional influence of the Combined Development; the separation distance of 5.10 km will ensure that the turbines will be seen as medium scale elements; and they will occupy only a small proportion of a wider view.

Viewpoint 8 – Angler's Car Park, Loch Calder

9.10.102 Grid reference: 307144/962277 Distance from nearest turbine: 8.02km

9.10.103 **Viewpoint selection:** This viewpoint has been selected to represent the visual amenity of visitors and road-users to the area around Loch Calder. The car park is small and informal, offset to the east of the minor road. Close to the road there are seats for visitors to enjoy the view out across the loch and a rough track leading down to the loch shore.

9.10.104 **Baseline:** The focus in the view is Loch Calder. It presents an attractive landscape feature seen to occupy the foreground to a wider expanse of Sweeping Moorland, with Lone Mountains marking a distinctive skyline in the distance. While this distant landscape appears wild and remote, the more immediate landscape, with its extensive forestry and agricultural land uses, is evidently settled. The large and open farm fields of improved pasture spread across the low and gently undulating landform, with intermittent farmsteads adding small scale rural development to the view.

9.10.105 The forestry covers the margins of the farmlands and spreads into the low hills, which mark the transition between the settled and unsettled landscapes. While neither wild nor remote, this settled landscape has a rural character which is both typical and familiar in northern Scotland. Forestry and agriculture are accepted land uses, and although they have changed the landscape from its intrinsic state and those changes have been extensive in terms of land take, they have involved a limited scale of built development.

9.10.106 In contrast to this rural view, the view to the right of the photo and north of the viewpoint focuses on the human intervention of Baillie Hill Wind Farm. From this range of 4 km, the turbines will be seen as large-scale structures, with 21 turbines seen set across the hill slopes of this low hill. The wind farm draws the focus of the view away from Loch Calder, partly because of the scale of the turbines and partly because of the movement of the blades in contrast to the stillness of the loch and surrounding moorland landscape.

9.10.107 The low hills of Limekiln sit in a comparatively discreet position in the view, set towards the background and forming a low and mostly even skyline, darkened by the green of the forest cover. In relation to the other features in the view; the loch, the forestry, the farmland and the wind farm, these hills form a relatively subtle component.

9.10.108 **Sensitivity:** The sensitivity of the view is considered to be **medium**. The medium part of the rating relates to the attractive aspects of the natural landscape, in particular Loch Calder, which presents a welcome contrast to the expansive moorland landscape and which adds visual interest to the view. Although much of the landscape in the view is not covered by any national or regional designation, it does have some scenic value at a local level and this, along with its importance as a venue for fishing, adds to the medium sensitivity.

- 9.10.109 There is a limited amount of development visible in the view, other than the road, transmission line, farmsteads and field boundaries. While the more distant moorland hills appear close to their natural state, much of the landscape in the view has been altered by forestry and farming practices such that it no longer appears natural. The forestry, especially, in the form of blocks of single species is at variance with the natural landscape. These human artefacts and modifications detract from the sensitivity of the view. The presence of Baillie Hill Wind Farm to the right of the view adds large scale man-made development as a baseline component which will be readily evident to road-users travelling to and from Loch Calder.
- 9.10.110 **Magnitude of change:** The magnitude of change will be **medium**. The wireline in **Figure 9.44** shows that 20 of the 21 turbines will be visible, seen set along the low afforested hills in the background of the view. The dark colour of the hills from the forestry and heather moorland will make these turbines appear more distant than they actually are. The addition of the turbines will form a scale comparison in which the turbines will rise above the background hills and accentuate the perceived scale of the turbines. Beinn Ratha presents such an example, which at 242 m AOD is a low hill, but which in the skyline profile looks distant and mountainous and against which the scale of the turbines will be accentuated.
- 9.10.111 Although the wind farm will not be seen as a new or unfamiliar feature, it will be seen to extend the influence of wind farm development, not only into a new sector of the wider view, but also into a new landscape. With operational developments associated with the Mixed Agriculture and Settlement LCT to the north, the Revised Consented Development will introduce wind farm development into the Coniferous Woodland Plantation LCT to the west. From this direction, the Revised Consented Development will be seen close to its longest extent with some turbines appearing more prominent than others owing to proximity to the viewpoint and base level elevation. These factors all contribute to the medium magnitude of change.
- 9.10.112 Despite the encroachment above the skyline and the apparent comparisons of scale between the turbines and the landform, from this range of 8.02 km the turbines will be seen as medium scale elements. They will be associated with this discreet portion of the skyline which is relatively low and level and which does not draw much visual exposure. While the Revised Consented Development will form a secondary focus, it will not be prominent enough to compete with the visual attraction of Baillie Hill Wind Farm and, to a lesser extent, Loch Calder. Baillie Hill Wind Farm will continue to form the closer range example, and, in comparison, the Revised Consented Development will appear more distant and slightly smaller in scale, although in actual fact of a larger height. It will form a relatively well contained group within the wider panorama.
- 9.10.113 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form an apparent feature during construction, although this will only occur during the latter part of the construction phase.

- 9.10.114 **Significance of the effect:** The effect of the development on the view from the Angler's Car Park at Loch Calder will be **not significant**. This relates chiefly to the following factors; the distance between the viewpoint and the Revised Consented Development, which at 8.02 km means that the turbines will be seen as medium scale elements; the location of the turbines within a discreet part of the view; and the presence of Baillie Hill Wind Farm, which, owing to its closer proximity, will remain as the primary focus of the wider view.
- 9.10.115 The effect of the Revised Consented Development on the view from Loch Calder will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Effect with Limekiln Extension*

- 9.10.116 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 8: Angler's Car Park, Loch Calder will remain **medium-low** during the construction phase and **medium** during the operational phase, and the effect will remain **not significant** during both phases. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer and appear slightly larger in scale, any sense of encroachment will be counteracted by their containment by the landform, as shown in the wireline in **Figure 9. 44b** and their containment by the forestry, as shown in the accompanying baseline photograph. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their containment within the horizontal extent of the Revised Consented Development, albeit with a small increase in terms of the density of the Combined Development.
- 9.10.117 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the following reasons; the separation distance of 7.32 km will ensure that the turbines will be seen as medium scale elements; the location behind a low-lying and afforested ridgeline will moderate their prominence in the view; they will form a well-contained group occupying a small proportion of a wider panorama; and through comparison with closer range and more prominent Baillie Hill Wind Farm, the Combined Development will appear comparatively smaller.

Viewpoint 9 – Ben Dorrery

- 9.10.118 Grid reference: 306287/955051 Distance from nearest turbine: 8.61 km
- 9.10.119 **Viewpoint selection:** Ben Dorrery has been selected as a viewpoint as it presents one of the few distinct hill tops in the area and at an elevation of 244 m AOD affords fairly extensive views across the surrounding landscape. The viewpoint is representative of the view walkers will gain from the hill top. It is also representative of the view from the summit of Beinn Freiceadain which is the neighbouring summit and which THC suggested was included in the 2016 ES.
- 9.10.120 **Baseline:** Although Ben Dorrery is only 244 m AOD high, it forms a distinct feature amidst the comparatively low-lying landscapes which typify this region. It is marked by a mast and ancillary control buildings, which are located at the

summit. From the small cluster of houses at Dorrery, a vehicular track leads all the way up to the hill top. The slopes are not especially steep and the landcover is predominantly heather moorland. The track makes it an easy hill top to reach, which local walkers may well do, but it is unlikely to attract a wider range of hill walkers as it is not a high hill and the summit is made less attractive by the mast. There are no sign-posts and only a small area for informal parking.

- 9.10.121 Despite the low elevation, the view from the top is fairly extensive owing to the extent of surrounding low-lying landscapes. The mast and buildings are enclosed by a perimeter fence and these features block out the view to the south-east from the viewpoint. The view is most dramatic to the west and south where, across a large expanse of Sweeping Moorland and Flat Peatland, distant Lone Mountains stand out against the skyline. The view to the north is more complex and less distinctive, with a mix of forestry and farmland set across a low and gently undulating landscape. This more fragmented pattern of land cover, as well as the presence of Baillie Hill Wind Farm at a minimum of approximately 10 km and Forss Wind Farm at a minimum of approximately 14 km, denotes a more notable human influence in this landscape.
- 9.10.122 It is to the north-west that the Revised Consented Development is to be situated, set amongst the Coniferous Woodland Plantation which characterises the Limekiln Hills. This landscape appears as a blanket of woodland, which, without any distinctive form or features, fails to draw the viewer's attention. The ridge formed by the wider Sweeping Moorland landscape is relatively low and gently undulating without any focal points. Instead, it is the more distant North Atlantic which adds to the sense of location and acts as the draw to viewers looking in this north-westerly direction.
- 9.10.123 **Sensitivity:** The sensitivity of this viewpoint is **medium**. The viewpoint and the content of the view are not covered by any landscape designations which would otherwise denote a special scenic value, although Special Landscape Areas and Wild Land Areas do cover areas further to the south and west, indicating the greater sensitivity attached to these more remote landscapes. The viewpoint does, however, have local value as it presents one of the few opportunities to gain an elevated view over this local landscape. It does not, however, appear to attract large numbers of walkers and the presence of the mast detracts from the undeveloped characteristics which many hill walkers may seek.
- 9.10.124 The susceptibility of viewers to the Revised Consented Development, will be moderated by the presence of existing developments in the view, most notably the mast owing to its very close proximity to the viewpoint. Wind farm development is also evident with the cluster of Achlachan, Bad a Cheo, Causeymire and Halsary at a minimum of approximately 12 km to the south-east, and Baillie Hill and Forss at a minimum of approximately 13 km to the north. These developments establish wind farms as a feature of the baseline view which means the Revised Consented Development will not form a new or unfamiliar feature. The extent of forestry further detracts from the sensitivity as this is a large scale land use which modifies the landscape from its natural state. Other man-made artefacts are relatively small in scale and more in-keeping with the rural character.

- 9.10.125 **Magnitude of change:** The magnitude of change on the view as a result of the Revised Consented Development will be **medium**. The wireline in **Figure 9.45** shows that 20 of the 21 turbines will be theoretically visible from this viewpoint. They will be seen set behind the hill ridge characterised by the Coniferous Woodland Plantation LCT and almost all will be seen against the open skyline.
- 9.10.126 From this range of 8.61 km the turbines will appear as medium scale elements in the view. They will occupy only a small horizontal extent of the full 360-degree view, and this will give the appearance of the Revised Consented Development being contained amidst the wider landscape. The scale of the turbines is small enough in relation to the vertical depth of the moorland, to ensure that they appear to fit comfortably without diminishing the scale of the landscape. As such, the landscape will continue to define the character of the view, within which, the Revised Consented Development will appear as a relatively contained element.
- 9.10.127 The Revised Consented Development will not be seen as a new or unfamiliar feature but will add a further development which will alter the wider pattern of wind farm development as seen from this viewpoint. It will be seen in the same sector of the view as Forss and Baillie Hill wind farms, which will help to contain the overall horizontal extent. The Revised Consented Development and Baillie Hill will also be seen as developments of similar size in terms of turbine numbers, and of similar scale, albeit with the proposed turbines appearing slightly larger. These similarities will help to reduce the visible variances which can arise between two or more developments and in so doing, will lead to a more co-ordinated appearance.
- 9.10.128 The Revised Consented Development will be seen as part of the Sweeping Moorland LCT, while Baillie Hill and Forss are associated with the Mixed Agriculture and Settlement LCT. This will be seen to draw wind farm development into a new landscape, although the Revised Consented Development will be seen situated on the edge of this LCT and occupying a small part of a much wider extent. The band of forestry, within which the Revised Consented Development will be located, will contain its extent from the other surrounding landscapes.
- 9.10.129 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form an apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.130 **Significance of the effect:** The effect of the Revised Consented Development on this view from Ben Dorrery will be **not significant** during the operational phase. The key factors which have led to this conclusion includes; the distance between the viewpoint and the development which makes the turbines appear as medium scale elements; the scale of the turbines in relation to the landform which makes them appear to be in proportion; the small proportion which the turbines occupy within the wider landscape; and the existing presence of visible developments, including Baillie Hill and Forss Wind Farm, along the northern coast which establish this type of development as part of the baseline situation.



- 9.10.131 The effect of the Revised Consented Development on the view from Ben Dorrery will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Effect with Limekiln Extension*

- 9.10.132 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 9: Ben Dorrery will remain **medium-low** during the construction phase and **medium** during the operational phase, and the effect will remain **not significant** during both phases. The location of this viewpoint to the south-east means that the five Limekiln Extension turbines will be slightly closer and appear slightly larger in scale, compared to the Revised Consented Development, albeit appearing collectively as one cohesive development and with containment by the ridgeline and forestry, ensuring there will be no sense of encroachment. While they will give rise to an increase in the effect on this view, especially as they form a slight increase to the horizontal extents on the right side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.
- 9.10.133 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the following reasons; the separation distance of 8.10 km will ensure that the turbines will be seen as medium scale elements; the location behind a low-lying and afforested ridgeline will moderate their prominence in the view; they will form a well-contained group occupying a small proportion of a wider panorama; and they will be seen in a wider landscape in which wind farm development already has a presence and an influence, most notably with Baillie Hill Wind Farm to the north.

Viewpoint 10 – Minor Road, Lythmore Junction

- 9.10.134 Grid reference: 305255 / 966422      Distance from nearest turbine: 7.99km
- 9.10.135 **Viewpoint selection:** On the minor road, which connects the A836 near Bridge of Forss in the north with the minor road between Thurso and Reay in the south, there are a small number of rural farmsteads and properties with views out towards the south-west where the Revised Consented Development is proposed to be located. This viewpoint has been selected to represent views of residents in this area as well as views of road-users travelling along this minor road. The viewpoint is located close to Lythmore at the access point to Lythmore Strath.
- 9.10.136 **Baseline:** This view displays many of the features typical of the Mixed Agriculture with Settlement LCT. The landform is broadly undulating with long and low ridgelines and shallow valleys. The fields are large and open with very little enclosure other than that afforded by traditional stone slates and small groups of trees. Trees tend to be clustered around the dispersed farmsteads and access tracks follow the linear pattern of the fields.
- 9.10.137 This landscape is shaped by the ridge which runs between Yellow Moss and Baillie Hill, which, although only 110 m to 80 m AOD in height, forms a bold skyline and creates a sense of enclosure to the valley of the Forss Water. The skyline forms a visual draw in the view and accentuates features such as the coniferous forestry, the electricity transmission line and most notably Baillie Hill Wind Farm.

The landscape appears well managed through the cultivation of the farmland, but, at the same time, bare and lacking any contrast from the continuous openness. The scene is of a rural landscape into which a large-scale wind farm has been introduced. Contrasts in scale between the turbines and the small-scale detail of the landscape arise and lead to awkward comparisons which accentuate the large scale of the turbines.

- 9.10.138 This view is made distinct by Baillie Hill Wind Farm which occupies much of the foreground landscape and which characterises the view. All 21 of the turbines are visible, seen set along the ridge. At the close range of 2.1 km to the nearest turbine, the viewer sees the turbines as large-scale elements, contrasting with the scale and character of the rural landscape and forming a clear focus within the wider panorama. Forss Wind Farm is also visible to the north of the viewpoint, although of a much lesser impact owing to its small-scale turbines (78 m) and more distant range (3.8 km to the nearest turbine).
- 9.10.139 **Sensitivity:** The sensitivity of the view to the Revised Consented Development is considered to be **medium**. The viewpoint is located in the Mixed Agriculture and Settlement LCT and lacks the sensitivity attributed to the more remote and undeveloped landscapes that occur to the south. There are no national or regional designations covering this landscape and even at a local level the view is unexceptional. The view will be experienced by road-users and residents. To road-users the view will be seen at an angle oblique to the direction of travel and this will reduce their susceptibility. A higher susceptibility potentially relates to the visual amenity of residents in the few properties which align the minor road and which look out in this westerly direction, although this is moderated by the existing presence of Baillie Hill Wind Farm.
- 9.10.140 The view is of a landscape which has been altered by human interventions and this limits the susceptibility of viewers to the effects of the Revised Consented Development. Most notable is the presence of the Baillie Hill wind turbines which, owing to their close range, reduce the susceptibility of viewers. The presence of the Electricity transmission lines across this landscape, add further to this effect.
- 9.10.141 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on the view will be **medium-low**. The photomontage in **Figure 9.46** shows that the Revised Consented Development will be seen as a more distant wind farm, set behind the turbines of the existing Baillie Hill Wind Farm and behind the ridge of hills on which it is located.
- 9.10.142 Despite other comparisons of scale which may occur, the most apparent and influential comparison occurs between the Revised Consented Development turbines and the Baillie Hill turbines. With the Revised Consented Development set directly behind Baillie Hill Wind Farm, it is clear that the Revised Consented Development turbines are more than half the scale, despite being larger in height. This is on account of the range difference with the closest Revised Consented Development turbine at 7.99km, compared to 2.07km in respect of Baillie Hill Wind Farm.
- 9.10.143 The magnitude of change during the construction phase will be **low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the

construction activities. The emergence of the cranes and wind turbines will form an apparent feature during construction, although this will only occur during the latter part of the construction phase.

9.10.144 **Significance of the effect:** The effect of the Revised Consented Development on the view will be **not significant** during the operational phase. This relates chiefly to the prominence of Baillie Hill Wind Farm, which, through comparison, diminishes the effects of the Revised Consented Development. Even without the presence of Baillie Hill Wind Farm, the effect will be not significant owing to the distance of the Revised Consented Development from the viewpoint, the unexceptional appearance of the view, its limited sensitivity, and the presence of the other close-range wind farm development at Forss.

9.10.145 The effect of the Revised Consented Development on the view from the Lythmore Junction will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the coniferous plantation.

*In-Combination Effect with Limekiln Extension*

9.10.146 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint10: Minor Road, Lythmore Junction will remain **low** during the construction phase and **medium-low** during the operational phase, and the effect will remain **not significant** during both phases. The location of this viewpoint to the north-east means that the five Limekiln Extension turbines will be slightly closer and appear slightly larger in scale, compared to the Revised Consented Development, albeit appearing collectively as one cohesive development and with containment by the ridgeline and forestry, ensuring there will be no sense of encroachment. While they will give rise to an increase in the effect on this view, especially as they form a slight increase to the horizontal extents on the left side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.

9.10.147 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the principal reason that it will be seen to the rear of the much closer range and prominent Baillie Hill Wind Farm, and through comparison of scale, this will moderate the effect of the Combined development and make it appear notably less prominent.

Viewpoint 14 – Borlum Hill

9.10.148 Grid reference: 297435/963520 Distance from nearest turbine:1.87km

9.10.149 **Viewpoint selection:** Borlum Hill has been selected to represent the close range views of locals who may use the area to the north of the Revised Consented Development for walking. Although it does not appear to be frequently used, there are enough tracks across the hill slopes to suggest some people do visit this low hill top. Walking does not appear to be encouraged as there is no provision for parking, no sign-posting or formal path and access from the track to the east needs to be made by crossing a burn and a fence.

- 9.10.150 **Baseline:** Borlum Hill is a small hill located on the northern edge of the Limekiln Coniferous Woodland Plantation. At a height of approximately 80 m AOD it is an easy, but steep climb and affords a short range panorama over the local area. The view is characterised by Coniferous Woodland Plantation which covers much of the immediate landscape. The underlying landform is low and gently undulating with a series of small open knolls rising up from the forest cover along this northern edge. The visual interest in this view is limited, with Beinn Ratha, to the right, presenting one of the few distinctive landform features. There is no clear focus and greater interest potentially lies in the view towards the settled landscape in the opposite direction.
- 9.10.151 To the north, the view extends out across the coastal edge to the North Atlantic with Orkney, visible in clear weather, across the Pentland Firth to the north-east. The coastal edge is typified by its settled nature, with the land improved for pasture and a concentration of properties in the settlement of Reay and dispersed throughout the wider rural landscape. Large scale development is visible in the form of Dounreay Nuclear Power Plant, visible next to the coast, and Baillie Hill Wind Farm, partially concealed by Shebster Hill to the east. Baillie Hill Wind Farm is seen as 21 turbines set at a range of 4.79km, such that it forms a contained group of medium scale structures, which act as the focus of the baseline view.
- 9.10.152 **Sensitivity:** The sensitivity of this viewpoint is **medium**. The view and the viewpoint are not covered by any national or regional designations which would otherwise denote a special value. There is little evidence to suggest this is a frequently visited viewpoint, and this further reduces the value of the view. The hill top is, nonetheless, in easy reach of the village of Reay and does present a view of local importance.
- 9.10.153 The view lacks any special scenic qualities or features, with instead, the Coniferous Woodland Plantation LCT characterising the view to the south and the settlement of Reay characterising the view to the north. The susceptibility of viewers to the effects of the Revised Consented Development is tempered by the extent to which this settled landscape has been modified; for example, the extensive coniferous plantation to the south; and the settlement of Reay to the north, Dounreay Nuclear Power Plant to the north-east and Baillie Hill Wind Farm to the east.
- 9.10.154 **Magnitude of change:** The magnitude of change will be **high**. The wireline in **Figure 9.50** shows that all 21 of the proposed turbines will be visible and almost all seen at their full height. The closest turbine will be seen at a distance of 1.87 km from the viewpoint, making it appear as a large vertical structure. The surrounding forestry will provide the basis for a scale comparison which will accentuate the scale of the proposed turbines and the low hills themselves will be diminished by the much larger scale of these new structures, especially where the exposed knolls occur in close proximity. From this viewpoint there will be evidence of overlapping, although the majority of the proposed turbines will appear evenly spaced and of a comparable elevation. While there will be a noticeable scale difference between the closest and furthest range rows, from this elevated viewpoint the different ranges, which explain the differences in scale, will be apparent.

- 9.10.155 The location of the proposed turbines within the forestry plantation helps to give the impression of containment, whereby they are all seen to be confined within this one clearly defined landscape character type, thus avoiding the perception of the proposed turbines spreading across many different landscapes. They fill the majority of the 90-degree extent of the photo frame but do not extend into the other 270-degree extent of the wider panorama and this again supports the sense of containment and offers relief from the effects of such a close-range development.
- 9.10.156 Despite the main draw of the baseline view being north out across the North Atlantic Coast, the addition of the Revised Consented Development will form a new and immediate focus which will replace the existing focus. While Baillie Hill Wind Farm will also be visible, it's more distant range and partial concealment will mean that in comparison it will have a lesser influence.
- 9.10.157 The magnitude of change during the construction phase will be **medium-high**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The close and elevated location of the viewpoint means that some of the activities and features of the construction process such as sections of tracks and borrow pit excavation will be partially visible.
- 9.10.158 **Significance of the effect:** The effect of the Revised Consented Development on the view from Borlum Hill will be **significant** during the operational phase. This relates chiefly to the close range from which the Revised Consented Development will be seen. This leads to the turbines appearing as large-scale vertical structures at variance with the existing character, which will create a definite focus and redefine the character of the view. The viewpoint is not especially sensitive but does, nonetheless, represent the experience of locals who may use this area between the village of Reay and the Limekiln Coniferous Woodland plantation.
- 9.10.159 The effect of the Revised Consented Development on the view from Borlum Hill will be **significant** during the construction phase owing to the close proximity of the viewpoint and its elevated location which means that construction activities will be more evident than from other nearby viewpoints, and that the cranes and turbines will be seen in closer proximity.

*In-Combination Effect with Limekiln Extension*

- 9.10.160 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint14: Borlum Hill will remain **medium-high** during the construction phase and **high** during the operational phase, and the effect will remain **significant** during both phases. The location of this viewpoint to the north means that the five Limekiln Extension turbines on the south-east side of the Revised Consented Development will be slightly further and appear slightly smaller in scale, from this viewpoint, albeit appearing collectively as one cohesive development. While they will give rise to an increase in the effect on this view, especially as they

form a slight increase to the horizontal extents on the left side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.

- 9.10.161 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of this view for the principal reason that it will be seen in close proximity and will form the key focus of the view.

Viewpoint 15 – Beinn Ratha

- 9.10.162 Grid reference:295424/961314 Distance from nearest turbine: 1.56km

- 9.10.163 **Viewpoint selection:** This viewpoint is located at the summit of Beinn Ratha and was selected to represent the view experienced by hill walkers. It is also representative of views which will be experienced across the wider landscape to the west of the site. There is no formal parking or defined route to guide walkers up the hill. The ground has a high-water table and contains extensive areas of marsh. The hill is not difficult to climb although the ground conditions may discourage some walkers, especially as there is no path. Although there is little evidence to suggest this is a frequently climbed hill, it provides one of the few clear vantage points readily accessible from this section of the northern and settled coastline.

- 9.10.164 **Baseline:** The summit of Beinn Ratha is at an elevation of 242 m AOD; not a high hill but, within the context of the surrounding Sweeping Moorland, high enough to afford a 360-degree panoramic view of the surrounding landscape and seascape. The character of the view varies with the greatest visual interest occurring to the west and south where the large expanse of the Sweeping Moorland appears in parts wild and remote. The attention of the viewer tends to be drawn in these directions.

- 9.10.165 The 90-degree photo frame east towards the Revised Consented Development is characterised by the Limekiln Coniferous Woodland Plantation LCT which forms an almost continuous blanket covering across the low hills of the moorland. The cultivated origins of the plantations are evident through the use of a single species, the predominance of a single age crop, the often straight geometric edges, and the pattern of subdivisions created by forest tracks and fire breaks. The forestry presents a contrasting darkness to the lightness of the open moorland and detracts from the overall character and continuity of the wider landscape.

- 9.10.166 The coastal edge presents an aspect of contrasting character to this view. Its character appears flatter and more settled with the green of improved pasture and faint outline of field patterns denoting the agricultural land use. Small scale development can be seen concentrated in the settlement of Reay and scattered across the rural landscape. The larger scale developments of Baillie Hill and Forss wind farms are evident; Baillie Hill set in the Mixed Agriculture and Settlement LCT at a range of 7.49km such that the turbines appear as medium scale structures; and Forss set in the Open Intensive Farmland on the coast at a range of 10.53km such that the turbines appear as small scale structures. Dounreay Nuclear Power Plant is also visible and marks this coastal edge as an area occupied by industrial development.



- 9.10.167 **Sensitivity:** The sensitivity of the view is **medium-high**. The sensitivity of the view to the east and north-east is tempered by the presence of the commercial forestry which denotes the extent to which this landscape has been modified, as well as the presence of large scale developments including the Baillie and Forss wind farms and Dounreay Nuclear Power Plant. The susceptibility of hill walkers to the effects of the Revised Consented Development are therefore tempered by its location in the same sector as these existing developments.
- 9.10.168 Although there are no scenic designations covering this view, either at the national or regional level, the view is covered by the East Halladale WLA. It is also of importance at the local level as it provides one of the few relatively easily accessible vantage points from which to view this local landscape, although there is little evidence to suggest that the hill is frequently used by hill walkers. These factors raise the sensitivity to medium-high.
- 9.10.169 **Magnitude of change:** The magnitude of change will be **high**. The wireline and photomontage in **Figure 9.51** show that all 21 of the proposed turbines will be seen at their full height and from a minimum of 1.56 km they will appear as very large scale elements. Comparisons of scale will arise with the Coniferous Woodland Plantation LCT, accentuating the scale of the turbines and, conversely, the turbines diminishing the scale of the landform. Despite this elevated perspective, some of the proposed turbines are tall enough to rise above the skyline. The proposed turbines do, however, appear relatively well spaced with only a few instances of overlap occurring.
- 9.10.170 Despite the large scale of the proposed turbines and their prominence in this section of the view, they will appear contained within the horizontal extent of the Coniferous Woodland Plantation LCT, with all the proposed turbines set within the forestry. The proposed turbines are also located on one side of the ridge without extending into the adjoining landscape. These factors will help to contain the extent to which the Revised Consented Development is perceived to spread the influence of this type of development. The full panorama from this viewpoint illustrates how the wider landscape and seascape will be relatively free of wind farm development. Baillie Hill, to the left of the Revised Consented Development and Forss Wind Farm to the left of that, such that together with the Revised Consented Development, the three developments will be contained in the north-east sector of the view. Views to the south and west will provide relief and contrast in respect of the wild and remote characteristics of these largely undeveloped landscapes.
- 9.10.171 The magnitude of change during the construction phase will be **medium-high**. This lower rating, compared to the rating for the operational phase, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The close and elevated location of the viewpoint means that track construction and borrow pit excavation will be partially visible from this viewpoint and that the construction of the turbines and cranes will be seen in close proximity.
- 9.10.172 **Significance of the effect:** The effect of the Revised Consented Development on the view from Beinn Ratha will be **significant** during the operational phase.

This relates chiefly to the close proximity between the viewpoint and the Revised Consented Development which will mean the turbines will appear as large scale elements that will redefine the character of this view, despite the Revised Consented Development only occupying a section of a wider panorama and with wind farm development already a feature in this view.

- 9.10.173 The effect of the Revised Consented Development on the view from Beinn Ratha will be **significant** during the construction phase owing to the close proximity of the viewpoint and its elevated location, which means that construction activities will be more evident than from other nearby viewpoints.

*In-Combination Effect with Limekiln Extension*

- 9.10.174 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 15: Beinn Ratha, will remain **medium-high** during the construction phase and **high** during the operational phase, and the effect will remain **significant** during both phases. The location of this viewpoint to the west means that the five Limekiln Extension turbines on the south-east side of the Revised Consented Development will be slightly further and appear slightly smaller in scale, from this viewpoint. They will sit within the horizontal extents of the Revised Consented Development and, together, will appear collectively as one cohesive development. The small number of additional turbines and their location on the far side of the group will mean they will give rise to only a small increase in the overall effect.

- 9.10.175 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of this view for the principal reason that it will be seen in close proximity and will form the key focus of the view.

Viewpoint 16 – Shurrery

- 9.10.176 Grid reference: 305014/958497 Distance from nearest turbine: 5.93km
- 9.10.177 **Viewpoint selection:** This viewpoint is included to represent the effects on the visual amenity of residents and road users in the rural area of Shurrery, to the east of the development. The viewpoint is located on the minor road which connects the minor road to Ben Dorrery with the minor road to Shurrery Lodge. It is situated at a high point, to the west of where the road emerges from the cover of the woodland plantation, and close to the access to the cluster of properties at Monadh nan Carn.
- 9.10.178 **Baseline:** The view looks across an area classified as Small Farms and Crofts LCT although the appearance is more like Sweeping Moorland LCT with its rough grasses and heather land cover, and the absence of field enclosures and improved pasture. The landscape is broad and gently undulating with a strong horizontal emphasis. The afforested hills of the Limekiln form a low edge and some degree of enclosure to an otherwise predominantly low-lying and relatively flat landscape. The dark green of the forestry accentuates this distinction and forms an even bolder distinction between the land and sky, making the skyline a key feature of the view.

- 9.10.179 The view is typical of a Sweeping Moorland landscape, which by its very nature, is characterised by its openness and simplicity. It is not a remote or wild landscape, as is evident by the presence of the minor road and the rural properties. The encroachment of the woodland into the moorland landscape further denotes human intervention in this landscape, the forestry detracting from the otherwise largely featureless expanse of the Sweeping Moorland LCT. The properties which sit in the foreground form a minor focus although appropriate to the context on account of their traditional design and use of natural stones and slate which keeps the colour of the buildings muted.
- 9.10.180 Baillie Hill Wind Farm is visible from this viewpoint at a range of 6.42 km in a northerly direction. All 21 of the turbines will be visible, seen set on the low and distant hill behind the group of buildings to the right of centre. The brighter green and more fragmented pattern of this landscape denotes its use for improved agriculture. The association of this wind farm with the settled landscape to the north, in turn disassociates it from the area of Sweeping Moorland which surrounds the viewpoint. From this range of 6.42km, the turbines will appear as medium scale elements and the movement of their blades will be readily discernible. This will add movement into an otherwise relatively still landscape.
- 9.10.181 **Sensitivity:** The sensitivity of viewers is **medium**. There are no national or regional landscape designations which would denote a special sensitivity in terms of scenic value and this is reflected in the quality of the view which is typical of the Sweeping Moorland but lacks any distinctive or dramatic landscape features. The view does, nonetheless, have its attraction in the simplicity of the landscape and limited extent of development.
- 9.10.182 Viewers will be mostly road-users travelling along this minor road at a moderate speed. Their experience of this view will be transitory, and although visibility will continue along the 900 m stretch until it joins with the Broubster road, the gradual decrease in elevation means that the turbines will become more increasingly concealed by the intervening landform. The view will be apparent to those travelling west-bound and the direction of the road towards the Revised Consented Development will emphasise this relationship and in so doing increase the susceptibility of road-users to the effects of the Revised Consented Development. The viewpoint is at a passing place on the minor road and, therefore, lacks the importance of a formal viewpoint which would be presenting a particular view of scenic value.
- 9.10.183 **Magnitude of change:** The magnitude of change on this view as a result of the Revised Consented Development will be **medium**. The wireline in **Figure 9.52** shows that 17 of the 21 proposed turbines will be visible, seen set behind the ridge of the Limekiln Hills. While most will be seen to extend above the skyline, the four tips will be screened by the intervening forestry on the ridge, as shown in the photomontage in **Figure 9.52**. From a minimum of 5.93 km, the turbines will appear as medium scale elements and the movement of their blades will be readily apparent.
- 9.10.184 The factors which increase the magnitude of change include the following; the direction of the road draws the focus towards the Revised Consented Development making it the more prominent wind farm in this view; the slightly

closer range and larger proposed turbines, in comparison to Baillie Hill Wind Farm turbines, will make them appear more prominent; the wooded skyline already forms a distinctive feature in the view and the addition of the proposed turbines will mark this out as the focus; and, although appearing as medium scale elements, they will rise notably above the skyline and form an eye-catching feature.

- 9.10.185 There are also a number of factors which reduce the magnitude of change. Baillie Hill Wind Farm is already visible in this view and, therefore, the Revised Consented Development will not appear as a new or unfamiliar feature, and furthermore, their location in the same sector of the view will prevent the perceived spread of wind farm development across the wider extent. There will be similarities in the appearance of the two wind farm developments; they will be seen at a similar range and although the Revised Consented Development turbines are larger, their scale will appear comparable. They comprise the same number of turbines and are arranged in a similar layout. In relation to the landscape, the setting of the proposed turbines behind the ridge acts to make them appear less impinging and more part of the adjacent landscape. The forestry will partially screen the bases of the towers and present a simple and large-scale blanket covering which avoids awkward comparisons of scale, especially as the detail of the individual trees is not readily discernible.
- 9.10.186 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.10.187 **Significance of the effect:** The effect of the Revised Consented Development on this view will be **not significant**. This relates chiefly to the unexceptional character of the view and the arbitrary nature of the viewpoint, as well as the medium scale of the turbines and their containment within the forestry cover. The existing presence of Baillie Hill Wind Farm also tempers the effect of the Revised Consented Development, although in relation to this wind farm, the Revised Consented Development will be seen to increase the extent of wind farm development.
- 9.10.188 The effect of the Revised Consented Development on the view from the Shurrery will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Effect with Limekiln Extension*

- 9.10.189 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 16: Shurrery will remain **medium-low** during the construction phase and **medium** during the operational phase, and the effect will remain **not significant** during both phases. The location of this viewpoint to the south-east means that the five Limekiln Extension turbines will be slightly closer and appear slightly larger in scale, compared to the Revised Consented Development, albeit appearing collectively as one cohesive development and with containment by the ridgeline

and forestry, ensuring there will be no sense of encroachment. While they will give rise to an increase in the effect on this view, especially as they form a slight increase to the horizontal extents on the right side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.

- 9.10.190 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the following reasons; the separation distance of 5.32 km will ensure that the turbines will be seen as medium scale elements; the location behind a low-lying and afforested ridgeline will moderate their prominence in the view; they will form a well-contained group occupying a small proportion of a wider panorama; and they will be seen in a wider landscape in which wind farm development already has a presence and an influence, most notably with Baillie Hill Wind Farm to the north.

Viewpoint 17 – A836 Hill of Forss

- 9.10.191 Grid reference: 305640/969387 Distance from nearest turbine: 10.34 km
- 9.10.192 **Viewpoint selection:** This viewpoint is located on the A836 to the east of Bridge of Forss and is representative of the views which will be gained by road-users travelling west-bound and residents who live in this area. Development in this area is relatively sparse with single properties located intermittently along the roadside and some recessed along access tracks. Most of the properties face in towards the road such that their principal orientation is north or south. There are a few properties which face in towards their access tracks and this leads to a south-west orientation which focuses on Baillie Hill Wind Farm, but also with the possibility of oblique views of the Revised Consented Development towards a more westerly direction.
- 9.10.193 **Baseline:** The A836 is the main road which runs along the north-east coast of Scotland. It is assumed that it is used mostly by locals but also by commercial drivers and tourists. The views along the A836 between John O' Groats and Reay are largely characterised by the Mixed Agriculture and Settlement LCT. This view, with its cultivated landscape, intermittent farmsteads and residential properties, is typical of this type. The landscape appears modified; the fields are large and enclosure made by post and wire fences with slates; the pasture is either improved or semi-improved; and the few trees and little scrub, gives the farmland an exposed appearance.
- 9.10.194 The adjacent landscapes add interest to the view; the coastal edge to the right of the view and the more distant hills in the background. The hills are seen as a dark silhouette and although neither high nor dramatic in profile mark a contrast with the low-lying, settled and cultivated north-east coast.
- 9.10.195 The defining feature of the view is Baillie Hill Wind Farm which is seen across the downslope of Stemster Hill. From a minimum of approximately 4 km, the turbines are seen as large-scale elements which contrast with the scale and character of the agricultural landscape. Baillie Hill Wind Farm forms the clear focus in the view. Forss Wind Farm can be seen on the right of the view, situated on the northern coast, the six turbines forming a readily apparent feature. The

turbines are 78 m in height and from this range of 3.42 km they appear to fit well with the scale of their location.

- 9.10.196 **Sensitivity:** The sensitivity of the view is **medium-low**. The view is typical of the Mixed Agriculture and Settlement LCT which occupies the north-east coast. It does not display any special scenic qualities or distinctive features, and this is reflected in the absence of national and regional landscape designations across the area.
- 9.10.197 The viewpoint itself is not a formal viewpoint, but instead an arbitrary point along the side of the road. It is representative of road-users on the A836 and a small number of local residents. The susceptibility of road-users to the effects of the Revised Consented Development is less than that of residents as they will be experiencing the view whilst in transit and therefore for a shorter duration than residents. Although the susceptibility of residents is higher, as it relates to views which are potentially of longer duration, direct views of the Revised Consented Development from the properties in this area are unlikely owing to their orientation in different directions.
- 9.10.198 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the view will be **medium-low**. The wireline in **Figure 9.53** shows that 20 of the 21 proposed turbines will be theoretically visible from this viewpoint, while the photomontage in **Figure 9.53** shows that the few tips in the group will be screened by forestry on the ridge. With a distance of 10.34 km between the viewpoint and the nearest proposed turbine, they will appear as medium to small scale elements in the landscape. They will be seen set within the transitional landscape that lies between the Mixed Agriculture and Settlement LCT, and the more distant Sweeping Moorland LCT.
- 9.10.199 The key feature, which will limit the magnitude of change will be the presence of Baillie Hill Wind Farm. Its location, to the fore of the Revised Consented Development, means that it is closer in range and with the effect that the proposed turbines appear larger in scale. This establishes a direct comparison with which to scale the Revised Consented Development turbines and, owing to their more distant range, their scale will appear moderated. The overlap between the two wind farms means the Revised Consented Development could appear as an extension to Baillie Hill Wind Farm and will certainly prevent the perceived spread of wind farm development into new parts of the view.
- 9.10.200 The concentration of wind farm development within this portion of the view, in other respects, increases the magnitude of change by making the appearance of Baillie Hill Wind Farm more complex and with an increase to its perceived size as it is seen to spread across a deeper extent of the landscape. The difference in scale between the close range Baillie Hill turbines and more distant Revised Consented Development turbines will also add to the disparities in appearance.
- 9.10.201 The magnitude of change during the construction phase will be **low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.



- 9.10.202 **Significance of the effect:** The effect of the Revised Consented Development on the view will be **not significant**. This relates chiefly to the location of Baillie Hill Wind Farm at a closer range and in the foreground to the Revised Consented Development which makes it the clear focus of the view and diminishes the influence of the Revised Consented Development. It also relates to the lack of importance of the viewpoint and the typical nature of the view.
- 9.10.203 The effect of the Revised Consented Development on the view from the A836, Hill of Forss will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the woodland plantation.

*In-Combination Effect with Limekiln Extension*

- 9.10.204 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on Viewpoint 17: A836 Hill of Forss will remain **low** during the construction phase and **medium-low** during the operational phase, and the effect will remain **not significant** during both phases. The location of this viewpoint to the north-east means that the five Limekiln Extension turbines will be slightly closer compared to the Revised Consented Development, albeit appearing collectively as one cohesive development and with containment by the ridgeline and forestry, ensuring there will be no sense of encroachment. While they will give rise to an increase in the effect on this view, especially as they form a slight increase to the horizontal extents on the left side of the group, this will be moderated by the small number of additional turbines and their clear association with the Revised Consented Development.
- 9.10.205 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development and will not redefine the character of this view for the principal reason that it will be seen to the rear of the much closer range and prominent Baillie Hill Wind Farm, and through comparison of scale, this will moderate the effect of the Combined development and make it appear notably less prominent.

## **9.11 Assessment of Effects on Principal Visual Receptors**

- 9.11.1 The second part of the assessment of effects on views is the assessment of effects on principal visual receptors. The principal visual receptors considered in the assessment include settlements and route corridors, including roads, railways, and national cycle routes. These are shown in **Figures 9.5** and **9.6**, and in conjunction with the ZTV in **Figures 9.15** and **9.16**. The criteria used to select the principal visual receptors are described in the baseline section of this chapter.
- 9.11.2 The first step in the assessment has been a preliminary assessment to ascertain which of the principal visual receptors have potential to be significantly affected by visibility of the Revised Consented Development. This process has been carried out through a desk study and site survey which examines the visibility of the Revised Consented Development from the principal visual receptors, using the ZTV and wirelines. A table that shows this process, including a brief description of the assessment for each of the principal visual receptors, is presented in **Appendix 9.C** Preliminary Assessment of Effects on Views.

- 9.11.3 This filtering process has indicated that of the principal visual receptors, three settlements; Reay, Shebster, and Westfield; three routes; the A836, the Shebster Minor Road, and National Cycle Route 1 (NCR1)/NC500; and nine core paths have potential to be significantly affected as a result of the Revised Consented Development. The effects on the settlements, routes and core paths are described below. The stretch of NCR1/NC500 that has potential to be significantly affected follows part of the A836 and part of the Shebster Minor Road (in respect of NCR1), and these routes have, therefore, been assessed together.
- 9.11.4 The other principal visual receptors were discounted through the preliminary assessment as they were considered to not have the potential to be significantly affected.

#### Reay

- 9.11.5 **Baseline:** Reay is a small settlement strung along the A836, 16 km west of Thurso and 24 km east of Bettyhill. The settlement lies close to the North Atlantic coast and Sandside Bay, a kilometre south of the coastal edge. Views of the coast can be gained from the more elevated properties on the northern side of the A836, and the open space around the church and golf course. From these locations, views also occur to the south, where the Coniferous Woodland Plantation and Sweeping Moorland LCTs present a contrasting character from the small-scale development of the settlement. Reay sits between these two distinct landscape influences of the coast to the north and the open landscape to the south.
- 9.11.6 The settlement has evolved in a linear pattern along the A836 with the original properties fronting onto the main road. More modern properties have infilled gaps and expanded the edges, especially to the east, with further tiers of roads having been built to the south of the A836. The properties are typically single or double storey and tend to front onto the streets. This gives rise to a situation in which very few properties face towards Limekiln Coniferous Woodland Plantation LCT, but instead back onto the land in this direction. In most instances boundaries are relatively low, allowing views of the landscape towards the south, from the gardens and lower floors of the adjacent properties. It is primarily the properties on the southern settlement boundary which gain these views. The properties at Isauld also have the potential to gain views of the Revised Consented Development although intervening landform may cause partial screening. In the south-east of Reay, the properties are modern and arranged around a cul-de-sac such that their orientations are variable. The backs of a few of these properties have the potential to gain views of the Revised Consented Development.
- 9.11.7 Most of the public streets in the settlement are enclosed by the surrounding built form such that views are contained within the street space and seldom draw in the surrounding landscape. The settlement is fairly dispersed along the A836 with some gaps between the properties giving rise to the potential for views to be gained towards the landscape to the south. The most notable gap occurs between the western and eastern parts of the settlement, where the cemetery, church and golf course occupy the land to the north, and open fields occupy the land to the south. This open section allows views to the south, where the

Limekiln Coniferous Woodland Plantation LCT can be seen set behind a series of small and rugged knolls. Beinn Ratha is a small hill which stands out amidst the low lying landscapes around, making it a focal feature in these local views, set to the west of Limekiln.

- 9.11.8 The views to the south are unremarkable, comprising semi-improved farm fields in the close range and forestry plantations in the background. The hummocky knolls, which lie along the northern edge of the Coniferous Woodland Plantation LCT, appear as irregular features and add a complexity to the shape of the landform. The presence of the electricity transmission line crossing through these views presents a modern artefact in contrast with the predominantly rural character.
- 9.11.9 Baillie Hill Wind Farm is located to the east of the settlement set behind the slopes of the Hill of Shebster at a range of 4.5 km from the eastern edge of the settlement and 6 km from the western edge. The principal alignment of the properties in a north-south direction means that very few will gain an outlook towards this development. Views will, however, be gained from the main road, which for people moving eastwards, will align towards the development and this will make it more of a focus. The turbines will be seen as medium scale elements, although often partially screened by the intervening houses such that visibility will be intermittent. Their prominence will be further reduced by the scale comparison with the towers of the electricity transmission line, which owing to their closer range will make the turbines appear smaller.
- 9.11.10 **Sensitivity:** The sensitivity of residents in Reay to the effects of the Revised Consented Development is **high**. This reflects their susceptibility to the effects of this close range development and the importance of their visual amenity, especially in respect of their views which could last for long durations in instances where the Revised Consented Development is aligned with windows from principal living spaces.
- 9.11.11 The settlement has not evolved in response to the surrounding landscape. It is set back from the coastal edge and has formed an insular pattern centring on the main road. Views to the south are incidental and mostly occur from the backs of properties on the southern boundary edge, as well as from the open stretch which lies around Reay Church. The views are unremarkable, comprising a typical mix of farmland and forestry, which denote the extent to which the landscape has been modified. The presence of the electricity transmission line marks the spread of development into this otherwise rural landscape. There is limited scenic interest and this is reflected in the absence of any regional or landscape designations across this area.
- 9.11.12 **Magnitude of change:** At a range of 2.7 km between the closest boundary edge and closest turbine, Reay is the closest settlement to the Revised Consented Development. The ZTV shows theoretical visibility occurring across much of the settlement. Actual visibility will be greatly reduced by the enclosure of the built form such that views will most likely occur from the open stretch around Reay Church (Viewpoint 3) and from the backs of properties along the southern boundary edge (Viewpoint 2). There is also the possibility that from some streets, blades will be visible above roof tops.

- 9.11.13 Viewpoint 3 - Reay Church illustrates the view gained from the central part of the settlement, showing that practically the full extent of the Revised Consented Development will be visible and will form a focal feature in views from this area. Viewpoint 2 - Reay footpath is indicative of the view gained from the properties along the southern boundary, showing that the development will be partially screened by the intervening landform and set at the lowest part of the horizon. The properties to the south are set at a slightly lower elevation, such that the extent of the development will be more concealed by the landform than in the view shown in the wireline and photomontage and this will diminish the magnitude of change, although the turbines will still appear as large-scale elements and their blade movements close to the horizon could appear disconcerting.
- 9.11.14 While Baillie Hill Wind Farm is already visible from parts of the settlement, and this means the Revised Consented Development will not appear as a new or unfamiliar feature, the Revised Consented Development will, nonetheless, form a closer range and more prominent example of wind farm development which will have a more notable influence on the character of Reay. The north south alignment of the majority of properties in the settlement means that there is greater potential for views to align with the Revised Consented Development. The Revised Consented Development will give rise to a **medium-high** magnitude of change.
- 9.11.15 The magnitude of change during the construction phase will be **medium**. This lower rating compared to the rating for the operational development, reflects the extent to which the enclosure of the buildings and cover of the forestry plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.11.16 **Significance of the effect:** The effect of the Revised Consented Development on the settlement of Reay will be **significant** during the operational phase. This relates chiefly to the close proximity of the settlement to the Revised Consented Development, which means the turbines will be seen as large-scale elements; the openness of the area around Reay Church, which allows clear views from this central part of the settlement; the potential for some visibility from the southern boundary edge which is closest to the turbines; and the sensitivity of the residential viewers despite the unremarkable nature of the baseline view.
- 9.11.17 The effect of the Revised Consented Development on the view from Reay will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.11.18 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on people in Reay will remain unchanged from that presented above in respect of the Revised Consented Development. The wireline for Viewpoint 3: Reay Church (**Figure 9.39c**) shows that Limekiln Extension will be largely screened by intervening landform such that only one blade and three tips will be visible. The effect of the

Combined Development will, therefore, be effectively the same as that for the Revised Consented Development owing to the limited additional effect of the Limekiln Extension, with a **medium** magnitude of change during the construction phase, medium-**high** magnitude of change during the operational phase and **significant** effect during the operational phase and **not significant** during the construction phase. The Combined Development will redefine the character of views from this settlement during the operational phase owing to its close proximity and prominent position to the south of the village.

#### Shebster

- 9.11.19 **Baseline:** Shebster is a small settlement comprising a cluster of properties set along the minor road which connects the B874 near Thurso with the A836 at Isauld. The settlement sits at the foot of the Hill of Shebster, which at 132 m AOD is a small hill and which extends eastwards into a long and low ridge across Yellow Moss to Baillie Hill. The hill slopes to the north provide enclosure to the settlement and limit the extent of views in this direction. To the south the land gently falls away to give a more open aspect.
- 9.11.20 Shebster lies within the Mixed Agriculture and Settlement LCT, although on the edge of the Sweeping Moorland and Coniferous Woodland Plantation LCTs which lie to the south. The majority of properties in Shebster face south; the view comprising some close-range fields of semi-improved pasture, with a mix of woodland plantations and low moorlands in the middle and background. This marks the transitional nature of the landscape in these views.
- 9.11.21 The views are unremarkable, lacking any distinctive landform characteristics or features. There is no clear focus, and the most prominent feature is the long and low skyline, accentuated by the darkness of the plantation cover. There is very little visible development in this direction, other than the minor road to Broubster. The openness and simplicity of the rural outlook presents views that are likely to be valued in terms of local visual amenity.
- 9.11.22 Baillie Hill Wind Farm sits in extreme close proximity to Shebster; the closest turbine located approximately 560 m from the closest property. The location of the turbines on the hill slopes which rise behind the settlement, further accentuates their prominence in views. The properties back onto the wind farm, such that it will be readily visible from many of the rear windows and gardens. It will also be visible from the minor road, seen over the rooftops, and will have a notable presence across the extent of the settlement.
- 9.11.23 **Sensitivity:** The sensitivity of residents in Shebster to the effects of the Revised Consented Development is **high**. This reflects their susceptibility to the effects of this close-range development and the importance of their visual amenity, especially in respect of their views which could last for long durations in instances where the Revised Consented Development is aligned with windows from principal living spaces.
- 9.11.24 The settlement and surrounding landscapes are not covered by any national or regional landscape designations which would otherwise denote a special landscape value. The views are unremarkable in terms of character and content, presenting a typical image of a farmed and afforested landscape in this area.

- They are, however, of local importance, relating very much to the visual amenity of local residents.
- 9.11.25 The settlement has evolved in response to the landscape, in that it sits along the base of the hill and the majority of the properties have been aligned to face out across the gently descending land form to the south and kept largely one-sided along the road to retain this open outlook. This presents a direct relationship between the settlement and the landscape.
- 9.11.26 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the settlement of Shebster will be **medium**. The predominant southerly orientation of the properties means that internal views will not align directly to the Revised Consented Development although there may be some possibility that the wind farm will be visible at an oblique angle. Views will be readily apparent from the minor road and front gardens but possibly screened by the buildings in the views from back gardens.
- 9.11.27 Visibility will appear similar from all parts of this small settlement with all 21 of the proposed turbines seen set along or behind the long and low ridge of the Limekiln Hills. From this range of 3.7 km to 4.2 km, the proposed turbines will be seen as medium to large elements, their vertical scale contrasting with the horizontal emphasis of the skyline and accentuating their prominence. The scale of the highest turbines will appear comparable to the height of the hills on which they sit and this comparison will increase their perceived scale.
- 9.11.28 The position of the proposed turbines on, or over the ridge, and the clothing of the bases of the towers by the forestry will make the proposed turbines appear contained within the forestry and prevent the sense that the Revised Consented Development is spreading across many different landscape types. The proposed turbines will be relatively evenly spaced, and this will present a generally unified appearance, although small clusters and gaps occur, and along with instances of proposed turbines set at different heights, these will detract from the overall continuity of the composition.
- 9.11.29 The close proximity of Baillie Hill turbines, set on the low hills to the north of Shebster at a range of approximately 560 m, will make them an exceptionally prominent feature in the opposite direction of the view. In comparison, the Revised Consented Development, at a range of 3.7 to 4.2 km, will not appear as large and will be seen set within a neighbouring, rather than the immediate landscape. The developments will appear similar in terms of number of turbines, although the scale of the Baillie Hill turbines will appear larger owing to their closer proximity.
- 9.11.30 The magnitude of change during the construction phase will be **medium-low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.11.31 **Significance of the effect:** The effect of the Revised Consented Development on the settlement of Shebster will be **significant** during the operational phase. This relates chiefly to the proximity of the Revised Consented Development to



the settlement, the sensitivity of the residential viewers and the relatively undeveloped outlook of the view. Direct views will not be gained from the majority of the properties, but views will be apparent from areas of public and private space around the settlement.

- 9.11.32 The effect of the Revised Consented Development on Shebster will be **significant** during the construction phase reflecting the higher sensitivity of residents to potential changes in their views.

*In-Combination Assessment with Limekiln Extension*

- 9.11.33 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on people in Shebster will remain **medium-low** during the construction phase and **medium** during the operational phase, and the effect will remain **not significant** during the construction phase and **significant** during the operational phase. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer and appear slightly larger in scale, any sense of encroachment will be counteracted by their containment by the landform and the forestry. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.11.34 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of views from this settlement during the operational phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the most open aspect of the views from the settlement.

Westfield

- 9.11.35 **Baseline:** Westfield is a small settlement situated on the minor road which connects Isauld and Thurso. The pattern of the settlement does not appear planned with individual properties strung along the main road, each of its own style with some old, but mostly modern, buildings.
- 9.11.36 Westfield is characterised by the landform which folds down into a valley around the Forss Water. The minor road passes through the valley, dipping down, bridging the Forss Water and rising up, changing direction to gain a suitable gradient over the valley slopes. As a result, the properties positioned along the road are also variable in terms of direction; those in the valley facing inwards, while those at the tops of the slopes facing outwards. Overall, the predominant orientation tends to be towards the south following the alignment of the Forss Water.
- 9.11.37 Westfield relates firstly to its valley location and secondly to the Mixed Agriculture and Settlement LCT which lies to the south. There is no association with the Sweeping Moorland LCT which lies to the west, nor the Coniferous Woodland Plantation LCT which lies further west beyond. These landscapes are visible from some of the elevated properties on the upper slopes but seen as components of a much wider landscape setting.

- 9.11.38 The character of Westfield is typically rural and small scale. At variance with this character is the presence of Baillie Hill Wind Farm, situated on Baillie Hill to the immediate west, where 21 turbines each at 110 m high are located. The closest turbine is approximately 2 km from the closest property and, as such, the turbines will appear as close range and large-scale structures in views from the settlement, albeit from the lower parts of the settlement, partially concealed by the intervening landform of the valley slopes.
- 9.11.39 **Sensitivity:** The sensitivity of residents in the settlement is considered to be **high**. This reflects the importance of residents' views which have the potential to be affected by the introduction of the Revised Consented Development. It is from only a few of the properties that there will be the potential to gain visibility of the Revised Consented Development, owing to the variable orientation combined with the partial containment of the valley landform.
- 9.11.40 This area is not covered by any regional or national designations which would otherwise denote a special scenic value. The views from the properties feature the farmed landscapes of the Mixed Agriculture and Settlement LCT which surrounds the settlement. This outlook appears typical for this area and lacks any notable features or characteristics.
- 9.11.41 **Magnitude of change:** Visibility of the Revised Consented Development is variable across the settlement. In the eastern end, all 21 proposed turbines will be visible, seen at a range of 7.7 km and set in the separate landscape of the Coniferous Woodland Plantation LCT. They will be seen to occupy a small proportion of a much wider view where the natural draw is to the south and not the south-west where the Revised Consented Development will be located. They will be seen as medium to small scale elements that will appear in proportion with the scale of the landform in which they are located. Furthermore, Baillie Hill Wind Farm is visible to the immediate east at the closer range of 2.7 km. This will have the effect of diminishing the perceived scale of the Revised Consented Development by providing a closer range example which will look notably larger in height, despite being smaller. The magnitude of change in the eastern end of the settlement will be **medium-low**.
- 9.11.42 As the elevation of the settlement descends into the valley, the slopes of the valley reduce visibility gradually, so that initially towers are partly concealed and then only blades are visible, and then eventually the full extent of the turbines is screened by the intervening landform. The properties in the western end will gain no visibility until the road rounds the lower slopes of the Hill of Shebster and the views open up again. Visibility of Baillie Hill Wind Farm continues through this area albeit reduced in terms of number of turbines and their visible extent. The magnitude of change in this western end reduces down to **low**.
- 9.11.43 The magnitude of change during the construction phase will be **low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.

- 9.11.44 **Significance of effect:** The effect of the Revised Consented Development on the settlement of Westfield will be **not significant** during the operational phase. This relates chiefly to the lack of association between the settlement and the landscape in which the Revised Consented Development will be located, the generally limited levels of visibility and the closer range influence from Baillie Hill Wind Farm.
- 9.11.45 The effect of the Revised Consented Development on Westfield will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.11.46 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on people in Westfield will remain **low** during the construction phase and **medium-low** or **low** during the operational phase, and the effect will remain **not significant** during both phases. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer and appear slightly larger in scale, any sense of encroachment will be counteracted by their containment by the landform and the forestry. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.11.47 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will not redefine the character of views from this settlement owing to a combination of the separation distance of 7.7 km, the patchy extents of actual visibility and the comparatively stronger influence from the closer range Baillie Hill Wind Farm.

A836 / NC 500

- 9.11.48 **Baseline:** The A836 is routed along the northern coast of Scotland, connecting John O' Groats in the north-east, with Tongue in the north-west, from which point it turns south and south-east to eventually connect with the A9 at the Dornoch Firth. The NC 500 route coincides with the A836 between Tongue and John O' Groats. The views gained from the A836 are characterised by the surrounding landscapes and, as such, vary along its length.
- 9.11.49 From John O' Groats to Castletown, the A836 passes close to the coast and is strongly influenced by views out towards the Island of Stroma and Orkney. From Castletown to Reay, the A836 is offset from the coast, and while views from elevated sections do still stretch out to the North Atlantic, most of the views are characterised by the open and relatively flat landscape classified as Mixed Agriculture and Settlement LCT. Small settlements occur along this section and the route passes through the town of Thurso, emphasising the settled nature of this northern coast. The fields are predominantly of improved grasslands, with large fields enclosed by stone walls, or post and wire fences. Very few trees occur in this open and exposed landscape, where there is a strong horizontal emphasis and big skies.

- 9.11.50 While much of the development is small scale and rural in character there are examples of large-scale development visible from this section of the A836. Most notable are the Baillie Hill Wind Farm, Forss Wind Farm and Dounreay Nuclear Power Plant, all in the section between Thurso and Reay, and all of which come in close proximity to the road. Continuous visibility of Baillie Hill Wind Farm occurs from the A836 at Hill of Forss (Viewpoint 20) to the A836 at Drum Hollistan (Viewpoint 1) and at its closest it comes within 2.2 km from the A836. Almost continuous visibility of Forss Wind Farm occurs over the same stretch and comes within 0.6 km of the road. Dounreay Nuclear Power Plant is accessed from the A836 and recessed only 0.5 km from the main road.
- 9.11.51 Between Bridge of Forss and Reay, while the character of the views is still primarily influenced by the Mixed Agriculture and Settlement LCT, a secondary influence is introduced with the distant visibility of the Sweeping Moorland LCT which, in contrast, appear as low undulating hills of open moorland which, in the case of Limekiln, is characterised by blanket woodland plantations.
- 9.11.52 West, beyond Reay, the character of the views becomes dominated by the Sweeping Moorland LCT, which, from elevated sections, is seen juxtaposed against the rugged coastal scenery of the High Cliffs and Sheltered Bays LCT. The road dips down into the Straths LCT at Melvich and further on at Bettyhill, where the relative shelter has given rise to the establishment of small settlements and pockets of the Small Farms and Crofts LCT. West, beyond Strathy Inn, the landscape passes from the Sweeping Moorland LCT to the Moorland Slopes and Hills LCT, with slopes becoming steeper and hills more pronounced.
- 9.11.53 Development in these western landscapes occurs as small settlements and isolated properties scattered along the roadside. There are very few examples of large-scale development and while not remote or wild, the natural landscape and seascape are the defining elements in the character of the views.
- 9.11.54 **Sensitivity:** The sensitivity of views from the A836 varies along its length in accordance with the variations in character. The section of the A836 between John O' Groats and Reay passes through a landscape which is settled and cultivated, the sensitivity of which, in respect of views, is typically **medium** or **medium-low** on account of the following factors. Firstly, there is an absence of any landscape designation which would otherwise denote a particular sensitivity in respect of scenic value. Secondly, the agricultural landscape has been altered from its intrinsic state by human modification and is, therefore, not as sensitive as an unmodified landscape would be. Thirdly, small scale developments, such as the road and settlements, present an inhabited landscape, albeit sparse in terms of population. Fourthly, large scale developments, such as Forss Wind Farm, Baillie Hill Wind Farm and Dounreay Nuclear Power Plant and associated electricity transmission lines, contrast with the underlying rural character and scale of views and reduce the sensitivity of the views to such features. Fifthly, the views are likely to be most commonly experienced from inside vehicles, which are often travelling at considerable speed along the road. Views will be transitory and often secondary to the focus of the road, especially in the driver's case, and the way in which the views are experienced reduces the sensitivity of the road-users.

- 9.11.55 The sensitivity of views from the A836 / NC 500 between John O'Groats and Thurso is **medium** as the coastal scenery adds a scenic quality to the outlook and there is little visibility of large-scale developments, while the sensitivity of views between Thurso and Reay is **medium-low** as the large-scale developments are more readily visible and detract from the rural character.
- 9.11.56 The sensitivity of views between Reay and Bettyhill is **medium**. While the landscape is neither wild nor remote on account of the influence of the road and intermittent settlements, the moorland and coastal landscapes do contribute to more dramatic and scenic views, which, with the exception of the woodland plantations, appear largely unaltered by human intervention, and this increases their sensitivity to the introduction of man-made elements. The views from this section are prevented from being rated medium-high or high on account of the absence of any landscape designations, which reflect the absence of any landscape qualities of regional or national value. The views are, however of a landscape which is distinctive in character and at least of local value.
- 9.11.57 **Magnitude of change:** The magnitude of change that the Revised Consented Development will have on the A836 / NC 500 will be variable along its length and different for eastbound and westbound travellers. The ZTV shows a concentration of visibility where the A836 passes to the north of the Revised Consented Development and then patchy visibility to the east and to the west. To the east of the Study Area, patches occur at East Mey (34 km), Dunnet (25 km), Castletown (18.5 km), and east of Thurso (15 km). Visibility of the development will be limited by the distance of these parts of the receptor and the settled nature of this landscape which means buildings will reduce actual visibility. The magnitude of change will be **low** to the east of Thurso and gradually decrease in the patches which occur along the A836 until **negligible** at East Mey.
- 9.11.58 To the west of the Study Area, visibility is not only patchier but also shows lower levels of proposed turbines as being visible. Visibility typically occurs on the east facing slopes as the land rises out of the low-lying Straths LCT. The closest range example is at Melvich which is 9.5 km from the Revised Consented Development and from where the proposed turbines will be seen as medium to small scale elements and largely concealed by the intervening hill ridge which contains Beinn Ratha. The magnitude of change from this section of the A836 will be **medium-low**. Where visibility occurs as patches further west, the magnitude of change will fall to **low** and eventually **negligible** as the distance from the development increases and the intervening landform becomes a stronger influence. From this western section of the A836, the contrast between the coastal and moorland scenery characterises the views and diminishes the importance of more distant features such as the Revised Consented Development.
- 9.11.59 The following assessment focuses on the section of the A836 which lies between Drum Hollistan and Hill of Forss, where the magnitude of change is rated **medium**, **medium-high** and **high**, and where there is the potential for significant effects to arise.
- 9.11.60 **Magnitude of change eastbound:** Visibility of the site becomes most apparent to road-users travelling westbound close to the A836 Drum Hollistan Layby (Viewpoint 1). Here the road aligns towards the Revised Consented Development

and this increases the magnitude of change by making it the focus of views. The proposed turbines are seen at a range of 4.5 km and their scale comparison with the surrounding landform will make them appear as medium to large scale elements. While the magnitude of change from the viewpoint is reported as medium-high, the transitory nature of the views road users will reduce the effect and the magnitude of change will be **medium**.

- 9.11.61 The alignment of the road changes as the road approaches Reay and the Revised Consented Development becomes oblique to the direction of travel. The increase in proximity will, however, ensure that the magnitude of change remains at **medium**. For a short section all views are obscured by tree cover and then on entering Reay become intermittent. From Reay Church, as illustrated by Viewpoint 3, views towards the Revised Consented Development open up and the turbines are seen as large-scale elements. In contrast to the viewpoint, the views from the A836, will be at a lower level and occur at an oblique angle to the direction of travel. The magnitude of change will therefore be **medium-high**, rather than high as reported in the assessment of Viewpoint 3.
- 9.11.62 Having passed through the centre of Reay, the position of the Revised Consented Development gradually comes to lie to the rear of road-users views. This notably reduces its prominence in views and as a result the magnitude of change rapidly falls away to **low** and then **negligible**. The influence from Baillie Hill Wind Farm and to a lesser extent Forss Wind Farm, as well as Dounreay Nuclear Power Plant, increases as they become closer range features in views from this section of the A836.
- 9.11.63 **Magnitude of change westbound:** The first patch of clear visibility occurs as the A836 rounds the Hill of Forss and the views extend across the coastal and inland landscapes. These views are represented by Viewpoint 20 which lies 10.3 km from the Revised Consented Development. From this range, the proposed turbines will be seen as medium to small scale elements in the landscape and the magnitude of change will be **medium-low**. This section of the A836 presents views of Forss Wind Farm to the north-east and Baillie Hill Wind Farm to the south-west. In comparison, the Revised Consented Development will appear to the rear of Baillie Hill Wind Farm and smaller in scale owing to its more distant location and this will diminish the visual effect it has on views.
- 9.11.64 Visibility around Bridge of Forss becomes patchy and tree cover screens what is potentially low levels of visibility from a short section of the A836. Beyond this, the alignment of the road turns to the south-west and, although not directly aligned with the Revised Consented Development, this does make it a readily visible feature in the view. This point of the A836 comes within 1 km of the Forss Wind Farm but soon passes by such that it lies to the rear of road-users travelling westbound. Baillie Hill Wind Farm is seen due south, at a range of 2.2 km and will be seen to the left of the Revised Consented Development. Its closer range will make it the more prominent development of the two and, in so doing, diminish the perceived scale of the more distant Revised Consented Development. The magnitude of change on this section of the route will be **medium**.



- 9.11.65 The effects described above will continue until the access road for Dounreay Nuclear Power Plant is reached. From this point, Baillie Hill Wind Farm will come to lie to the rear of road-users and its influence on views will diminish rapidly. The Revised Consented Development will become the primary focus in views and without the scale comparison of a closer range development will appear larger, especially where scale comparisons with the surrounding landform features become apparent. The magnitude of change that the Revised Consented Development will have on the section of the road between Dounreay Nuclear Power Plant and Isauld will be **medium-high**.
- 9.11.66 Between Isauld and Reay Church, visibility becomes patchy with the enclosure of the village properties and the oblique angle of the views towards the Revised Consented Development. Where visibility occurs, the proposed turbines will be seen as large-scale elements and, although not continuous, there are enough gaps between the buildings for a sequential effect to occur. The magnitude of change through this section will be **medium**.
- 9.11.67 **Significance of the effect eastbound:** The effect of the Revised Consented Development on the A836 eastbound will be **significant** between Drum Hollistan and Reay Church and then **not significant** for the remaining parts. The significant effect relates chiefly to the proximity of the A836 to the Revised Consented Development; the scale of the turbines which will appear as large-scale vertical elements in contrast with the existing rural character; and the general alignment of the road towards the direction of the Revised Consented Development. The remaining sections of the A836 will remain **not significant**.
- 9.11.68 **Significance of the effect westbound:** The effect of the Revised Consented Development on the A836 westbound will be **significant** between Dounreay and Reay Church. This reflects the proximity of this section of the road to the Revised Consented Development as well as the alignment of westbound traffic roughly in this direction and the diminished influence from the Baillie Hill Wind Farm. The remaining sections of the A836 will remain **not significant**.
- 9.11.69 The effect of the Revised Consented Development on the A836 will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.11.70 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the effect on road-users on the A836 during the operational phase will remain as assessed in respect of the Revised Consented Development, that is on the A836 eastbound the effect will be **significant** between Drum Hollistan and Reay Church and then **not significant** for the remaining parts, and on the A836 westbound the effect will be **significant** between Dounreay and Reay Church and **not significant** for the remaining parts. During the construction phase the effects will be **not significant**.
- 9.11.71 While the location of the five Limekiln Extension turbines on the eastern side of the Revised Consented Development means that they will be more readily apparent to west-bound road-users, their additional effect will be moderated by there being only five turbines, their containment by the landform and forestry,

and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.

- 9.11.72 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of the views experienced by road-users in those localised sections described above, owing principally to its close proximity and large scale, and the contrast it will present in respect of the rural context, despite the presence and influence of nearby Dounreay Nuclear Power Plant and Baillie Hill Wind Farm.

#### Shebster Minor Road

- 9.11.73 **Baseline:** The minor road connects the A836 at Isauld in the west, with the B874 to the south of Thurso in the east. It runs parallel to the A836 but inland from the coast. NCR1 follows this minor road between Reay and Thurso, possibly to by-pass Dounreay on the A836.
- 9.11.74 The road passes through a landscape classified as Mixed Agriculture and Settlement LCT, which acts as the principal influence on the character of views. It is characterised by fields of improved pasture set across a gently undulating landscape of low hills and shallow valleys. The land generally slopes from north to south, with low hills occurring to the north of the road. Within the central section, the Hill of Shebster sits at the west of a long and low ridge which passes through Yellow Moss to Baillie Hill in the east. From here the land dips down into the valley of the Forss Water, before rising into a low ridge which runs behind the eastern section of the road. The landscape is generally open and exposed with very little tree cover other than the forestry blocks which lie in the adjoining landscape of the Sweeping Moorland LCT to the south. Small scale development occurs along the road, intermittently as farmsteads and individual properties, and clustered as small settlements, which from west to east include Isauld, Shebster and Westfield. At the eastern end of the road, Newlands of Geise is a settlement but with a dispersed pattern of intermittent properties.
- 9.11.75 The character of the landscape is typically rural and the views from the road are unremarkable, with the exception of Baillie Hill Wind Farm. This adds a large-scale man-made development which is in contrast with the small scale pattern of the landscape, and which forms a definite focal feature in many of the views from the road. It is located across Yellow Moss and Baillie Hill to the north-east of the settlement of Shebster. The wind farm is in close proximity to the Shebster Minor Road and forms the defining feature in many of the views
- 9.11.76 **Sensitivity:** The sensitivity of the Shebster Minor Road is **medium** along its length. The road does not lie within a landscape area recognised for its scenic value through either a national or regional designation. It is of local value and of importance in relation to the visual amenity of local road-users. The landscape is typical of the Mixed Agriculture and Settlement LCT and displays a landscape which has been modified by an enclosed agricultural field pattern and linear settlement patterns. Furthermore, large scale development has a strong influence on the character of views from the road, in the form of Baillie Hill Wind

- Farm, which is in contrast with the scale and character of the rural landscape. Electricity transmission lines add to the human influence from modern artefacts.
- 9.11.77 The susceptibility of road-users is less than that of residents because their views are transitory and typically of shorter duration than those experienced by residents within their homes and gardens. Road-users tend to travel at speed, such that their views are not as focused on the surrounding landscape as other groups, such as walkers will be. Furthermore, the character of the road and the experience from within the vehicle and of other passing vehicles, separates road-users from the influences of the surrounding landscape.
- 9.11.78 **Magnitude of change:** The ZTV shows almost continuous visibility along the length of the road with a small gap where it dips into the valley around Westfield. Visibility is shown to be high with most sections gaining theoretical visibility of 17 to 21 proposed turbines. The openness of the landscape around the road means that theoretical visibility is largely representative of actual visibility apart from in localised parts where buildings or tree cover obscure views.
- 9.11.79 **Magnitude of change eastbound:** For road users travelling eastbound, the Revised Consented Development will lie due south at the western end of the road around Isauld. Views will be at a perpendicular angle to the direction of travel, which will reduce their prominence and the magnitude of change that the Revised Consented Development will have on the views of road-users. At this section, the Revised Consented Development will be at its closest coming within 3 km of the road, such that the turbines will appear as large and readily apparent features. There is mature tree cover around Achvarasdal which will preclude visibility south towards the Revised Consented Development and, beyond this, the Revised Consented Development will gradually pass to the rear of the road-users view during the approach to Shebster. Beyond this point, the Revised Consented Development will not readily feature in the views of eastbound travellers and the magnitude of change will be **negligible**.
- 9.11.80 The magnitude of change for eastbound travellers between Isauld and Shebster is also influenced by the presence of Baillie Hill Wind Farm, which owing to the alignment of the road in this direction will form a prominent feature and a focus in the views of road-users. From Isauld, the Revised Consented Development will be seen at a minimum of 4.0 km and, with travel eastbound, this will decrease to less than 1 km in views from Shebster. Baillie Hill Wind Farm will feature more readily in views and detract from the attention which would otherwise be drawn toward the Revised Consented Development. The magnitude of change between Isauld and Achvarasdal will be **medium** on account of the oblique angle of the Revised Consented Development to this section despite the close proximity. From beyond Achvarasdal to Shebster this will reduce down to medium-low, as views of the Revised Consented Development become increasingly oblique, and the influence of Baillie Hill Wind Farm becomes stronger.
- 9.11.81 **Magnitude of change westbound:** Visibility of the Revised Consented Development occurs along most of the length of the minor road for west-bound travellers. It also coincides with visibility of Baillie Hill Wind Farm with the exception of three small patches; one where the minor road connects with the B874 south of Thurso, where only Baillie Hill Wind Farm is visible; one in the

valley of the Forss Water in Westfield, where only Baillie Hill Wind Farm is visible; and one west of Shebster, where only the Revised Consented Development is visible.

- 9.11.82 Starting at the eastern end of the minor road, where it forks off from the B874, there will be no visibility of the Revised Consented Development and limited visibility of Baillie Hill Wind Farm. The alignment of the road is towards the Revised Consented Development and visibility occurs periodically but only comprising a limited proportion of the turbines and seen at the range of 10 to 12 km. Baillie Hill Wind Farm is seen closer at 5 to 7 km although partially concealed by the southern slopes of Hill of Forss. The magnitude of change through Newlands of Geise will be **low**. Baillie Hill Wind Farm has already established wind farm development as a component of the baseline situation. Its closer location, combined with the appearance of the Revised Consented Development as a medium to small-scale feature, as seen from this range, reduces the prominence of the Revised Consented Development in the view.
- 9.11.83 As the road emerges from Newlands of Geise and the bend turns towards the west, views of the Revised Consented Development and Baillie Hill Wind Farm open up such that both are seen at their full extent in terms of numbers, although the turbines of both are partially concealed by intervening landform. They occupy the same sector of the view, although with a distinct separation in the middle and Baillie Hill Wind Farm apparently larger in scale on account of its closer proximity. These factors make Baillie Hill Wind Farm the key focus of views along this section, with the Revised Consented Development featuring as a background feature, albeit comprising medium to small scale elements as seen from this 8 to 10 km range. Visibility of the electricity transmission line in the foreground helps to provide a diminishing comparison of scale with the turbines, although at the same time adding to the visual disharmony of contrasting artefacts. The magnitude of change along this section is **medium-low** as Baillie Hill Wind Farm forms the primary influence and, in comparison, the Revised Consented Development appears more distant and smaller in scale.
- 9.11.84 As the minor road dips down into Westfield and across the valley of the Forss Water, the extent of visibility falls away with the Revised Consented Development being completely screened by the landform around the river crossing. The close range of Baillie Hill Wind Farm and its position on the elevated slopes above Westfield means that visibility occurs continuously, although reduced in extent. The enclosure of the buildings will have some effect in reducing visibility although the low heights and well-spaced layout means this reduction will be limited. The magnitude of change that will occur through Westfield will continue to be **medium-low**. Visibility will occur between 7 to 8 km and will vary between showing the Revised Consented Development at its full extent, to showing no visibility.
- 9.11.85 Beyond Westfield, as the road rises and again bends westwards, views of the Revised Consented Development are readily apparent along the stretch between Westfield and Shebster during which the range shortens from 7 km to 4 km. The road is not directly aligned with the Revised Consented Development, such that views are at a slightly oblique angle to the south-west. The proposed turbines will, nonetheless, be readily apparent and be seen as medium scale elements.

Their prominence will be diminished by the very close range of Baillie Hill Wind Farm which sits on the hill slopes to the north and which come within 600 m at the closest point. Although at an oblique angle to the road, this will continue to form the primary feature in views from the road, making the Revised Consented Development the secondary feature, and preventing the magnitude of change from this section rising above **medium**.

- 9.11.86 Shebster marks the pivot point beyond which Baillie Hill Wind Farm is positioned to the rear of road-users and as a consequence its influence on views rapidly diminishes. From Shebster to Isauld, the Revised Consented Development becomes the primary feature although it's prominence wains as it becomes increasingly oblique to the position of west-bound travellers as they travel further west. At Shebster, the magnitude of change is **medium-high** as all 21 proposed turbines are readily visible and seen against the open skyline at a range of 3 to 4 km. As the direction of the road kinks around the Hill of Shebster, the development lies at a more oblique angle to the road and the visibility becomes partially concealed by intervening landform. This effect continues on to Isauld and despite the range of views continuing to be close to 3 km the magnitude of change is reduced to **medium**.
- 9.11.87 **Significance of the effect eastbound:** The effect of the Revised Consented Development on the Shebster Minor Road eastbound will be **not significant** owing chiefly to the oblique angle at which the Revised Consented Development sits in relation to the western section of the road. This angle becomes increasingly oblique with travel eastwards, while the influence from Baillie Hill Wind Farm becomes increasingly apparent.
- 9.11.88 **Significance of the effect westbound:** The effect of the Revised Consented Development on the Shebster Minor Road westbound will be **significant** between the access road to Bardnaheigh and Isauld chiefly due to the alignment of the road towards the Revised Consented Development in parts, the increasing proximity of the road to the Revised Consented Development and the decreasing prominence of Baillie Hill Wind Farm in the views. The remaining sections of the Shebster Minor Road will undergo **not significant** effects.
- 9.11.89 The effect of the Revised Consented Development on the Shebster Minor Road will be **not significant** during the construction phase owing to the screening effect of the majority of the construction activities by the forestry plantation.

*In-Combination Assessment with Limekiln Extension*

- 9.11.90 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the effect on road-users on the Shebster Minor Road during the operational phase will remain as assessed in respect of the Revised Consented Development, that is with **not significant** effects during the construction phase and **not significant** effects during the operational phase with the exception of the west-bound section between the access road to Bardnaheigh and Isauld where the effects will be **significant**. The effects during the construction phase will be **not significant**.
- 9.11.91 While the location of the five Limekiln Extension turbines on the eastern side of the Revised Consented Development means that they will be more readily apparent to west-bound road-users, their additional effect will be moderated by

there being only five turbines, their containment by the landform and forestry, and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.

- 9.11.92 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of the views experienced by road-users in the westbound section described above, owing principally to its close proximity and large scale, and the contrast it will present in respect of the rural context, despite the presence and influence of nearby Baillie Hill Wind Farm.

#### National Cycle Route 1

- 9.11.93 **Baseline:** National Cycle Route 1 spans the length of the United Kingdom from Dover to the Shetland Isles. In respect of the north coast of Scotland it joins the A836 from the A897 along Strath Halladale, just east of Melvich, from where the route passes eastwards along the A836 to John O' Groats, with a short diversion along the Shebster Minor Road between Reay and Thurso. As well as accommodating NCR1, many cyclists follow this route on the final part of the Land's End to John O' Groats route.
- 9.11.94 The long distance of these cycle routes means that the character along their length is extremely diverse, with differing extents of human influence evident in the landscape. The general expectation will be that constructions and contemporary land uses will be less evident through the northern part of Scotland. While the landscape through Strath Halladale and from Melvich to Drum Hollistan is largely characterised by open sweeping moorland, there is evidence of development in the form of operational Strathly North wind farm, which lies to the west of the A897.
- 9.11.95 From Drum Hollistan, the character of the landscape changes from the more natural appearance of the Sweeping Moorland LCT to the more modified appearance of the Mixed Agriculture and Settlement LCT. The relatively low and gently undulating landform of the north Caithness coastline has led to the cultivation of the land and development of settlements, roads and other developments. A detailed description of the character along NCR1 is presented in respect of the A836 and Shebster minor road above.
- 9.11.96 **Sensitivity:** The sensitivity of cyclists to the effects of the Revised Consented Development in the section between Drum Hollistan and Thurso via Reay is **medium**. In terms of the value of the views of road-users, the route does not pass through any landscapes which are designated at either the national or regional level. The route is, however, part of a National Tourist Route and this adds to its value.
- 9.11.97 The susceptibility of cyclists to the Revised Consented Development will be moderated by the extent of developments and contemporary land uses already evident along the section of the route between Drum Hollistan and Thurso. Wind farm development is already an established feature with Forss Wind Farm visible on the coast and Baillie Hill Wind Farm forming an especially close range feature from the section of NCR1 which passes along the Shebster Road. Furthermore, the presence of Dounreay Nuclear Power Plant detracts from the rural qualities



of this coastal landscape and in so doing, reduce the susceptibility of cyclists to the effects of the Revised Consented Development.

- 9.11.98 **Magnitude of change:** The assessment of the magnitude of change in respect of the A836 and Shebster minor road applies to those sections of NCR1 which coincide with these routes. The findings that apply are that the magnitude of change for eastbound road-users will be **medium** in the section between Drum Hollistan and Achvarasdal and then **low** beyond, and **medium** for west-bound road users between the Bardnaheigh access and Reay, but **low** to the west and east of this section.
- 9.11.99 **Significance of the effect:** The effect of the Revised Consented Development on the views of cyclists on NCR1 (and other routes) will be **significant** whilst travelling eastbound on the section between Drum Hollistan and Achvarasdal and **significant** whilst travelling westbound on the section between the access road to Bardnaheigh and Reay. Views of cyclists on the remaining west and east-bound sections will be **not significant**.

*In-Combination Assessment with Limekiln Extension*

- 9.11.100 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then during the operational phase the effects on cyclists on NCR1 will remain as assessed in respect of the Revised Consented Development, that is **significant** whilst travelling eastbound on the section between Drum Hollistan and Achvarasdal and **significant** whilst travelling westbound on the section between the access road to Bardnaheigh and Reay, and **not significant** for all remaining sections. During the construction phase the effects will be **not significant**.
- 9.11.101 While the location of the five Limekiln Extension turbines on the eastern side of the Revised Consented Development means that they will be more readily apparent to west-bound cyclists, their additional effect will be moderated by there being only five turbines, their containment by the landform and forestry, and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.11.102 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of the views experienced by cyclists in the westbound and eastbound section described above, owing principally to its close proximity and large scale, and the contrast it will present in respect of the rural context, despite the presence and influence of nearby Baillie Hill Wind Farm.

Core Paths

CA11.02 – Achvarasdal Woodland / CA11.10 – Achvarasdal East Drive

- 9.11.103 **Baseline:** CA11.02 and CA11.10 have been grouped together in this assessment as they are close in proximity and relate to the same property. The paths provide access into and around the grounds of Achvarasdal House, which is located to the east of Isauld and on the south side of the Shebster Minor Road. The house is currently used as a residential care home. The grounds are characterised by

mature and relatively dense mixed woodland planting, which has the effect of enclosing views from the majority of the paths. The exception to this occurs from the East Drive, and the access road to Achvarasdal Farm on the western side of the grounds, both of which are open from tree cover and afford views of the surrounding landscape, albeit partly screened by the woodland surrounding Achvarasdal.

- 9.11.104 The surrounding landscape comprises gently undulating landform with a predominant agricultural land use. The hill to the north is made distinct by the presence of the Baillie Hill turbines which form a notable influence on the character of the views from the East Drive, although partly obscured by the intervening woodland from the farm access to the west. The hills to the south mark the transition in landscape character, and although these are small knolls, they appear larger than they actually are.
- 9.11.105 **Sensitivity:** The value of the views from the core paths relates to their local, rather than regional or national status, and this is further reflected in the absence of any regional or national designations covering the surrounding landscape. The susceptibility of walkers will be raised by their awareness of their surroundings and their expectations of enjoying the views of the surrounding landscape. The proximity of Baillie Hill Wind Farm will moderate the susceptibility of walkers to the Revised Consented Development as it already forms a notable feature readily visible on the close range adjacent hills. Furthermore, the core path is located in a settled and cultivated landscape and this, further moderates the susceptibility.
- 9.11.106 Taking all these factors into account the overall sensitivity of views from the CA11.02 and CA11.10 is **medium**.
- 9.11.107 **Magnitude of change:** The Revised Consented Development will have **no effect** on the majority of the core paths enclosed by the woodland cover as views towards the Revised Consented Development will be almost fully screened. Views from CA11.10, which follows the East Drive, and the section of CA11.02 which accesses Achvarasdal Farm, will include visibility of the Revised Consented Development in the sector to the south. At 2.2 km from the nearest turbine, the proposed turbines will appear as large-scale structures at variance with the scale of the knolly hills, behind which they will sit. While the full extent of the Revised Consented Development will not be visible, owing to the screening effect of closer range woodland and middle range landform, a substantial proportion of the closer range turbines will be readily apparent, their presence accentuated by the movement of the blades. These factors will contribute to an overall **medium-high** effect on the East Drive and farm access.
- 9.11.108 The magnitude of change during the construction phase will be **low**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.11.109 **Significance of the effect:** During the operational phase, the effect of the Revised Consented Development on views from CA11.02 will be **not significant**

for the majority of its length, with the exception of the western path that accesses Achvarasdal Farm where the effects will be **significant**. The effect on the views from CA 11.10 will be **significant** along its length. This finding relates to the relatively open aspect gained from these paths towards the south, where the Revised Consented Development will be visible in close proximity.

- 9.11.110 During the construction phase, the effects on all sections of both paths will be **not significant**. This finding relates to the extent to which the majority of the construction works will be screened by intervening woodland, landform and coniferous forestry. While the emergence of cranes and turbines will be apparent above these intervening features, these will only be apparent during the latter parts of the construction phase.

*In-Combination Assessment with Limekiln Extension*

- 9.11.111 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on CA11.02 and CA11.10 will remain **low** during the construction phase and **medium-high** or **no effect** during the operational phase, and the effect will remain **not significant** during the construction phase and **significant** in those sections with visibility during the operational phase. While the location of the five Limekiln Extension turbines on the near side of the Revised Consented Development means that they will be slightly closer, any sense of encroachment will be counteracted by their containment by the intervening landform and forestry. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their close attachment to the Revised Consented Development, despite a small increase in the horizontal extent of the Combined Development on the left side.
- 9.11.112 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of views from these paths during the operational phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the most open aspects of the views.

CA11.03 – Limekiln Forest

- 9.11.113 **Baseline:** CA11.03 is located in Limekiln Forest to the south of the village of Reay. From the access point on the northern edge of the forest, the path follows an elongated loop to the south, which covers an approximate distance of 8 km. With the exception of the northern approach to the access, which is in the open, the core path is contained by dense coniferous forestry. This severely limits the extent of views, which are mostly contained to within the extreme close range. The undulations of the landform do, however, mean that from higher ground and where occasional openings in the forest cover occur some views extend out over tree tops but seldom beyond the extent of the forest.
- 9.11.114 The plantation is typical of its type, with single age, single species rows of sitka spruce planted in coupes, with intermittent fire breaks and no special treatment to planting along the road edge. The path serves the purpose of providing a forest walk, although it is clear that there are no special views or landmark features. To enable the core path to remain open to the public throughout the construction period the access tracks will be realigned through the site.

- 9.11.115 **Sensitivity:** The value of the views from the core path relates to its local, rather than regional or national status, and this is further reflected in the absence of any regional or national designations covering this afforested landscape. The susceptibility of walkers will be moderated by their location in a densely afforested area, whereby it will be anticipated that views will be contained and there will be limited opportunity to appreciate the wider landscape. The susceptibility of walkers in respect of the specific effects of operational wind farms will, however, be less affected than in respect of other core paths, as there is very limited visual influence from operational wind farms owing to the enclosure of the forestry.
- 9.11.116 Taking all these factors into account the overall sensitivity of views from the core paths is **medium**.
- 9.11.117 **Magnitude of change:** Despite the limited extent of views walkers will experience from this core path, the magnitude of change on their views will be **high** during both the construction and operational phases. This relates to the location of the Revised Consented Development in this area of forestry. The core path will be used as the main access track into the Revised Consented Development and, therefore, will be widened and will accommodate side tracks branching off to the turbines. The proximity of some of the proposed turbines to the core paths means that they will be readily visible, while others will be visible above the cover of the forestry owing to their pronounced vertical scale. They will form a new focus in the views from the path, their scale at variance with the scale of the trees and their movement at variance with the stillness of the forest cover.
- 9.11.118 **Significance of the effect:** The effect of the construction and operational phases of the Revised Consented Development on the core path will be **significant**. This relates to the location of the Revised Consented Development in extreme proximity to the core path which means that it will be readily evident from much of the path, despite the enclosure of the forestry.

*In-Combination Assessment with Limekiln Extension*

- 9.11.119 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on CA11.03 will remain high during the construction phase and operational phase, and the effect will remain **significant**. The five Limekiln Extension turbines and associated infrastructure will be located in this LCT, along with the proposed turbines and infrastructure of the Revised Consented Development. While Limekiln Extension will add to the magnitude of change on the views experienced by walkers on this core path, the assessment will remain at the highest rating of 'high' for both the construction and operational phases.
- 9.11.120 The Combined Development will not notably increase the magnitude of change assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of the views experienced by walkers owing to its location close to the core path and the notable effect the large scale turbines and associated infrastructure.

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#### CA11.04 – Sandside Head

- 9.11.121 **Baseline:** CA11.04 is located along a short section of the coastal edge to the north of Sandside Bay. It forms an extension from the Sandside Bay car park past the harbour and along the low but rocky coastline to the point marked on the OS map as Sandside Head. The length of the path is no more than 700 m and access further west along the coast is restricted. The main attraction in views from the path is the North Atlantic, with views on clear days extending out across the Pentland Firth to Orkney. The main detractor from the attraction of the coastal views is the presence of Dounreay Nuclear Power Plant. This is readily evident on the opposite side of Sandside Bay on account of the large scale of the complex of buildings, including the iconic dome that characterises the site. Further along the coastal edge, lies Forss Wind Farm, adding to the extent of development associated with this north coastal edge.
- 9.11.122 Views inland are characterised generally by the rural landscape, with its mix of agricultural fields and forest blocks. The landform is relatively low-lying which accentuates the scale of the low hills that lie to the south of the village of Reay and Beinn Ratha which lies to the west. Baillie Hill Wind Farm is visible to the east of Reay and forms a notable feature that draws attention away from the coastal edge.
- 9.11.123 **Sensitivity:** The value of the view from the core path relates to its local, rather than regional or national status, and this is further reflected in the absence of any regional or national designations covering the surrounding landscape. The susceptibility of walkers will be raised by their awareness of their surroundings and their expectations of enjoying the views of the North Atlantic and coastal edge. The proximity of Dounreay Nuclear Power Plant will moderate the susceptibility of walkers to the Revised Consented Development as it already forms a notable feature readily visible on the opposite headland. Furthermore, Baillie Hill and Forss wind farms are also visible in the landscapes to the south-east and east respectively, and their presence means the Revised Consented Development will not appear as a new or unfamiliar feature.
- 9.11.124 Taking all these factors into account the overall sensitivity of views from CA11.04 is **medium**.
- 9.11.125 **Magnitude of change:** The magnitude of change on the views from the Sandside Head path as a result of the Revised Consented Development will be **medium-high**. The proposed turbines, seen at a minimum range of 4.32 km, will appear as medium to large scale elements. The largest scale turbines will appear of a comparable scale to Beinn Ratha, which sits on the right of the view.
- 9.11.126 The Revised Consented Development will not appear as a new or unfamiliar feature on account of the turbines at Baillie Hill and Forss wind farms being already visible. The Revised Consented Development will, however, be seen as a further large-scale development, extending the influence of wind farms into the southerly sector of the views. The addition of the Revised Consented Development will have a medium-high magnitude of change, largely owing to the perceived scale of the turbines in comparison to other landscape features and artefacts in the view.

- 9.11.127 The magnitude of change during the construction phase will be **medium**. This lower rating compared to the rating for the operational development, reflects the extent to which the cover of intervening woodland and landform will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.
- 9.11.128 **Significance of the effect:** The effect of the Revised Consented Development on the core path will be **significant** during the operational phase. Despite the attraction of the coastal views and the presence of other existing wind farm developments, the proximity of the Revised Consented Development, combined with the comparisons of scale that will arise in respect of the surrounding landform, means that it will form a new focus in views from this coastal path.
- 9.11.129 During the construction phase, the effects on all sections of these paths will be **not significant**. This finding relates to the extent to which the majority of the construction works will be screened by intervening woodland, landform and coniferous forestry. While the emergence of cranes and turbines will be apparent above these intervening features, these will only be apparent during the latter parts of the construction phase.

*In-Combination Effect with Limekiln Extension*

- 9.11.130 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on CA11.04 will remain **medium** during the construction phase and **medium-high** during the operational phase, and the effect will remain **not significant** during the construction phase and **significant** in those sections with visibility during the operational phase. While the five Limekiln Extension turbines on the eastern side of the Revised Consented Development will give rise to a slight increase in the effect, this will be moderated by the screening effect of the intervening small hills, which will mean these five additional turbines will mostly be seen as blades or tips.
- 9.11.131 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of views from this core path during the operational phase, for the principal reason that it will be seen in relatively close proximity and will form the key focus in the views of walkers on this core path.

CA 11.05 – Achins and Helshetteer / CA 11.09 – Borlum Circuit

- 9.11.132 **Baseline:** These two core paths have been grouped together because they both lie in close proximity and are representative of the views of walkers to the south of the village of Reay. The paths follow tracks which extend south from the A836 to access the farmsteads, farmland and other residential properties that lie in this narrow band of open land between the village to the north and the forest to the south.
- 9.11.133 Despite the limited extent of these paths, they mark a distinct transition from the urban enclosure of the village through farmed and afforested land to the dense forestry of the Limekiln Plantation. The gently undulating coastal edge contrasts with the small but distinct knolls that lie along the south of this area. Further complexity is added by the presence of the electricity transmission line



that extends from west to east, and, although outwith this area, there is also a visual influence from Baillie Hill Wind Farm on the nearby low hills to the east.

- 9.11.134 **Sensitivity:** The value of the views from the core paths relates to their local, rather than regional or national status, and this is further reflected in the absence of any regional or national designations covering the surrounding landscape. The susceptibility of walkers will be raised by their awareness of their surroundings and their expectations of enjoying the views of the surrounding landscape. The proximity of the electricity transmission line will moderate the susceptibility of walkers to the Revised Consented Development as it already forms a notable feature readily visible above the core paths. Furthermore, visibility of Baillie Hill Wind Farm and the general extent to which the landscape has been modified by settlement, farming and forestry, moderates the susceptibility of viewers.
- 9.11.135 Taking all these factors into account the overall sensitivity of views from the CA 11.05 and CA 11.09 is **medium**.
- 9.11.136 **Magnitude of change:** The magnitude of change which the Revised Consented Development will have on these CA 11.05 and CA 11.09 will be **high**. The proximity of the paths to the Limekiln Forest in which the turbines will be located means that they will be seen as large-scale structures. They will be seen from the paths at a range of 2 to 3 km and with their moving blades rising above the forest cover, will form a new focus in the views of walkers.
- 9.11.137 While the majority of the turbines will be visible from these paths, they will be partly screened to varying extents by the low ridge of forestry which runs through the north of the site. In instances where the turbines are seen behind the electricity transmission towers, a comparison of scales will reduce the perceived scale of the turbines, although this may be countered by comparisons with the forest which increase their perceived scale. The turbines will form a relatively well-defined group with fairly well spaced turbines, and seen to be contained within the forest cover, which will go some way in concealing the bases of the turbines.
- 9.11.138 The magnitude of change during the construction phase will be **medium-high**. This lower rating compared to the rating for the operational phase, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase. The close proximity to the Revised Consented Development does, however, mean that despite the short duration, the effect of the cranes and turbines being constructed will have a **medium-high** magnitude of change on the view.
- 9.11.139 **Significance of the effect:** The effect of the Revised Consented Development on the views from CA 11.05 and CA 11.09, will be **significant** during the operational and construction phase. This finding relates to the relatively open aspect gained from these paths towards the south, where the Revised Consented Development will be visible in close proximity.

*In-Combination Assessment with Limekiln Extension*

9.11.140 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on CA11.05 and CA11.09 will remain **medium-high** during the construction phase and **high** during the operational phase, and the effect will remain **significant** during both phases. The location of these core paths on the north and north-west side of the Revised Consented Development and the location of the five Limekiln Extension turbines on the eastern side, means that they will be set behind the Revised Consented Development, and any sense of encroachment will be counteracted by their containment by the intervening landform and forestry. While they will give rise to an increase in the effect on this view, this will be moderated by the small number of additional turbines and their location behind the Revised Consented Development.

9.11.141 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of views from these paths during the operational and construction phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the most open aspects of the views.

CA 11.06 Reay Roadside Link / CA 11.07 – Reay Golf Course via Mary’s Cottage / CA 11.08 – Reay Golf Course via Clubhouse

9.11.142 **Baseline:** These three core paths have been grouped together because they all lie in close proximity and are representative of the views of walkers through, and to the north of the village of Reay. CA 11.06 passes along the section of the A836 between the Sandside Bay turn-off, to the west, and Reay Cross, to the east. Although this section lies in the village, the limited extent and low scale of built enclosure along the southern edge of the road means open views toward the Revised Consented Development will be readily apparent.

9.11.143 In respect of the two paths associated with the golf course, CA 11.07 is routed down the eastern side and CA 11.08 through the middle of the course. The openness of the golf links ensures that from both these paths, views of the Revised Consented Development will also be readily apparent.

9.11.144 A number of influences act upon the character of the views experienced from these core paths. Firstly, is the influence of the village, which, despite its dispersed pattern of properties, establishes settlement as a characteristic feature of this coastal edge. Secondly, is the presence of the adjacent farmland, which denotes the cultivated nature of the surrounding landscape. Thirdly, the electricity transmission line, presents a larger scale of structure, which, along with the Baillie Hill turbines partially visible to the east, mark energy infrastructure as a baseline feature.

9.11.145 **Sensitivity:** The value of the views from the core paths relates to their local, rather than regional or national status, and this is further reflected in the absence of any regional or national designations covering the surrounding landscape. The susceptibility of walkers will be raised by their awareness of their surroundings and their expectations of enjoying the views of the surrounding landscape. The proximity of the village of Reay will moderate the susceptibility of walkers to the Revised Consented Development as they will be seeing it within

the context of a settled landscape, albeit characterised by small scale and rural style development. The larger scale structures associated with the electricity transmission line and Baillie Hill Wind Farm, further reduce the susceptibility of walkers to the Revised Consented Development, as these structures are seen as an established part of the baseline views.

9.11.146 Taking all these factors into account the overall sensitivity of views from CA 11.06, CA 11.07 and CA11.08 is **medium**.

9.11.147 **Magnitude of change:** The magnitude of change on these core paths as a result of the Revised Consented Development will be **medium-high**. The majority of the turbines will be visible, set approximately 3 km to the south of the core paths, such that they will be seen as large-scale structures and will form a new focus in the views of walkers on these paths.

9.11.148 While visibility of Baillie Hill Wind Farm, albeit limited, will prevent the Revised Consented Development from appearing as a new or unfamiliar feature in this view, it will appear as a much more readily apparent example and be seen to extend this type of development into a new sector of the available views. In respect of the electricity transmission line, the closer proximity of the towers will mean they appear comparatively taller than the turbines and this will reduce the perceived scale of the turbines. Conversely, the scale comparison between the turbines and the coniferous trees in which they are located, will make the turbines appear very large in scale. In summary, the scale of the turbines from these core paths will appear large, although somewhat diminished by the comparison with the transmission towers.

9.11.149 The magnitude of change during the construction phase will be **medium**. This lower rating compared to the rating for the operational phase, reflects the extent to which the cover of the plantation will screen the majority of the construction activities. The emergence of the cranes and wind turbines will form a readily apparent feature during construction, although this will only occur during the latter part of the construction phase.

9.11.150 **Significance of the effect:** The effect of the Revised Consented Development on the views from CA 11.06, CA 11.07 and CA 11.08, will be **significant** during the operational phase. This finding relates to the relatively open aspect gained from these paths towards the south, where the Revised Consented Development will be visible in close proximity.

9.11.151 During the construction phase, the effects on these paths will be **not significant**. This finding relates to the extent to which the majority of the construction works will be screened by intervening woodland, landform and coniferous forestry. While the emergence of cranes and turbines will be apparent above these intervening features, these will only be apparent during the latter parts of the construction phase.

#### *In-Combination Assessment with Limekiln Extension*

9.11.152 In considering the effect of the Revised Consented Development in combination with the Limekiln Extension, then the magnitude of change on CA11.06, CA11.07 and CA11.08 will remain **medium-high** during the construction phase and **high** during the operational phase, and the effect will remain **not significant** during the construction phase and **significant** during the operational phase. While the

five Limekiln Extension turbines on the eastern side of the Revised Consented Development will give rise to a slight increase in the effect, this will be moderated by the screening effect of the intervening small hills, which will mean these five additional turbines will mostly be seen as blades or tips.

9.11.153 The Combined Development will not notably increase the effect assessed in respect of the Revised Consented Development. The Combined Development will redefine the character of views from these paths during the operational phase for the principal reason that it will be seen in relatively close proximity and will form the key focus in the inland views.

#### Summary of effects on views

9.11.154 The assessment has assessed the effects of the Revised Consented Development on views and principal visual receptors throughout the Study Area. The assessment reports that there will be significant changes to the views from the viewpoints and visual receptors as summarised below.

9.11.155 The assessment reports that the Revised Consented Development will give rise to significant effects in seven of the 18 viewpoints, five of the six principal visual receptors and nine of the 19 core paths (within a 10 km radius).

- Viewpoint 1 – A836 Drum Hollistan layby;
- Viewpoint 2 – Reay footpath;
- Viewpoint 3 – Reay Church;
- Viewpoint 4 – Shebster;
- Viewpoint 5 – Sandside Bay Harbour;
- Viewpoint 14 – Borlum Hill;
- Viewpoint 15 – Beinn Ratha;
- Reay;
- Shebster;
- A836 / NC500 westbound between Dounreay and Reay / eastbound between Drum Hollistan and Reay;
- Shebster minor road westbound between Bardnaheigh access and Achvarasdal;
- NCR1 westbound between Bardnaheigh access and Reay / eastbound between Drum Hollistan and Achvarasdal;
- CA11.02 – Achvarasdal Woodland only western path
- CA11.03 – Limekiln Forest;
- CA11.04 – Sandside Head;
- CA11.05 – Achins / Helshetter;
- CA11.06 – Reay Roadside Link;
- CA11.07 – Reay Golf Course via Mary's Cottage;
- CA11.08 – Reay Golf Course via Clubhouse;

- CA11.09 – Borlum Circuit; and
- CA11.10 – Achvarasdal East Drive.

9.11.156 The seven viewpoints which are reported to be significantly affected all lie within approximately 5 km of the Revised Consented Development. In each case the assessment relates chiefly to a high or medium-high magnitude of change as a result of the close proximity of the viewpoint to the Revised Consented Development. From these viewpoints the proposed turbines will appear as large scale, or medium to large scale, structures. The sensitivity ratings for the rural viewpoints are typically medium while for the settlements they are high. This demonstrates that the most sensitive receptors relate to the local residential population and that the sensitivity of the landscape is not as high as in other areas which are covered by national or regional landscape designations.

9.11.157 From the viewpoints and principal visual receptors where significant effects arise, the turbines will be the most visible components of the Revised Consented Development and will be seen as large scale elements at variance with the scale of the local landscape. The visibility of these turbines will alter the views by becoming the focal feature and redefining the character such that it is no longer defined by the landscape but by the Revised Consented Development instead. Significant effects are reported to occur from two settlements and from short sections of two roads, which also incorporate a short section of NCR1 and North Coast 500. The core paths which are significantly affected all lie within very close proximity of the Revised Consented Development.

9.11.158 In considering the in-combination effects of the Revised Consented Development with Limekiln Extension, the same extent and levels of effect were found to occur, highlighting the incremental increase that the Limekiln Extension will give rise to in respect of the effect already attributed to the Revised Consented Development.

## 9.12 Assessment of Cumulative Effects

### Introduction

9.12.1 All operational and under construction wind farms have been included as part of the baseline situation in the main assessment. This means that their influence on the main assessment has been taken into account in relation to the landscape and visual receptors assessed in detail in the 'Assessment of effects on landscape character' and 'Assessment of effects on views' respectively. The cumulative effect of the Revised Consented Development in conjunction with the operational and under construction wind farms is assessed in more detail in this section, in relation to two further cumulative scenarios.

- **Cumulative Scenario 1** assesses the effects of adding the Revised Consented Development to a cumulative situation comprising all operational, under construction and consented wind farms.
- **Cumulative Scenario 2** assesses the effects of adding the Revised Consented Development to a cumulative situation comprising all operational, under construction, consented and application wind farms.

9.12.2 A preliminary assessment in order to identify those cumulative developments of relevance to the detailed assessment is presented in Section 9.4 of this

chapter, with the relevance of each of the cumulative wind farms set out in Table 9.4.

- 9.12.3 A preliminary assessment in order to identify those landscape and visual receptors of relevance to the detailed assessment is presented in **Appendix 9.D**. This sets out which of the landscape and visual receptors have the potential to undergo significant cumulative effects as a result of the Revised Consented Development in conjunction with operational, under construction, consented and application stage wind farms and, therefore, require a more detailed assessment. These detailed assessments are presented below.

Methodology for the cumulative assessment

- 9.12.4 The methodology used in the assessment of cumulative effects differs in some respects from that used in the rest of the assessment. The full methodology for the cumulative assessment is described in **Appendix 9.A**.
- 9.12.5 It is important to remember that the objective of the cumulative assessment is different from the assessment of effects of the Revised Consented Development as carried out previously in this chapter; here, the intention is to establish whether or not the addition of the Revised Consented Development, in combination with other relevant existing and proposed wind farms, may lead to wind farm developments becoming a prevailing characteristic of the landscape character or view as a result, albeit that they may become one of a number of prevailing characteristics.
- 9.12.6 It should be noted that even if the Revised Consented Development itself is assessed to have a significant effect, it does not necessarily follow that the cumulative effect will also be significant.

**Wind Farm sites included in the cumulative assessment**

- 9.12.7 The preliminary assessment presented in Section 9.4 sets out which of the cumulative sites will be relevant to the cumulative assessment. Cumulative sites that lie within a 40 km radius of the Revised Consented Development have been listed in Table 9.7 and their locations shown in **Figure 9.17**.
- 9.12.8 Cumulative ZTVs that show the visibility of the cumulative site or a group of sites, along with visibility of the Revised Consented Development have been run for all of the operational, under construction, consented and application wind farms that are considered relevant in the cumulative assessment, as shown in **Figures 9.18 to 9.30**. These show the extent of visibility of each wind farm in conjunction with the Revised Consented Development and are referred to in the following detailed assessments.
- 9.12.9 The cumulative sites are shown in the cumulative wirelines for each of the representative viewpoints in Figures **9.37 to 9.54**. In these wirelines, the Revised Consented Development turbines are shown in red; operational and under-construction wind farms are shown in blue; consented wind farms are shown in purple, and application wind farms are shown orange.
- 9.12.10 In some instances, wind farms show up in the wirelines although they are beyond their own study area radius. Where this occurs, the wind farm is not included in the written assessment as it lies outwith its own study area radius



and is, therefore, considered to lie beyond the radius within which it may contribute to a significant cumulative effect.

#### Assessment of cumulative effects on landscape character

9.12.11 The assessment of cumulative effects on landscape character covers the same receptor groups as the assessment of effects on landscape character carried out previously in this chapter. There are two groups:

- Landscape character types; and
- Designated areas.

9.12.12 The preliminary assessment in **Appendix 9.D** has indicated that four of the landscape character types and none of the designated areas have potential to undergo significant cumulative effects as a result of the addition of the Revised Consented Development. These are:

- Sweeping Moorland - Broubster LCT;
- Sweeping Moorland - West LCT;
- Moorland Slopes and Hills - Beinn Ratha LCT; and
- Mixed Agriculture and Settlement – North-East LCT.

9.12.13 The cumulative effects of the Revised Consented Development on these receptors are assessed in full below. The rest of the landscape character types and designated areas do not have potential to undergo significant cumulative effects as a result of the Revised Consented Development, due largely to one or a combination of the following reasons;

- limited visibility and influence of the Revised Consented Development as shown on ZTVs and wirelines;
- limited visibility and influence of other wind farm developments as shown on cumulative ZTVs and wirelines; and
- the distance of the Revised Consented Development and other wind farm sites from the receptors, and the resultant limited influence that they will have.

#### Sweeping Moorland - Broubster

9.12.14 The Broubster LCT of Sweeping Moorland has been assessed as having a medium sensitivity, a medium-high magnitude of change in the north-west and medium elsewhere, and a significant effect resulting from the Revised Consented Development in the north-west and not significant elsewhere.

**Table 9.10: Scenario 1 and 2 wind farms relevant to Sweeping Moorland – Broubster**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	1.2 km +	Visibility almost continuous across LCT.

Forss	Operational	6T x 78m	5.5 km +	Visibility limited to small patches within southern part of LCT beyond 9.5km
Hill of Lybster	Consented	1T x 79m	5.5 km +	Visibility limited to small patches within southern part of LCT beyond 9.5km
Drum Hollistan	Application	7T x 125m	7km +	Patchy visibility occurs across this LCT, albeit more concentrated in the north.
Ackron	Application	12T x 149.9m	8km +	Patchy visibility occurs across this LCT, albeit more concentrated in the north.
Limekiln Extension	Application	5T x 149.9m	2.5km +	Visibility is fairly extensive across this LCT.
Forss III	Application	2T x 125m	6km +	Patchy visibility occurs across this LCT.

### *Cumulative Scenario 1*

- 9.12.15 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. The cumulative developments of relevance to this assessment are presented in the Table 9.10 above.
- 9.12.16 Forss, Hill of Lybster and Baillie Hill wind farms are the three developments that will have an influence on the cumulative situation of this LCT. While the ZTV in **Figure 9.22** shows the cluster of operational, under construction and consented wind farm developments to the south-east give rise to patches of visibility in this LCT, at a distance of beyond 17 km and with visibility typically comprising blades and tips mostly set behind landform and forest cover, the influence of these developments on the character of this LCT will be limited.
- 9.12.17 Theoretical visibility of Baillie Hill Wind Farm is almost continuous across the LCT, while theoretical visibility of Forss and Lybster wind farms occur only as patches in the southern part. The close proximity of Hill of Lybster and Forss and similar scale of turbines means that they appear as one development. Although Forss / Lybster is located in the Open Intensive Farmland, from this LCT, all three wind farms appear to be located in Mixed Agriculture and Settlement. Forss / Lybster and Baillie Hill sit as separate developments and with 21 turbines visible at the minimum range of 1.2 km, Baillie Hill Wind Farm is the larger of the two. Both sites appear relatively compact and well contained within their landscape setting. The subtle form of the valley landscape is orientated towards Baillie Hill Wind Farm, making it a prominent feature especially from the northern part of this LCT.
- 9.12.18 The addition of the Revised Consented Development will bring another large scale wind farm development within close proximity to this LCT. It will be seen within the neighbouring Coniferous Woodland Plantation and this will be seen to

extend the influence of wind farm development into a new landscape. Together, the Revised Consented Development and Baillie Hill Wind Farm will form large-scale developments in close proximity to the northern part of the LCT. In the middle and southern parts, the greater range means the influence of these developments diminishes and the influence of the wider, and largely undeveloped landscapes to the south and east, will increase.

- 9.12.19 In the north-west corner of the LCT, as defined by the boundaries of the LCT and the minor road to Shurrery, the magnitude of change was reported in 'Assessment of effects on landscape character' to be medium-high and the effect significant. The cumulative magnitude of change in this area will be **medium** as the Revised Consented Development is adding another close range and large scale development next to an area already influenced by close range and large-scale Baillie Hill Wind Farm on the opposite side. To the east of this area, Baillie Hill Wind Farm comes in even closer proximity and the Revised Consented Development in more distant proximity, such that the cumulative magnitude of change decreases to **medium-low**. To the south, the influence of both developments diminishes with distance and they become closer contained within the same direction from the LCT, causing the effect to drop to **medium-low** in the middle and then **low** in the southern part.

#### *Cumulative Scenario 2*

- 9.12.20 The application stage wind farms that will have an influence on Cumulative Scenario 2 include Drum Hollistan and Ackron to the west. The cumulative ZTVs in **Figures 9.26** and **9.27** show similar patterns of patchy visibility for both Drum Hollistan and Ackron across the Broubster Sweeping Moorland LCT from minimum distances of 7 km and 8 km respectively.
- 9.12.21 These application stage wind farms will have a lesser influence on this LCT than Baillie Hill Wind Farm owing to their greater separation distance, which means that they will be seen as more distant and comparatively smaller scale wind farms, with a lesser influence on the landscape character of this LCT. They will, nonetheless, increase the extent of the developed skyline surrounding this LCT by introducing a cluster to the north-west. It is in this context that the addition of the Revised Consented Development will give rise to a **medium** cumulative magnitude of change in the north-west corner of the LCT which reduces to **medium-low** or **low** further east and south as the influence from Baillie Hill Wind Farm strengthens and the influence from the Revised Consented Development weakens.

#### *Significance of cumulative effect*

- 9.12.22 In respect of both Scenario 1 and Scenario 2, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the Broubster Sweeping Moorland LCT will be **significant** in the north-west corner and **not significant** across the remaining area. The significant effect relates to the close proximity of this area to both the Revised Consented Development and Baillie Hill Wind Farm in Cumulative Scenario 1 and then with the additional influences from Drum Hollistan and Ackron wind farms in Cumulative Scenario 2. The north-west corner of the wider LCT will become characterised by this series of wind farms.

*Combined Development Cumulative Scenario 1 and Cumulative Scenario 2*

- 9.12.23 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1 and Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect in respect of both scenarios will be **significant** across the north-west of the LCU and **not significant** across all remaining parts.
- 9.12.24 In the north-west of the LCU, the addition of the Combined Development, to a cumulative situation in which Baillie Hill Wind Farm already has a strong influence, will lead to wind farm developments becoming one of the defining features of the landscape. In the remaining parts, in which the influence of the Revised Consented Development will be weaker, its addition will not lead to a cumulative significant effect.

Sweeping Moorland - West

- 9.12.25 The West LCT of Sweeping Moorland has been assessed as having a medium sensitivity in the north and a medium-high sensitivity in the south, a high magnitude of change to the west, medium-high or medium in the area to the north and south and negligible in the area to the west of the ridge, and a significant effect across the eastern half of the LCT between the A836 and Beinn nam Bad Mor resulting from the Revised Consented Development.

**Table 9.11: Scenario 1 and 2 wind farms relevant to Sweeping Moorland – West**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Forss	Operational	6T x 78m	7.5 km +	Almost contiguous with Limekiln visibility with exception of valley along eastern boundary of LCT.
Baillie Hill	Operational	21T x 110m	6 km +	Almost contiguous with Limekiln visibility with exception of valley along eastern boundary of LCT.
Hill of Lybster	Consented	1T x 79m	7.5 km +	Almost contiguous with Limekiln visibility with exception of valley along eastern boundary of LCT.
Strathly North	Operational	33T x 110m	10 km +	Inter-visibility only occurring along the Beinn Ratha / Clachgeal Hill ridgeline.
Drum Hollistan	Application	7T x 125m	Located in this LCT	Inter-visibility in north of LCT, none on east-facing side of Beinn Ratha and patches across the south.
Ackron	Application	12T x 149.9m	Located in this LCT	Inter-visibility in north of LCT, none on east-facing side of Beinn Ratha and patches across the south.
Limekiln Extension	Application	5T x 149.9m	2.5 km +	Inter-visibility across the eastern part of the LCT similar in extents to the Revised Consented Development.

Forss III	Application	2T x 125m	8 km +	Inter-visibility occurring across northern and eastern parts of LCT.
Strathy Wood	Application	13T x 180m	11 km +	Very limited intervisibility with intervening ridgeline forming a divide.
Strathy South	Application	39T x 200m	11 km +	Very limited inter-visibility with intervening ridgeline forming a divide.

### *Cumulative Scenario 1*

- 9.12.26 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. Those cumulative developments of relevance to this assessment are presented in the Table 9.11 above.
- 9.12.27 The cumulative ZTV in **Figure 9.21** indicates the limited inter-visibility that will occur between Strathy North and the Revised Consented Development, whereby it will be largely concentrated to a line along the Beinn Ratha to Clachgeal Hill ridgeline with some additional patches around Cnoc bad Mhairtein and Cnoc an Fhuarain Bhain. While Strathy North establishes wind farm development as an influence across this south-west sector, its limited inter-visibility with the Revised Consented Development combined with the presence of other closer range wind farm developments in the same north-east sector as the Revised Consented Development, limits its overall influence on the cumulative situation.
- 9.12.28 Forss, Hill of Lybster and Baillie Hill wind farms are the three developments to the north-east of the LCT, with visibility of all three largely coinciding with visibility of the Revised Consented Development. The most notable exception occurs along the eastern boundary of the LCT where the land falls away into Sandside Burn and the lower elevation means visibility of Baillie Hill and Forss wind farms is screened. Baillie Hill Wind Farm is seen at a minimum range of 5.9 km such that the turbines will appear as medium scale structures from the closest parts of the LCT, although more typically medium to small across much of the LCT, with ranges up to 10 km occurring from the southern parts of the LCT. Not only are Forss and Lybster wind farms located at a greater distance from the LCT, their smaller number and scale of turbines reduces the influence they have on the cumulative situation.
- 9.12.29 While Baillie Hill, Forss and Lybster wind farms are located in the same north-east sector, the scale of the Forss / Lybster turbines appears small in comparison to the Baillie Hill turbines. This is further accentuated by the location of Forss / Lybster tucked on the coastal edge behind the low hills of the Mixed Agriculture and Settlement LCT, where Baillie Hill Wind Farm is situated, and from where it presents a more prominent feature.
- 9.12.30 The location of the Revised Consented Development in the Coniferous Woodland Plantation will be seen to extend the influence of wind farm development into a new landscape. This landscape is closer to the Sweeping Moorland West LCT and as reported in 'Assessment of effects on landscape character' the introduction of such a close range wind farm will lead to a high magnitude of change and a significant effect within defined parts in the north-

west of the LCT. The effect in relation to the cumulative situation will be of a lesser extent owing to the comparatively limited influence of Baillie Hill, Forss and Lybster wind farms. The scale of the Baillie Hill, Forss and Lybster turbines will be tempered by the comparison with the closer range turbines of the Revised Consented Development.

- 9.12.31 The Revised Consented Development will, from most parts of the LCT, appear in the same north-east sector as the cumulative developments and this will leave the remaining sectors appearing largely undeveloped and, in so doing, reduce the cumulative magnitude of change. From the south of the LCT, where the sensitivity is highest and the distance is greater, the cumulative developments are seen in closest proximity to one another. From the north, where the sensitivity is lowest and the distance is also greater, they are seen more spread out, but still relatively contained within the wider view.
- 9.12.32 Taking all these factors into account the overall cumulative magnitude of change that the Revised Consented Development will have on the West Sweeping Moorland LCT will be **medium-low**. This relates chiefly to the containment of the cumulative developments within the north east sector and the collective relationship between the three developments, whereby the Revised Consented Development will form a strong influence with a much lesser influence from Baillie Hill, Forss and Hill of Lybster wind farms, which comparatively, will appear as background features.

#### *Cumulative Scenario 2*

- 9.12.33 The cumulative ZTVs show that almost continuous visibility of application wind farms Strathy Wood and Strathy South will occur across the western slopes of the Sweeping Moorlands West LCT. They also show that inter-visibility with the Revised Consented Development will be limited to the higher ground around the ridgelines between Sean Airigh and Clachgeal Hill and Cnoc Bad Mhairtein and Cnoc an Fhuarain Bhain and in patches to the north of this second ridge. From these areas, these wind farms will be seen in the opposite sector to the Revised Consented Development. Both will be visible to the left of Strathy North, seen to variable extents owing to the changing intervening landform. Strathy Wood and Strathy South will form a continuation of the horizontal extent of Strathy North, such that they will appear as an extension to the operational wind farm.
- 9.12.34 Strathy Wood and Strathy South will add to the visible extent of wind farm development from a large part of the LCT, albeit from a limited extent in which inter-visibility with the Revised Consented Development will occur. They will be seen in the same sector as, and in close association with the operational Strathy North. Their influence on the cumulative situation will be limited owing to the limited extent of inter-visibility across the LCT as a whole and the incremental increase they make to the cumulative situation in a sector where operational Strathy North already occurs.
- 9.12.35 In contrast, application stage Drum Hollistan and Ackron wind farms will have a much more notable influence on the cumulative situation owing to their location in this LCT. They will be located in the northern part of this Sweeping Moorland LCT, set a minimum of 3 km and 5 km respectively to the north-west



the Revised Consented Development. With Drum Hollistan comprising seven turbines at 125 m and Ackron comprising 12 turbines at 149.9 m, combined, they will present a concentration of wind farm development in this northern part of the LCT.

- 9.12.36 The addition of the Revised Consented Development will give rise to a **medium-high** magnitude of change in the northern part of the LCT. It will be located on the eastern boundary of the LCT and inter-visibility with Drum Hollistan and Ackron will be almost continuous in the northern part. All three wind farms will be seen in close proximity and the Revised Consented Development will extend the influence into the Coniferous Woodland Plantation LCT to the east and south-east.
- 9.12.37 Beinn Ratha and the ridgeline that extends south through Clachgeal Hill forms something of a divide in respect of intervisibility, such that Drum Hollistan and Ackron are typically visible on the west and the Revised Consented Development is visible on the east. Inter-visibility resumes across the southern part of the LCT, although with the influence from all three wind farms reduced by their greater separation distance and also a stronger influence coming from the broad extent of largely undeveloped Sweeping Moorland and Flat Peatland to the south. In these areas the cumulative magnitude of change will be **medium-low** or **low**.

*Significance of cumulative effect*

- 9.12.38 In respect of Cumulative Scenario 1, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the West Sweeping Moorland LCT will be **not significant**. The addition of the Revised Consented Development will not result in the LCT being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent across a large part of the LCT.
- 9.12.39 In respect of Cumulative Scenario 2, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the West Sweeping Moorland LCT will be **significant** in the northern part and not significant across the remainder of the LCT. The addition of the Revised Consented Development will result in wind farms becoming one of the main characterising features in the northern part of the LCT.

*Combined Development Cumulative Scenario 1*

- 9.12.40 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. While the addition of the Combined Development will give rise to a cumulative interaction with Baillie Hill Wind Farm, the comparatively weak influence of the more distant Baillie Hill Wind Farm will ensure that the cumulative effect is not significant.

*Combined Development Cumulative Scenario 2*

- 9.12.41 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will

be **significant** in the northern part and **not significant** across all remaining parts. In the northern part of the LCU, the significant cumulative effect will arise as a result of the strong influence from application stage Drum Hollistan and Ackron, which will be located in this LCU and the strong influence from the Combined Development located to the immediate east. In the southern part of the LCU, the influence from Drum Hollistan and Ackron, as well as the Combined Development will weaken owing to an increase in separation distance and the screening effect of intervening landform, such that the cumulative effect will be not significant.

#### Moorland Slopes and Hills – Beinn Ratha

9.12.42 The Beinn Ratha LCT of Moorland Slopes and Hills has been assessed as having a medium sensitivity, a medium-high magnitude of change and a significant effect resulting from the Revised Consented Development.

**Table 9.12: Scenario 1 and 2 wind farms relevant to Moorland Slopes and Hills– Beinn Ratha**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Forss	Operational	6T x 78m	9 km +	Visibility almost continuous across eastern slopes.
Hill of Lybster	Consented	1T x 79m	9 km +	Visibility almost continuous across eastern slopes.
Baillie Hill	Operational	21T x 110m	6 km +	Visibility almost continuous across eastern slopes.
Strathy North	Operational	33T x 110m	12 km +	Visibility almost continuous across western slopes.
Drum Hollistan	Application	7T x 125m	1 km +	Limited combined visibility occurring as narrow strip on ridge and north edge of LCT.
Ackron	Application	12T x 149.9m	2 km +	Limited combined visibility occurring as narrow strip on ridge and north edge of LCT.
Limekiln Extension	Application	5T x 149.9m	3.5 km +	Inter-visibility across east facing slopes.
Forss III	Application	2T x 125m	8km +	Inter-visibility across east facing slopes.
Strathy Wood	Application	13T x 180m	11 km +	Visibility across west facing slopes, with intervisibility limited to ridgeline.
Strathy South	Application	39T x 200m	13 km +	Visibility across west facing slopes, with intervisibility limited to ridgeline.

#### *Cumulative Scenario 1*

9.12.43 The addition of the Revised Consented Development to the operational and consented wind farms is considered in this cumulative assessment. Those

cumulative developments of relevance to this assessment are presented in the table above.

- 9.12.44 Those wind farms most relevant to the assessment of cumulative effects on the Beinn Ratha LCT include the cluster to the north-east comprising Baillie Hill, Forss and Hill of Lybster, as well as Strathy North to the west. Other more distant wind farms are visible from this LCT, with a concentration occurring to the east which includes operational Causeymire at a range of 20 to 22km, with one operational and three further consented wind farm developments located in the same cluster. Causeymire Wind Farm is visible at a distance of approximately 20 to 22km to the south-east, seen as a collection of small scale turbines set in a mix of Flat Peatlands LCT and Sweeping Moorlands LCT. These distant landscapes have no special connection with the Beinn Ratha Moorland Slopes and Hills LCT and therefore have a very limited influence on its character other than as a part of the wider landscape setting. The presence of the turbines in these landscapes will similarly have little influence other than establishing wind farm development as a component of the wider setting.
- 9.12.45 Forss, Hill of Lybster and Baillie Hill wind farms are the closest to this LCT and therefore will have the greatest influence on the cumulative situation. Baillie Hill Wind Farm is visible between the range of 6.2 and 7.4km. Visibility is almost continuous across the eastern half of the LCT, coinciding largely with that of the Revised Consented Development, as well as Forss / Hill of Lybster. An exception occurs across the eastern margin of the LCT where visibility of Baillie Hill, Forss and Hill of Lybster is screened by intervening landform. Baillie Hill Wind Farm is seen set in the North-east Mixed Agriculture and Settlement LCT. It appears relatively compact and well contained within its landscape setting. The turbines are seen as medium scale elements, albeit their scale appearing at variance with the small scale of the hills and land use patterns.
- 9.12.46 The addition of the Revised Consented Development will bring wind farm development into close proximity of the Beinn Ratha LCT. It will be seen as the closest range example and the large scale of the turbines will give rise to a high magnitude of change and a significant effect, as reported in Assessment of effects on landscape character. The cumulative magnitude of change will be **medium** in respect of the following factors.
- 9.12.47 In assessing the cumulative magnitude of change, the key consideration has been the relationship between the Revised Consented Development and Baillie Hill Wind Farm. The factors which add to the cumulative magnitude of change include; the location of the Revised Consented Development in a different LCT from Baillie Hill Wind Farm, which will look to extend the influence of wind farm development; the difference in perceived scale between the closer range Revised Consented Development and the more distant Baillie Hill Wind Farm which will reduce the sense of unity; and the difference in extent, where the Revised Consented Development, because of its close range is seen to occupy most of the north-easterly sector.
- 9.12.48 The factors which detract from the cumulative magnitude of change include; the concentration of wind farm development within the sector to the north-east of the LCT, which helps to contain its extent, group the developments together and keep much of the remaining landscapes around the LCT relatively free

from wind farm development; the similar number of turbines between the Revised Consented Development and Baillie Hill Wind Farm, which makes them appear associated as a pair, despite the difference in proximity; the location of the Revised Consented Development and Baillie Hill Wind Farm in modified landscapes, albeit one is afforested and the other farmed; and the similarities in the appearance of the proposed turbines and Baillie Hill Wind Farm turbines which are similarly proportioned and laid out in a similarly loose pattern across the landscape.

#### *Cumulative Scenario 2*

- 9.12.49 Strathy Wood and Strathy South will add to the visible extent of wind farm development from a limited extent of the LCT confined to patches along the ridgeline. They will be seen in the same sector as, and in close association with the operational Strathy North. While these developments will add to the cumulative situation within which the Revised Consented Development will be added, the cumulative magnitude of change will be limited.
- 9.12.50 In contrast, application stage Drum Hollistan and Ackron wind farms will have a much more notable influence on the cumulative situation owing to their location a minimum of 3 km and 4 km to the north of this LCT. They will also be located a minimum of 3 km and 5 km respectively to the north-west the Revised Consented Development. With Drum Hollistan comprising seven turbines at 125 m and Ackron comprising 12 turbines at 149.9 m, combined, they will present a concentration of wind farm development to the north of this LCT.
- 9.12.51 The addition of the Revised Consented Development will give rise to a **medium-high** magnitude of change in the north-eastern part of this LCT. It will be located close to the eastern boundary of the LCT and inter-visibility with Drum Hollistan and Ackron will occur across the north-eastern part. All three wind farms will be seen in close proximity and the Revised Consented Development will extend the influence into the Coniferous Woodland Plantation LCT to the east and south-east.
- 9.12.52 Beinn Ratha and the ridgeline that extends south through Clachgeal Hill forms something of a divide in respect of intervisibility, such that Drum Hollistan and Ackron are typically visible on the west and the Revised Consented Development is visible on the east. Where there is no inter-visibility, the cumulative magnitude of change reduces to **low**.

#### *Significance of cumulative effect*

- 9.12.53 In respect of Cumulative Scenario 1, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the Beinn Ratha Moorland Slopes and Hills LCT will be **not significant**. The addition of the Revised Consented Development will not result in the LCT being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent across a large part of the LCT. This relates chiefly to the concentration of the cumulative developments in the north-east sector and the comparatively limited influence of the other cumulative developments on the cumulative situation.

- 9.12.54 In respect of Cumulative Scenario 2, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the Moorland Slopes and Hills LCT will be **significant** in the north-eastern part and **not significant** in all remaining parts. The addition of the Revised Consented Development will result in wind farms becoming one of the main characterising features in the north-eastern part of this small LCT.

*Combined Development Cumulative Scenario 1*

- 9.12.55 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. While the addition of the Combined Development will give rise to a cumulative interaction with Baillie Hill Wind Farm, the comparatively weak influence of the more distant Baillie Hill Wind Farm and its containment within the wider landscape will ensure that the cumulative effect is not significant.

*Combined Development Cumulative Scenario 2*

In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** in the north-eastern part and **not significant** across all remaining parts of this small LCU. In the north-eastern part of the LCU, the significant cumulative effect will arise as a result of the strong influence from application stage Drum Hollistan and Ackron, located to the immediate north, and the strong influence from the Combined Development, located to the immediate east. In the remaining parts of the LCU, the influence from Drum Hollistan and Ackron, as well as the Combined Development will weaken owing to the screening effect of Beinn Ratha itself and the cumulative effect will be not significant. Mixed Agriculture and Settlement – North-East

- 9.12.56 The North-East LCT of Mixed Agriculture and Settlement has been assessed as having a medium-low sensitivity, a variable magnitude of change, and a significant effect within an approximate 4 km radius to the north and east and a not significant effect across the remaining parts, resulting from the Revised Consented Development.

**Table 9.13: Scenario 1 wind farms relevant to Mixed Agriculture and Settlement– North-East**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Forss	Operational	6T x 78m	0.3 km +	Visibility concentrated in northern part where close range, becoming increasingly patchy towards southern part.
Hill of Lybster	Consented	1T x 79m	0.3 km +	Visibility concentrated in northern part where close range, becoming increasingly patchy towards southern part.
Baillie Hill	Operational	21T x 110m	Located in this LCT.	Baillie Hill is located in this LCT so visibility is close range and continuous across much of

				northern part becoming patchier towards the south.
Camster	Operational	25T x 120m	1 km +	Camster is located to the south-east so visibility concentrated within the south-east of the LCT and not any close range inter-visibility with the Revised Consented Development.
Causeymire	Operational	21T x 100m	1.5 km +	Visibility concentrated in the southern half where Causeymire will be close range, becoming patchier across northern part of LCT.
Achlachan	Operational	5T x 110m	0.5 km +	Visibility concentrated in the southern half where Causeymire will be close range, becoming patchier across northern part of LCT.
Halsary	Operational	15T x 112m	1.5 km +	Visibility concentrated in the southern half where Causeymire will be close range, becoming patchier across northern part of LCT.
Bad a Cheo	Operational	13 x 112m	2.0 km +	Visibility concentrated in the southern half where Causeymire will be close range, becoming patchier across northern part of LCT.
Drum Hollistan	Application	7T x 125m	2.5km +	Visibility is fairly extensive across this LCT.
Ackron	Application	12T x 149.9m	3km +	Visibility is fairly extensive across this LCT.
Limekiln Extension	Application	5T x 149.9m	1km +	Visibility is fairly extensive across this LCT.
Forss III	Application	2T x 125m	1km +	Patchy visibility occurs across this LCT.

### *Cumulative Scenario 1*

- 9.12.57 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. Those cumulative developments of relevance to this assessment are presented in Table 9.13 above.
- 9.12.58 The greatest influence on the cumulative situation is operational Baillie Hill Wind Farm, which is located in this LCT. Operational Forss Wind Farm, and consented Hill of Lybster lie to the immediate north and their close proximity to one another, coupled with similar scale means that they will appear as one development.
- 9.12.59 Baillie Hill Wind Farm is located in the North-east Mixed Agriculture and Settlement LCT and therefore has direct as well as indirect effects on the landscape character. It is situated on the low hills which lie to the north of the settlements of Shebster and Westfield. It comprises 21 turbines and the extent of its visibility is almost continuous across this north-western part of the LCT. The location of Baillie Hill Wind Farm in this LCT means that for many of the close range parts, the turbines appear as large scale elements and with the scale of the landscape being small and settled, this gives rise to variances in scale and character.



- 9.12.60 Forss and Hill of Lybster wind farms lie in the adjoining Open Intensive Farmland LCT, which is situated along the northern coastal edge, where Dounreay Nuclear Power Plant is also located. Although smaller in terms of number and size of turbines, than Baillie Hill, Forss and Lybster wind farms presents a highly visible feature along this coastal edge. The extent of their visibility tends to be concentrated across the northern half of the North-east Mixed Agriculture and Settlement LCT with visibility becoming patchier with increased distance to the south.
- 9.12.61 The cluster of Causeymire, Halsary, Achlachan and Bad a Cheo wind farms present a slightly more distant influence on the cumulative situation, located between Sweeping Moorland LCT and Flat Peatland LCT in an area which abuts the southern edge of the North-east Mixed Agriculture and Settlement LCT. Camster Wind Farm lies further south-east, located between Sweeping Moorland LCT and Coniferous Woodland Plantation LCT. The location of these developments in LCTs distinctly different from the Mixed Agriculture and Settlement LCT disassociates them from the development pattern formed by Baillie Hill and Forss wind farms and weakens their influence on the character of the LCT.
- 9.12.62 The addition of the Revised Consented Development will have the effect of introducing a large-scale wind farm development in a different LCT and in a different direction to the other cumulative developments, relative to the Mixed Agriculture and Settlement LCT. The extent of visibility of the Revised Consented Development is almost continuous across the western half of the LCT, similar to that of Baillie Hill Wind Farm, but with the exception of a patch to the north and east of Baillie Hill Wind Farm, where there is no visibility. Beyond the Forss Water the Revised Consented Development lies more than 7 km away and here its influence in relation to the other cumulative developments gradually diminishes. Baillie Hill Wind Farm is located in the area to the west of Forss Water and this tends to define the landscape character of this close range area. This largely diminishes the influence of the Revised Consented Development by making it appear comparatively small in scale, whereas without this comparison and seen between a range of 4-8km, the development turbines will otherwise be seen as a medium to small scale structures.
- 9.12.63 In the area to the west of Shebster and south of Dounreay and Reay, the Revised Consented Development will be seen at its closest. In contrast to Baillie Hill Wind Farm, it will be seen to extend the influence of wind farm development into the LCT of the Limekiln Coniferous Woodland Plantation and this will increase the cumulative magnitude of change. In the area to the north of the Revised Consented Development and south of Reay the proposed turbines will be seen as large scale elements which will give rise to a high magnitude of change and a significant effect as reported in the 'Assessment of effects on landscape character'.
- 9.12.64 The Revised Consented Development will occur to the south, Baillie Hill Wind Farm will occur to the east and Forss Wind Farm will occur to the north-east, such that collectively they will be seen to occupy much of this south to north-east sector. The remaining extent around this area to the north and west will

appear largely undeveloped and will continue to provide a contrast in character. Baillie Hill Wind Farm will appear smaller in scale in contrast to the Revised Consented Development - owing to its greater distance from this area. It will be seen mostly set behind Baillie Hill and therefore not appear as prominent in the wider landscape as the Revised Consented Development. Forss will appear as an even smaller scale feature owing to its more distant location and smaller scale turbines. The cumulative magnitude of change will be **medium-low** in this area, as Baillie Hill and Forss wind farms will not present as strong an influence on the character of the landscape as the Revised Consented Development, which will act as the primary influence.

- 9.12.65 In the area which lies between the Revised Consented Development and Baillie Hill Wind Farm, which can be defined by Achvarasdal in the west and Shebster in the east, the boundary of the LCT in the south and the ridgeline of the hill of Shebster in the north. This small area will undergo a **medium** cumulative magnitude of change.

#### *Cumulative Scenario 2*

- 9.12.66 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment. Those cumulative developments of relevance to this assessment are presented in Table 9.13 above.
- 9.12.67 The application stage wind farms of relevance to the Cumulative Scenario 2 assessment include Drum Hollistan, and Ackron. These wind farms form a cluster in the northern part of the Sweeping Moorland LCT at minimum distances of 2.5 km and 3 km from the western most part of the Mixed Agriculture and Settlement LCT. These application stage wind farms increase the influence from this type of development on the north-western part of this LCT. While the Cumulative Scenario 1 assessment found that a medium-high cumulative magnitude of change extended only as far west as Achvarasdal, the inclusion of Drum Hollistan and Ackron wind farms on the western side of the LCT, will mean that the medium-high cumulative magnitude of change will extend further to the western boundary of the LCT at Reay.
- 9.12.68 In respect of the eastern extent of the medium-high cumulative magnitude of change, this will remain at Shebster as beyond this, the influence from the Revised Consented Development weakens. Although the influence of Baillie Hill Wind Farm strengthens in this eastern part of the LCT, the effect will be associated with this wind farms rather than the cumulative effects with the Revised Consented Development.

#### *Significance of cumulative effect*

- 9.12.69 In respect of Cumulative Scenario 1, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the North-East Mixed Agriculture and Settlement LCT will be **significant** in the small area defined by Achvarasdal in the west and Shebster in the east, the boundary of the LCT in the south and the ridgeline of the hill of Shebster in the north, and **not significant** in all remaining parts of the LCT.
- 9.12.70 In respect of Cumulative Scenario 2, the cumulative effect that will result from the addition of the Revised Consented Development to the character of the

North-East Mixed Agriculture and Settlement LCT will be **significant** in the small area defined by Reay in the west and Shebster in the east, the boundary of the LCT in the south and the ridgeline of the hill of Shebster in the north, and **not significant** in all remaining parts of the LCT.

*Combined Development Cumulative Scenario 1*

- 9.12.71 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** in the small area defined by Achvarasdal in the west and Shebster in the east, the boundary of the LCT in the south and the ridgeline of the hill of Shebster in the north, and **not significant** across all remaining parts.
- 9.12.72 The Combined Development will add to a cumulative situation in which there is already a strong influence from close range Baillie Wind Farm. The location of Baillie Hill Wind Farm to the north-east and the Combined Development to the south-west, means that the influence from close range wind farm developments will occur across the widest possible extents around this LCU. The cumulative effect of the Combined Development across the remainder of the LCU will be moderated by the weaker influence with the greater influence and the comparatively stronger influence from Baillie Hill Wind Farm.

*Combined Development Cumulative Scenario 2*

- 9.12.73 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** in the small area defined by Reay in the west and Shebster in the east, the boundary of the LCT in the south and the ridgeline of the hill of Shebster in the north, and **not significant** across all remaining parts. While the main cumulative interaction will be between the Combined Development and Baillie Hill Wind Farm, there will be an additional influence from application stage Drum Hollistan and Ackron in the middle range to the north-west. This will draw the extent of the cumulative effect further west from Achvarasdal to Reay, while the other extents will remain the same.

Assessment of cumulative effects on views

- 9.12.74 The assessment of cumulative effects on views is carried out using the same two categories of effects on views as described previously in this chapter:
- Assessment of effects on representative viewpoints; and
  - Assessment of effects on principal visual receptors.
- 9.12.75 The detailed methodology for the assessment of cumulative effects on views is described in **Appendix 9.A**.
- 9.12.76 The first stage in the cumulative assessment of the representative viewpoints and principal visual receptors is a preliminary assessment to ascertain which of them have the potential to undergo significant cumulative effects as a result of the addition of the Revised Consented Development. This process is carried out through a study which examines the visibility of the Revised Consented Development in conjunction with other wind farm sites from the viewpoints and

principal visual receptors, using the cumulative ZTVs and wirelines. A table that shows this process, including a brief description of the assessment for each representative viewpoint and principal visual receptor, is presented in

**Appendix 9.D.**

9.12.77 This filtering process has indicated that eleven of the representative viewpoints and six of the principal visual receptors have potential to undergo significant cumulative effects as a result of the addition of the Revised Consented Development. These are:

- Viewpoint 1: Drum Hollistan Layby, A836;
- Viewpoint 2: Reay Footpath;
- Viewpoint 3: Reay Church;
- Viewpoint 4: Shebster;
- Viewpoint 5: Sandside Bay;
- Viewpoint 6: A836 / Dounreay Road Junction;
- Viewpoint 8: Angler's Car Park, Loch Calder;
- Viewpoint 9: Ben Dorrery;
- Viewpoint 14: Borlum Hill;
- Viewpoint 15: Beinn Ratha;
- Viewpoint 16: Shurrery;
- Reay;
- Shebster;
- A836;
- Shebster Minor Road;
- NCR1; and
- CA 11.02 / CA 11.10.

9.12.78 The cumulative effects of the Revised Consented Development on the viewpoints and visual receptors are assessed in full below. Where a principal visual receptor is represented by a viewpoint, reference is made to the viewpoint assessment to ensure continuity in the assessment of cumulative effects.

9.12.79 The rest of the viewpoints, settlements, routes and visitor attractions do not have potential to undergo significant cumulative effects, due largely to the limited visibility of the Revised Consented Development and / or other wind farm sites as shown on cumulative ZTVs and wirelines, and the distance of the Revised Consented Development and other sites from the viewpoints and receptors.

Viewpoint 1 – A836, Drum Hollistan Layby

9.12.80 This viewpoint has been assessed as having a medium sensitivity, a medium-high magnitude of change, and a significant effect resulting from the operational phase of the Revised Consented Development.

**Table 9.14: Cumulative Scenario 1 and 2 wind farms relevant to Viewpoint 1**

Wind farm	Status	Number / Size	Distance	Visibility

Forss	Operational	6T x 78m	9.94km	All six turbines visible to their full extent set next to coastal edge.
Baillie Hill	Operational	21T x 110m	8.74 km	All 21 turbines visible set along low ridgeline, some partially obscured by landform.
Hill of Lybster	Consented	1T x 79m	10.44km	This single turbine appears as part of Forss owing to its close proximity and very similar size.
Drum Hollistan	Application	7T x 125m	0.95km	All 7 turbines are seen set on the low hills in close proximity to the viewpoint.
Ackron	Application	12T x 149.9m	2.06km	Only one tip is visible behind landform to the south.
Limekiln Extension	Application	5T x 149.9m	6.64km	All 5 turbines are readily visible inset from the coastal edge.
Forss III	Application	2T x 125m	10.35km	Both turbines are visible in cluster with Forss.

### *Cumulative Scenario 1*

- 9.12.81 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.82 Forss, Hill of Lybster and Baillie Hill wind farms are the three other developments visible from this viewpoint. They are seen at similar ranges and appear to be located in the same landscape of Mixed Agriculture and Settlement LCT, although Forss and Hill of Lybster wind farms are located in the neighbouring Open Intensive Farmland LCT. Forss and Hill of Lybster appear as the one development owing to their close proximity and similar size of turbines. They sit separate from Baillie Hill, which at a range of 8.74 km and with 21 turbines visible, is seen to be the larger of the three. Both sites appear relatively compact and well contained within their landscape setting, albeit with apparent variances in scale and character between Baillie Hill Wind Farm and its landscape setting.
- 9.12.83 The addition of the Revised Consented Development creates a new focus in the view on account of its closer range at 4.90km, which means that the turbines appear larger in scale, as well as the alignment of the layby, which orientates views in the direction of the Revised Consented Development. All 21 of the turbines are visible and are seen set in the Limekiln Coniferous Woodland Plantation LCT.
- 9.12.84 The Revised Consented Development is seen to extend the influence of Wind Farm development into the Coniferous Woodland Plantation LCT, which neighbours the Mixed Agriculture and Settlement LCT where Baillie Hill Wind Farm is located. This landscape does already contain electricity transmission lines and so is not completely undeveloped, although the turbines will present a more notable contrast owing to their larger scale and lighter colour. The

Revised Consented Development increases the extent of developed skyline visible from this viewpoint. These factors increase the magnitude of change.

- 9.12.85 Despite this difference in association with LCTs, there are some similarities which exist between the sites, more so between the Revised Consented Development and Baillie Hill Wind Farm, which help to present a more integrated appearance. Baillie Hill Wind Farm and the Revised Consented Development are similar in terms of the number of turbines, their location along visible ridgelines and their generally informal layout across the landscape. The closer range of the Revised Consented Development also has the effect of diminishing the scale and prominence of Baillie Hill and Forss wind farms.
- 9.12.86 The medium to close range of the Revised Consented Development means that it occupies a notable proportion of the view. Collectively, the three developments together occur within less than 90 degree of the view, with space in between separating each. While the view to the rear is limited by close range landform, there is still undeveloped space to the south towards Beinn Ratha and to the north towards the North Atlantic. The influence of the landscape prevails over the influence of the wind farms such that the addition of the Revised Consented Development does not lead to a view characterised primarily by wind farms. The overall cumulative magnitude of change will be **medium**.

#### *Cumulative Scenario 2*

- 9.12.87 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.88 In respect of Cumulative Scenario 2, the most notable wind farm will be application stage Drum Hollistan. It comprises seven turbines, each 125 m to blade tip, with the closest located 0.95 km to the south. This will make these turbines especially close in range and large in scale when seen from this viewpoint and adjacent sections of the A836. While the 12 Ackron turbines, each 149.9 m to blade tip, will also be present in this close range southerly sector, intervening landform ensures that only one blade will actually be visible from this viewpoint, thus limiting its influence on the cumulative situation.
- 9.12.89 Other application stage wind farms that will be visible from this viewpoint, include Forss III which comprises two turbines, each 125 m to blade tip, seen in a cluster with operational Forss at a minimum of 10.35 km. The cumulative wireline in **Figure 9.37c** also includes application stage Limekiln Extension, although this would not be built prior to Limekiln Wind Farm.
- 9.12.90 The addition of the Revised Consented Development to Cumulative Scenario 2 will give rise to a **medium** cumulative magnitude of change. It will be seen to add a further 21 turbines to a view in which there is already a close range influence from Drum Hollistan and middle range influences from Baillie Hill, Forss and Forss III. It will present an additional wind farm in an area of low afforested hills which will otherwise separate Drum Hollistan from Baillie Hill.
- 9.12.91 The magnitude of change will, however, be moderated by the favourable scale comparison that the closer range Drum Hollistan turbines present and which



reduces the perceived scale of the proposed turbines. Furthermore, the Revised Consented Development will be located in a relatively unremarkable section of the view, set back from the more sensitive coastal edge and set to the fore of the more pronounced sweeping moorlands and hills which characterise the hinterland. The view to the north and west will remain unaffected by wind farm development.

*Significance of cumulative effect*

- 9.12.92 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of both Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view.

*Combined Development Cumulative Scenario 1*

- 9.12.93 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the weaker influence from the more distant Baillie Hill and Forss wind farms, as well as the relatively contained appearance of the Combined Development amidst the wider landscape and seascape.

*Combined Development Cumulative Scenario 2*

- 9.12.94 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the close proximity of Drum Hollistan to the viewpoint, which makes it the main feature in the view and which comparatively reduces the perceived scale and influence of the Combined Development.

Viewpoint 2 – Reay Footpath

- 9.12.95 This viewpoint has been assessed as having a high sensitivity, a high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.15: Cumulative Scenario 1 and 2 wind farms relevant to Viewpoint 2**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Drum Hollistan	Application	7T x 125m	2.53km	All 7 turbines readily visible and all seen to almost their full extents.
Ackron	Application	12T x 149.9m	4.41km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform.

Limekiln Extension	Application	5T x 149.9m	4.05	Largely screened by intervening landform such that only 1 blade is readily visible.
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### *Cumulative Scenario 1*

- 9.12.96 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.97 As no other operational, under construction or consented wind farms are visible from this viewpoint, in respect of Cumulative Scenario 1, there will be no cumulative effect.

### *Cumulative Scenario 2*

- 9.12.98 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.99 In respect of Cumulative Scenario 2, there will be only two application stage wind farms readily visible. Drum Hollistan and Ackron will both be visible to the west, seen at minimum distances of 2.53 km and 4.41 km. This will make these turbines relatively close in range and large in scale when seen from this viewpoint and adjacent sections of the footpath. Application stage Ackron is located to the immediate rear of Drum Hollistan such that they will be perceived as one wind farm. While nine of Ackron's turbines will be visible, the extent of their visibility will be reduced to varying degrees by the intervening landform, and they will mostly sit within the horizontal extent of Drum Hollistan Wind Farm. All 7 of the Drum Hollistan turbines will be visible, seen set on the edge of the sweeping moorland landscape to the west of the village.
- 9.12.100 The cumulative wireline in **Figure 9.38b** also includes application stage Limekiln Extension, although this would not be built prior to Limekiln Wind Farm. This is also largely screened by intervening landform such that only one blade will be visible.
- 9.12.101 The addition of the Revised Consented Development to Cumulative Scenario 2 will give rise to a **medium** cumulative magnitude of change. It will be seen to add a further 21 turbines to a view in which there is already a relatively close range influence from Drum Hollistan and Ackron. It will present wind farm development in the southerly sector of the view, which is characterised by low afforested hills, extending the influence of this type of development from the westerly sector, where Drum Hollistan and Ackron are located on the edge of the sweeping moorland.
- 9.12.102 The magnitude of change will, however, be moderated by the relatively contained extent of all the developments, which ensures that they are seen as features within a wider landscape setting, rather than a characterising feature of the wider landscape. The Revised Consented Development and the cluster comprising Drum Hollistan and Ackron, both appear relatively well contained and with sufficient separation space between them to ensure the wider

landscape takes precedence in terms of the characterisation of this view. Furthermore, there is continuity between the perceived scale of the Revised Consented Development and the application stage wind farms, which helps to present a co-ordinated appearance. The influence of the Revised Consented Development is also tempered by its comparatively lower lying and less exposed location, as well as partial screening by enclosing woodland cover.

*Significance of cumulative effect*

9.12.103 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view. This is due to the relatively contained extent of each of the wind farm developments and the predominance of the wider landscape setting.

*Combined Development Cumulative Scenario 2*

9.12.104 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the relatively contained horizontal extents of the Combined Development and the application stage Drum Hollistan and Ackron, which ensures that the wider landscape remains as the defining feature of the view.

Viewpoint 3 – Reay Church

9.12.105 This viewpoint has been assessed as having a medium sensitivity, a high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.16: Cumulative Scenario 1 and 2 wind farms relevant to Viewpoint 3**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Forss	Operational	6T x 78m	7.02km	Theoretical visibility is of three blades and three tips, whereas actual visibility will be reduced by intervening built form and vegetation.
Baillie Hill	Operational	21T x 110m	5.26km	Theoretical visibility is of 16 turbines, whereas actual visibility will be limited by intervening built form and vegetation.
Hill of Lybster	Consented	1T x 79m	7.36km	This single turbine appears as part of Forss owing to its close proximity and very similar size.
Drum Hollistan	Application	7T x 125m	3.25km	All 7 turbines readily visible and all to almost their full extents.

Ackron	Application	12T x 149.9m	5.12km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform.
Limekiln Extension	Application	5T x 149.9m	3.89km	Largely screened by intervening landform such that only 3 tips and 2 blades are visible.
Forss III	Application	2T x 125m	7.30km	Not readily visible owing to screening effect of tree cover and built form.

### *Cumulative Scenario 1*

- 9.12.106 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.107 Forss, Hill of Lybster and Baillie Hill wind farms are the three other developments theoretically visible from this viewpoint. Visibility of Forss and Hill of Lybster wind farms is partly obscured by intervening built form and tree cover, which at a range of 7.02 km and 7.36 km, and with smaller turbines, limits their influence on the cumulative situation. Baillie Hill Wind Farm is still fairly close range at 5.26 km, although its prominence in the view is similarly diminished, whereby the setting of the turbines behind the ridgeline of the Hill of Shebster and then partially screened by intervening buildings and tree cover, means they are seen mostly as blades and nacelles. While the blades will be eye-catching on account of their movement, the amount of artefacts, such as buildings and electricity transmission lines, in this sector of the view and at closer range, comparatively reduces the influence Baillie Hill Wind Farm will have on the view.
- 9.12.108 The introduction of the Revised Consented Development 3.34 km from the viewpoint will make it the closest range example of wind farm development. The openness of the view in this direction means that all 21 turbines will be visible, and the significance of this effect has been reported in the visual assessment.
- 9.12.109 The comparatively limited influence of the Baillie Hill Wind Farm on the cumulative situation will, however, mean that the in-conjunction effect of the Wind Farm developments will also be limited. Baillie Hill Wind Farm will be visible but will not form a highly prominent feature from this viewpoint. The cumulative magnitude of change as a result of the Revised Consented Development will therefore be **medium**.

### *Cumulative Scenario 2*

- 9.12.110 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.111 Application stage Drum Hollistan and Ackron wind farms, along with Baillie Hill Wind Farm will have the most notable influence in Cumulative Scenario 2. The

seven Drum Hollistan turbines will be seen as a prominent feature owing to their location along the northern ridge of the sweeping moorlands. At a range of 3.25 km, these 125 m tall turbines will appear comparable in scale to the Revised Consented Development turbines, despite them being larger, albeit more distant also. Nine of the Ackron turbines will be located directly behind Drum Hollistan with some extension to the right and some screening from intervening landform. Their close proximity means that these two wind farms will be perceived as one development.

9.12.112 Other application stage wind farms that will be visible from this viewpoint, include Forss III which comprises two turbines, each 125 m to blade tip, located in a cluster with operational Forss, albeit likely to be screened by intervening tree cover and built form. The cumulative wireline in **Figure 9.39c** also includes application stage Limekiln Extension, although this would not be built prior to Limekiln Wind Farm. This is also largely screened by intervening landform.

9.12.113 The addition of the Revised Consented Development to Cumulative Scenario 2 will give rise to a **medium** cumulative magnitude of change. It will be seen to add a further 21 turbines to a view in which there is already a relatively close range influence from Drum Hollistan and Ackron, and a middle range influence from Baillie Hill. It will present wind farm development in the southerly sector of the view, extending the influence of this type of development from the westerly and easterly sectors, where the cumulative wind farms are, or will be, located.

9.12.114 The magnitude of change will, however, be moderated by the relatively contained extent of each of the developments, which ensures that they are seen as features within a wider landscape setting, rather than a characterising feature of the wider landscape. Each wind farm is relatively well contained and with sufficient separation space between them to ensure the wider landscape takes precedence in terms of the characterisation of this view. Furthermore, the main attraction from this area is north across the coastal edge and out across the North Atlantic, and this view will remain unaffected.

#### *Significance of cumulative effect*

9.12.115 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not** significant in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view. This is due to the relatively contained extent of each of the wind farm developments and the predominance of the wider landscape and seascape setting.

#### *Combined Development Cumulative Scenario 1*

9.12.116 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the relatively weak influence from Baillie Hill Wind Farm which will mean that the effect is mostly singular,

relating to the Combined Development, rather than cumulatively, relating to the effect of both developments.

#### *Combined Development Cumulative Scenario 2*

9.12.117 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the relatively contained horizontal extents of the Combined Development and the application stage Drum Hollistan and Ackron, which ensures that the wider landscape remains as the defining feature of the view.

#### Viewpoint 4 – Shebster

9.12.118 This viewpoint has been assessed as having a high sensitivity in relation to residents, a medium sensitivity in relation to road-users, a medium-high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.17: Cumulative Scenario 1 and 2 wind farms relevant to Viewpoint 4**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	0.88km	Close range visibility of 19 turbines seen to the rear of the viewpoint direction, full extent of some turbines obscured by intervening landform.
Causeymire	Operational	21T x 100m	18.88km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Camster	Operational	25T x 120m	27.78km	Very limited theoretical visibility owing to screening effect of intervening landform.
Achlachan	Operational	5T x 110m	17.65km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Halsary	Operational	15T x 112m	20.25km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Bad a Cheo	Operational	13T x 112m	20.28km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Drum Hollistan	Application	7T x 125m	7.88km	All 7 turbines readily visible albeit seen to varying degrees owing to screening effect of intervening landform.
Ackron	Application	12T x 149.9m	9.84km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform.



Limekiln Extension	Application	5T x 149.9m	3.07km	All 5 turbines seen set behind ridge and to fore of the Revised Consented Development
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### *Cumulative Scenario 1*

- 9.12.119 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.120 The limited visibility of Causeymire, Camster, Achlachan, Halsary and Bad a Cheo wind farms owing to intervening landform and forestry, means that they will have a very limited influence on the cumulative situation. Although this cluster of operational wind farms collectively cover a notable horizontal extent, the forestry at East Shebster screens visibility from this viewpoint. This assessment, therefore, focuses on the cumulative situation in relation to Baillie Hill Wind Farm.
- 9.12.121 Baillie Hill Wind Farm already establishes a baseline situation in which wind farm development is seen as a prominent feature from this viewpoint. This is due to its close proximity at a range of 0.88km and the position of the turbines on the elevated hillside to the north of Shebster. The Revised Consented Development will introduce turbines into the opposite direction of the view and although not seen at such close proximity (3.75 km), the effect on the viewpoint will be that large scale wind farm development will be seen to occupy a notable proportion of the view in both directions.
- 9.12.122 The introduction of the Revised Consented Development will be seen to increase the extent of Wind Farm development and draw it into the Coniferous Woodland Plantation LCT which has previously appeared largely undeveloped from this viewpoint. Both developments will be seen against the open skyline and this will also increase the cumulative magnitude of change.
- 9.12.123 The Revised Consented Development will be seen to add a further wind farm development within a wider view already characterised by Baillie Hill Wind Farm. It's location in the opposite direction to Baillie Hill Wind Farm could give the impression that the viewpoint is closed in by Wind Farm development on both sides and this will give rise to a **medium-high** cumulative magnitude of change.
- 9.12.124 There are a few factors which prevent the cumulative magnitude of change from being high and these include the similarities which exist between the developments, namely the size of the developments both in terms of the number and perceived scale of the turbines, and their generally informal arrangement across the landform. The cumulative situation also does not fully enclose the viewpoint and a relatively open aspect remains to the south east where distant cumulative wind farms are screened by closer range forestry.

### *Cumulative Scenario 2*

- 9.12.125 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.

9.12.126 Application stage Drum Hollistan and Ackron wind farms will be located a minimum of 7.88 km and 9.84 km respectively from this viewpoint. All seven Drum Hollistan turbines and all twelve Ackron turbines are shown in **Figure 9.40d** to be theoretically visible, although the screening effect of intervening landform means that only a few will be seen to their full extents and a few tips will be largely indiscernible. In comparison with the closer range Baillie Hill turbines, Drum Hollistan and Ackron turbines will appear relatively distant and small scale, such that their influence on the cumulative situation will be limited.

9.12.127 They will, nonetheless, add further development to the cumulative baseline and it is in this context that the addition of the Revised Consented Development will give rise to a **medium-high** magnitude of change, albeit largely due to the interaction with operational Baillie Hill Wind Farm, rather than the application stage wind farms.

*Significance of cumulative effect*

9.12.128 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **significant** in respect of both Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will result in the wider view being defined or characterised primarily by wind farms, and baseline characteristics will be altered by the proximity of the two large scale developments. This is chiefly due to the existing close proximity of Baillie Hill Wind Farm.

*Combined Development Cumulative Scenario 1*

9.12.129 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. The Combined Development will add to a cumulative situation in which there is already a strong influence from close range Baillie Wind Farm. The location of Baillie Hill Wind Farm to the north-east and the Combined Development to the south-west, means that the influence from close range wind farm developments will occur across the widest possible extents around this viewpoint.

*Combined Development Cumulative Scenario 2*

9.12.130 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. While the main cumulative interaction will be between the Combined Development and Baillie Hill Wind Farm, there will be an additional influence from application stage Drum Hollistan and Ackron in the middle range to the north-west. While this will add to the cumulative situation, the cumulative magnitude of change will remain medium-high.

Viewpoint 5 – Sandside Bay

9.12.131 This viewpoint has been assessed as having a medium sensitivity, a medium-high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.18: Scenario 1 wind farms relevant to Viewpoint 5 cumulative assessment**

Wind farm	Status	Number / Size Turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	6.17km	All 21 turbines will be visible seen set behind the ridge of the Hill of Shebster with notable stacking occurring.
Forss	Operational	6T x 78m	7.03km	All 6 of the turbines will be visible set on the north coastal edge.
Hill of Lybster	Consented	1T x 79m	7.53km	This single turbine appears as part of Forss owing to its close proximity and very similar size.
Limekiln Extension	Application	5T x 149.9m	4.93km	Blades of 5 turbines seen set behind ridgeline to left of Revised Consented Development.
Forss III	Application	2T x 125m	3.72km	All 2 turbines seen set in cluster with operational Forss.

*Cumulative Scenario 1*

9.12.132 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

9.12.133 Cumulative Scenario 1 comprises Baillie Hill, Hill of Lybster and Forss wind farms. They are all set at a comparable distance from the viewpoint although Forss and Hill of Lybster wind farms appear smaller, which is on account of the turbines being 78m and 79m to blade tip as opposed to 110m at Baillie Hill Wind Farm. There are also notably less turbines at Forss Wind Farm with Hill of Lybster appearing as a further one turbine extension. These developments are seen to occupy different landscapes; Baillie Hill set in the Mixed Agriculture and Settlement LCT and Forss / Hill of Lybster set in the Open Intensive Farmland, although this appears more as a coastal edge landscape from this viewpoint. Both appear as relatively well-contained developments, although Baillie Hill Wind Farm appears cluttered as a result of the stacking effect of the turbines in the view from this direction. The prominence of Baillie Hill Wind Farm makes a notable contribution to the cumulative situation.

9.12.134 The Revised Consented Development introduces a closer range example of Wind Farm development. The turbines appear larger in scale than the Baillie Hill turbines, on account of their closer proximity at a 4.32 km as well as the fuller extent at which they are seen; most being seen to almost the base of their towers while the towers. In contrast Baillie Hill turbines are partially screened by the intervening landform, which further reduces their perceived scale and prominence in the view. The Revised Consented Development is seen to extend the developed skyline, drawing development into a new sector of the view to the south of the viewpoint. It also draws development into a new landscape; the Limekiln Coniferous Woodland Plantation LCT which was previously unaffected by Wind Farm development, although the development of

an electricity transmission line is an existing feature, visible from this viewpoint to the foreground of the Revised Consented Development.

- 9.12.135 The introduction of the Revised Consented Development will make it the closest range example of Wind Farm development. The openness of the view in this direction means that all 21 turbines will be visible, and the significance of this effect has been reported in the visual assessment. The Revised Consented Development in combination with Baillie Hill and Forss / Hill of Lybster wind farms will be contained within the north-easterly to southerly sector of the view leaving the remaining extent of the wider panorama unaffected. The distance at which the developments are seen is far enough to ensure that they do not come to redefine the character of the landscape but remain as features within the landscape setting of the coastal edge. The cumulative magnitude of change will be **medium**.

*Cumulative Scenario 2*

- 9.12.136 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.137 The application stage developments which will be visible from this viewpoint include the two turbines of Forss III which will be seen as part of the group with operational Forss, and the five turbines of Limekiln Extension, although screened by intervening landform such that only blades will be visible. While the wireline in **Figure 9.41c** shows that a single blade of Drum Hollistan will theoretically be visible, the photograph shows that this will be screened by the intervening wall.
- 9.12.138 The main cumulative interaction will remain between Baillie Hill Wind Farm and the Revised Consented Development. The cumulative magnitude of change arising from the addition of the Revised Consented Development will, therefore, remain as **medium**, as assessed in respect of Cumulative Scenario 1.

*Significance of cumulative effect*

- 9.12.139 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view, including north across the seascape.

*Combined Development Cumulative Scenario 1*

- 9.12.140 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the contained extents of the Combined Development, Baillie Hill Wind Farm, and the other smaller scale or more distant operational or consented wind farms, which ensures the surrounding landscape and seascape remain as the defining features from this viewpoint.

*Combined Development Cumulative Scenario 2*

9.12.141 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. The limited visibility of the application stage wind farms will mean that the main cumulative interaction will be between the Revised Consented Development and Baillie Hill Wind Farm, which will not be significant owing to reason described in respect of Cumulative Scenario 1 above.

Viewpoint 6 – A836, Dounreay Road Junction

9.12.142 This viewpoint has been assessed as having a medium-low sensitivity, a medium magnitude of change, and a not significant effect resulting from the Revised Consented Development.

**Table 9.19: Scenario 1 and 2 wind farms relevant to Viewpoint 6**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	2.62km	21 turbines will be visible seen set behind the ridge of the Hill of Shebster at close proximity.
Drum Hollistan	Application	7 x 125m	6.85km	All 7 turbines will be visible seen set on the middle range hills.
Ackron	Application	12 x 149.9m	8.66km	All 12 turbines will be visible seen set on the middle range hills in similar extents to Drum Hollistan.
Limekiln Extension	Application	5 x 149.5m	4.93km	All 5 turbines will be partly screened by intervening landform and set to the left of the Revised Consented Development.

*Cumulative Scenario 1*

9.12.143 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

9.12.144 Cumulative Scenario 1 comprises one other development, Baillie Hill Wind Farm which is located at the close proximity of 2.62 km to the south. The turbines will appear as large scale elements which are in contrast with the scale of the landform and land use pattern of the Mixed Agriculture and Settlement LCT where they are located. The turbines mostly sit behind the ridgeline of Shebster Hill, which obscures visibility of the full towers, and with a few of the closer range turbines set on the ridgeline and seen at their full extent. Although there is only one other Wind Farm development, its close proximity, size and scale in relation to its landscape setting, mean that it will have a strong influence on the cumulative situation.

9.12.145 The Revised Consented Development will be seen at the slightly longer range of 5.09 km, such that compared to Baillie Hill Wind Farm the turbines will

appear of a lesser scale. They will, nonetheless, still appear as large scale elements owing to their height of 149.9m, the visibility of some turbines to their full extent and the scale comparisons which arise with the low undulating knolls to the fore of the Revised Consented Development.

9.12.146 There are a number of similarities between the developments which go some way in presenting a co-ordinated appearance to wind farm development, for example, they are both of a similar size in terms of number of turbines and height of turbines, and they both form a defined group of loosely arranged turbines which are relatively well spaced. There are, however, also differences which increase the cumulative magnitude of change, most notably the difference in location with Baillie Hill Wind Farm set in the Mixed Agriculture and Settlement LCT, while the Revised Consented Development is set in the Coniferous Woodland Plantation LCT. This will be seen as wind farm development extending into a new landscape, where development is currently limited to electricity transmission lines. This is despite the Coniferous Woodland Plantation LCT appearing as a more appropriate setting, separated from the settled landscapes along the northern coast, in which Baillie Hill Wind Farm is located.

9.12.147 Viewers may have the sense that this viewpoint is surrounded by development. Dounreay Nuclear Power Plant lies to the north, Baillie Hill Wind Farm to the south and then the introduction of the Revised Consented Development will occupy the view to the west. The Wind Farm developments are large scale developments and will collectively redefine the character of the view. The cumulative magnitude of change is **medium-high**.

#### *Cumulative Scenario 2*

9.12.148 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.

9.12.149 The main additions to the cumulative situation include Drum Hollistan, Ackron and Limekiln Extension, although Limekiln Extension would not be built prior to the Revised Consented Development.

9.12.150 All seven of the Drum Hollistan turbines will be visible at a minimum distance of 6.85 km, with all twelve of the Ackron turbines visible to the immediate rear at a minimum distance of 8.66 km. While the Drum Hollistan turbines will be visible to practically their full extents, the Ackron turbines will be partially concealed by the intervening landform. The proximity of these two wind farms will, however, mean that they are perceived as one development. They will extend the influence of wind farm development into this northern part of the sweeping moorland that extends north towards the coast. In respect of the cumulative situation, they will mark the western most wind farm development which, previously, in respect of Cumulative Scenario 1, was marked by the Revised Consented Development. The addition of the Revised Consented Development, in respect of Cumulative Scenario 2, will, therefore, be seen to sit between Baillie Hill Wind Farm to the south-west, and Drum Hollistan and Ackron wind farms to the west. Nonetheless, the Revised Consented Development will be seen to add a further wind farm development in a context



where two other notable developments, or combined developments, already have an influence, and the cumulative magnitude of change will be **medium-high**.

*Significance of cumulative effect*

9.12.151 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **significant** in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will result in the wider view being defined or characterised primarily by wind farms, and baseline characteristics will be altered by the proximity of four large scale developments. This is chiefly due to the close proximity of operational Baillie Hill Wind Farm, as well as the inclusion of application stage Drum Hollistan and Ackron.

*Combined Development Cumulative Scenario 1*

9.12.152 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. This finding relates chiefly to the influence from Baillie Hill Wind Farm to the south, Dounreay Nuclear Power Plant to the north and then the addition of the Combined Development to the west, which will give road-users the sense that this area is surrounded by large scale energy developments.

*Combined Development Cumulative Scenario 2*

9.12.153 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. Application stage Drum Hollistan and Ackron wind farms will increase the influence of wind farm development to the west, and it is in the context of these and Baillie Hill Wind Farm to the south, and Dounreay Nuclear Power Plant to the north, that the addition of the Combined Development to the west, will give rise to a significant cumulative effect.

Viewpoint 8 – Angler’s Car Park, Loch Calder

9.12.154 This viewpoint has been assessed as having a medium sensitivity, a medium magnitude of change, and a not significant effect resulting from the Revised Consented Development.

9.12.155 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

**Table 9.20: Scenario 1 and 2 wind farms relevant to Viewpoint 8**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	4.41km	Theoretical visibility of all 21 turbines seen set at a relatively close range on Baillie Hill and almost all at their full extent.

Forss	Operational	6T x 78m	8.56km	Theoretical visibility of all six turbines seen set at a medium range to the right of Baillie Hill.
Hill of Lybster	Consented	1T x 79m	8.50km	This single turbine appears as part of Forss owing to its close proximity and very similar size.
Drum Hollistan	Application	7T x 125m	13.23km	All 7 turbines visible on distant ridge to right of the Revised Consented Development.
Ackron	Application	12T x 149.9m	15.16km	All 12 turbines seen set to the rear of Drum Hollistan and with partial screening from intervening landform.
Limekiln Extension	Application	5T x 149.9m	7.32km	All 5 turbines seen set to the fore of the Revised Consented Development.
Forss III	Application	2T x 125m	8.68km	All 2 turbines seen as part of group with Forss.

### *Cumulative Scenario 1*

- 9.12.156 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.157 Baillie Hill Wind Farm forms the main influence on the cumulative situation. Baillie Hill, Forss and Hill of Lybster wind farms are seen in the same sector of the view, occupying a position to the north-west of the viewpoint. The close proximity and similar size of turbines means that the single Hill of Lybster turbine appears as an extension to Forss. Although Forss / Hill of Lybster wind farms sit in the Open Intensive Farmland LCT they are seen associated with the coastline, whilst in contrast Baillie Hill Wind Farm is associated with the Mixed Agriculture and Settlement LCT. The two developments are seen as being distinctly separate and Baillie Hill Wind Farm appears notably larger in terms of number and scale of turbines.
- 9.12.158 The Revised Consented Development will introduce a further wind farm development, which will be located to the left of Baillie Hill Wind Farm and seen in the same sector of the view although in a different landscape. The containment of the readily visible wind farm developments in this north-west sector will help to prevent the spread across the wider extent, where there is currently an absence of visible wind farm development. This reduces the cumulative magnitude of change. The spread of wind farm development into the neighbouring Limekiln Coniferous Woodland Plantation LCT, has the reverse effect and increases the cumulative magnitude of change.
- 9.12.159 The closer proximity of Baillie Hill Wind Farm at 4.41 km makes it the key focus in the cumulative view. The Revised Consented Development turbines at 8.02 km appear comparatively smaller and contained in the homogenous forest cover of the Limekiln Coniferous Woodland Plantation LCT, which appears a more suitable scale of landscape for wind farm development in comparison with the finer detail of the Mixed Agriculture and Settlement LCT in which Baillie Hill

Wind Farm sits. While these differences make the Revised Consented Development appear less prominent, they also make the developments appear less integrated. There are, however, also similarities, which increase the appearance of integration and include the size of the developments, in terms of numbers of turbines, and their colour.

- 9.12.160 The introduction of the Revised Consented Development does not give rise to a high magnitude of change as it will be seen to contain development in the same sector of the view as it already exists. A large extent of the view will continue to remain unaffected by wind farm development and continue to be defined by the existing landscape, in particular the views to the south-west and south, across Loch Calder and towards the Flat Peatlands and Lone Mountains, which comprise the most scenic parts of the view. The cumulative magnitude of change will be **medium**.

*Cumulative Scenario 2*

- 9.12.161 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.162 The application stage wind farms that will have an influence on Cumulative Scenario 2 includes Drum Hollistan at a minimum of 13.23 km to the west and Ackron at a minimum of 15.16 km also to the west.
- 9.12.163 All seven of the Drum Hollistan turbines will be seen to practically their full extents, while the 12 Ackron turbines will be seen to the immediate rear, albeit screened to varying degrees by the intervening landform. These two wind farms will appear as one development owing to their close proximity. While they will be seen to increase the extent of wind farm development to the left of Baillie Hill Wind Farm, their more distant location will moderate their influence on the cumulative situation. While these wind farms will increase the visible extent of turbines in the sector from the west through to the north, each development is relatively well contained, with longer extents of undeveloped skyline, and shorter extents of developed skyline.
- 9.12.164 The addition of the Revised Consented Development will give rise to a **medium** cumulative magnitude of change. While the Revised Consented Development will be seen to increase the extent of wind farm development in the westerly sector, this is a sector in which wind farm development will already have a baseline influence from Drum Hollistan and Ackron. The location of the Revised Consented Development to the immediate left will ensure that these developments are contained within the wider view. At a minimum of 8.02 km, the proposed turbines will appear as a relatively compact group within a wider landscape setting, and in which closer range turbines at Baillie Hill Wind Farm will have a greater influence.

*Significance of cumulative effect*

- 9.12.165 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be

apparent within a large part of the view. This relates chiefly to the more distant influence of the Revised Consented Development in comparison to Baillie Hill Wind Farm and the containment of the collective cumulatives within the north and west of the view.

#### *Combined Development Cumulative Scenario 1*

9.12.166 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the contained extents of the Combined Development and its distance from the viewpoint, combined with the contained extents of the other operational wind farms, which ensures the surrounding landscape remains as the defining feature from this viewpoint.

#### *Combined Development Cumulative Scenario 2*

9.12.167 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. The influence of the application stage wind farms will be limited by their more distant location and relatively contained extents. This means that the main cumulative interaction will continue to be between the Revised Consented Development and Baillie Hill Wind Farm, which will not be significant owing to reason described in respect of Cumulative Scenario 1 above.

#### Viewpoint 9 – Ben Dorrery

9.12.168 This viewpoint has been assessed as having a medium sensitivity, a medium magnitude of change, and a not significant effect resulting from the Revised Consented Development.

**Table 9.21: Scenario 1 and 2 wind farms relevant to Viewpoint 9**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	10.09km	All 21 turbines are visible seen set to the north beyond the hills of the Sweeping Moorland.
Forss	Operational	6T x 78m	14.97km	All six turbines are partially visible seen set behind Baillie Hill turbines.
Hill of Lybster	Consented	1T x 79m	14.83km	Single turbine seen as extension to Forss and set behind Baillie Hill turbines.
Strathy North	Operational	33T x 110m	24.40km	Small proportion of turbines visible, seen partially obscured by intervening landform.
Wathegar	Operational	5T x 100m	21.56km	Small group of turbines visible as small and distant elements in south-west sector in cluster with Achairn and Flexhill.
Achairn	Operational	3T x 100m	23.84km	All three turbines visible as small and distant elements in the south-west sector.

Flexhill	Operational	3T x 90m	20.97km	All three turbines visible as small and distant elements in the south-west sector.
Wathegar 2	Consented	9T x 110m	22.49km	Small group of turbines visible as small and distant elements in south-west sector in cluster with Wathegar, Achairn and Flexhill.
Boulfruch	Operational	15T x 75m	21.38km	Group of turbines seen as small and distant elements.
Camster	Operational	25T x 121.2m	19.64km	All 25 turbines seen set next to Causeymire and seen as small scale elements.
Causeymire	Operational	21T x 100m	9.77km	All 21 turbines seen at their full height as medium to small scale elements.
Halsary	Operational	15T x 112m	11.79km	All 15 turbines visible to the fore of Camster and behind Achlachan.
Bad a Cheo	Operational	13T x 112m	11.47km	All 13 turbines visible behind Causeymire.
Achlachan	Operational	5T x 110m	9.06km	All 5 turbines visible to the fore of Halsary.
Drum Hollistan	Application	7T x 125m	14.76km	All 7 turbines visible behind the Revised Consented Development.
Ackron	Application	12T x 149.9m	16.10km	10 turbines visible albeit partly screened by intervening landform and to left of the Revised Consented Development.
Limekiln Extension	Application	5T x 149.9m	8.10km	All 5 turbines visible to the right of the Revised Consented Development
Forss III	Application	2T x 125m	14.98km	All 2 turbines visible as part of Forss group.

### *Cumulative Scenario 1*

9.12.169 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. Presented in the table above are those wind farms which will have a notable influence on the cumulative situation. All other operational and proposed windfarms within a 40km radius are shown in the cumulative wirelines.

9.12.170 The view from the summit of Ben Dorrery presents a useful overview of cumulative wind farms in the area. The general pattern comprises a notable concentration in the sector to the south-east and a less notable concentration in the sector to the north-west. The relatively flat and open landscape to the south-east means that the two main clusters of operational and consented wind farms around Causeymire and around Wathegar, are almost all seen to their full extent. In respect of the Causeymire cluster the developments are seen from this viewpoint to be contained within a limited horizontal extent, albeit with a notable depth of turbines. The majority of the developments appear

associated with the sweeping moorland to the south of the cultivated and settled landscapes of north-eastern Caithness.

- 9.12.171 In the north-west sector, Baillie Hill Wind Farm is visible at a range of 10.09 km. All 21 turbines are visible and seen set in the Mixed Agriculture and Settlement LCT which appears distinct owing to its relative flatness, and the distant visibility of small scale development and land use patterns, especially in contrast to the closer range mass and simpler appearance of Beinn Freiceadain. Forss and Hill of Lybster wind farms sit in behind with some of their turbines partially obscured by the Baillie Hill turbines and although set in the Open Intensive Farmland LCT appears as part of the Mixed Agriculture and Settlement LCT.
- 9.12.172 The sector to the south-west does not contain operational, under construction or consented Wind Farm development, furthermore there is very limited presence of constructions or contemporary land uses. Tracks and forestry are the most obvious features to contrast with the otherwise open and natural landscape. The simplicity of the Sweeping Moorlands and Flat Peatlands combined with their low elevation and large expanse means views extend for long distances in these sectors. Although comprising a much more settled and cultivated landscape, the presence of wind farm development in the north-east sector is relatively small in scale and limited in extents.
- 9.12.173 The addition of the Revised Consented Development will occur in the north-west sector, such that it will be seen to the left of Beinn Freiceadain. With Baillie Hill and Forss wind farms already visible in this sector, the Revised Consented Development will not be introducing development into a previously undeveloped sector. It will, however, add a further development to the view and be seen to extend the influence into a different part of the landscape; Baillie Hill and Forss are associated with the Mixed Agriculture and Settlement LCT, while the Revised Consented Development will be seen in the Coniferous Woodland Plantation LCT.
- 9.12.174 At the distance of 8.61 km, the turbines will be seen as medium scale elements and as those closest to the viewpoint. The Revised Consented Development will be seen similar in terms of numbers and separation distance to Baillie Hill Wind Farm and these similarities will help to co-ordinate the overall appearance.
- 9.12.175 The developments to the south-east, collectively form a group and characterise this sector of the view with medium to distant range wind farm developments. The Revised Consented Development will be seen as a separate development from Baillie Hill Wind Farm, although both will be seen in the same north-westerly sector. The separation distance combined with the contained horizontal extent of both developments, means that the landscape remains as the characterising feature and that the cumulative magnitude of change will be **medium**.

#### *Cumulative Scenario 2*

- 9.12.176 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.



9.12.177 The application stage wind farms that will have some influence on the cumulative situation include Drum Hollistan, Ackron and Limekiln Extension, although Limekiln Extension could not be built before the Revised Consented development. The influence of Drum Hollistan and Ackron is limited by their minimum distances of 14.76 km and 16.10 km which means that they will appear as relatively distant and small scale features, with the influence of Ackron reduced further by the screening effect of intervening landform. These two developments will, nonetheless, establish wind farm development as a feature of this sector of the view, and more specifically in close proximity to the location of the Revised Consented Development.

9.12.178 The addition of the Revised Consented Development will give rise to a **medium** cumulative magnitude of change. While the presence of Drum Hollistan and Ackron will prevent the Revised Consented Development from appearing as a new feature in this sector of the view, its closer range will mean that the turbines appear larger by comparison. Overall, however, the separation distance of the Revised Consented Development and other cumulative developments from the viewpoint, will ensure that they are seen as relatively small scale and well contained developments, occurring as features within a wider landscape setting.

*Significance of cumulative effect*

9.12.179 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view. This relates chiefly to the range at which the Revised Consented Development and cumulative developments are seen which ensures the turbines appear as small scale structures within a wider landscape setting which continues to define the character of the view.

*Combined Development Cumulative Scenario 1*

9.12.180 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the contained extents of the Combined Development and its distance from the viewpoint, combined with the contained extents of the other operational wind farms, which ensures the surrounding landscape remains as the defining feature from this viewpoint.

*Combined Development Cumulative Scenario 2*

9.12.181 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. The influence of the application stage wind farms will be limited by their more distant location and relatively contained extents. This means that the main cumulative interaction will continue to be between the Revised Consented Development and Baillie Hill Wind Farm, which will not be significant owing to reason described in respect of Cumulative Scenario 1 above.

### Viewpoint 14 – Borlum Hill

9.12.182 This viewpoint has been assessed as having a medium-low sensitivity, a high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.22: Scenario 1 and 2 wind farms relevant to Viewpoint 14**

Wind farm	Status	Number / Size	Distance	Visibility
Baillie Hill	Operational	21T x 110m	4.79km	21 turbines visible seen set behind Shebster Hill, mostly seen as blades and towers but some only as blades.
Forss	Operational	6T x 78m	7.54km	Theoretical visibility of all six turbines seen set at a medium range along the coastal edge.
Hill of Lybster	Consented	1T x 79m	7.75km	This single turbine appears as part of Forss owing to its close proximity and very similar size.
Drum Hollistan	Application	7T x 125m	3.51km	All 7 turbines visible to their full extents on ridgeline to west.
Ackron	Application	12T x 149.9m	5.48km	10 turbines seen set partly to the rear of Drum Hollistan and partly screened by intervening landform.
Limekiln Extension	Application	5T x 149.9m	2.50km	All 5 turbines visible to the immediate left of the Revised Consented Development.
Forss III	Application	2T x 125m	7.73km	2 turbines visible as part of the Forss group.

### *Cumulative Scenario 1*

9.12.183 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

9.12.184 Cumulative Scenario 1 comprises three other developments, Baillie Hill Wind Farm set at 4.79 km to the east of the viewpoint, and Forss and Hill of Lybster set at 7.54 km and 7.75 km to the north-east. Forss and Hill of Lybster appear as the one development owing to their close proximity and similar size of turbines. While the location of the Baillie Hill turbines behind the ridge of Shebster Hill disassociates them from the immediate landscape, from this range of 4.79 km, the turbines will still appear as medium to large scale elements especially in contrast to the scale of the hills on which they sit. The smaller scale of Forss / Hill of Lybster combined with the more distant range means that their influence on the cumulative situation is not as notable.

9.12.185 At a minimum of 1.58 km, the addition of the Revised Consented Development will present a very close range example of wind farm development, which will have a high magnitude of change, as reported in the 'Assessment of effects on views'. In relation to Baillie Hill Wind Farm, the Revised Consented Development will appear related owing to the similar number of turbines, and

the informal arrangement of the turbines across the landform, although the Revised Consented Development turbines will appear notably larger owing to their close proximity.

9.12.186 Considered singularly, the Revised Consented Development will have a high magnitude of change and a significant effect, as reported in the 'Assessment of effects on views'. In relation to Baillie Hill it will be seen to extend the influence of Wind Farm development from the Mixed Agriculture and Settlement LCT into the Coniferous Woodland Plantation LCT. The comparatively lesser influence of Baillie Hill Wind Farm means that collectively the cumulative effect will be limited; these two developments being seen contained to the east and south. Views from Borlum Hill also extend towards Beinn Ratha and the surrounding Sweeping Moorland to the west and out across the Atlantic Ocean to the north. The Wind Farm developments occupy only a contained proportion of this wider view in which the main interest lies in directions where Wind Farm development does not occur. The cumulative magnitude of change will be **medium**.

*Cumulative Scenario 2*

9.12.187 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.

9.12.188 Drum Hollistan and Ackron application stage wind farms will have the most notable effect on Cumulative Scenario 2. These two wind farms will be located in the northern extent of the Sweeping Moorland LCT to the west of the viewpoint. The close proximity of the wind farms will mean that they appear as a single development, the seven closer range Drum Hollistan turbines seen to their full extents, while the slightly more distant Ackron turbines appearing partially screened by the intervening landform. Seen at a minimum of 3.51 km and 5.48 km, the wind farms will appear as a prominent feature in the simple open expanse of the Sweeping Moorland LCT.

9.12.189 The addition of the Revised Consented Development will give rise to a **medium-high** cumulative magnitude of change. This relates to the strong influence in the cumulative baseline from Baillie Hill Wind Farm to the east and Drum Hollistan and Ackron wind farms to the west. The introduction of the Revised Consented Development in the sector to the south will add the influence of wind farm development into a new sector, and from Borlum Hill, present the perception of this area becoming surrounded by wind farm developments, although the open aspect across the coastal edge and the Atlantic Ocean to the north will remain unaffected. The close range of the Revised Consented Development means that the turbines will appear large in scale and occupy a notable extent of the southern sector.

*Significance of cumulative effect*

9.12.190 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of

the view. Despite the close proximity of this viewpoint to the Revised Consented Development, the limited number of other developments visible and the extent of the view which remains unaffected, especially out across the Atlantic Ocean, means that the view will continue to be defined by the landscape and not the wind farm developments.

- 9.12.191 In respect of Cumulative Scenario 2, the addition of the Revised Consented Development will result in a **significant** effect. This finding relates principally to the extended influence of the cumulative context with Drum Hollistan and Ackron wind farms readily visible to the west and Baillie Hill Wind Farm readily visible to the east, and then the addition of the Revised Consented Development at relatively close proximity in the southern landward sector between them. This addition will make wind farm development one of the key characterising features of this view.

*Combined Development Cumulative Scenario 1*

- 9.12.192 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the limited influence of the other operational and consented wind farms, despite the strong influence from the Combined Development owing to its close range to the south of the viewpoint.

*Combined Development Cumulative Scenario 2*

- 9.12.193 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. The main cumulative interaction will be between the Combined Development, in close range to the south of the viewpoint, application stage Drum Hollistan and Ackron, in close range to the west, and operational Baillie Hill Wind Farm to the east, with wind farm development becoming one of the defining features of the view.

Viewpoint 15 – Beinn Ratha

- 9.12.194 This viewpoint has been assessed as having a medium-high sensitivity, a high magnitude of change, and a significant effect resulting from the Revised Consented Development.
- 9.12.195 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. Presented in the table below are those wind farms which will have a notable influence on the cumulative situation. All other operational and proposed windfarms within a 40 km radius are shown in the cumulative wirelines.

**Table 9.23: Scenario 1 and 2 wind farms relevant to Viewpoint 15**

Wind farm	Status	Number / Size	Distance	Visibility
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Baillie Hill	Operational	21T x 110m	7.49km	All 21 turbines visible seen set on low hills, almost all to their full extent.
Forss	Operational	6T x 78m	10.53km	All six turbines visible seen set next to coastal edge, all to their full extent.
Hill of Lybster	Consented	1T x 79m	10.75m	Single turbine seen close to Forss albeit with some separation.
Strathly North	Operational	33T x 110m	13.69km	All 33 turbines visible seen set beyond Sweeping Moorland to west.
Causeymire	Operational	21T x 100m	22.31km	Group of distant turbines seen set along skyline with cluster of other operational and consented wind farm developments.
Drum Hollistan	Application	7T x 125m	2.36km	All 7 turbines seen to full heights set on northern edge of sweeping moorland.
Ackron	Application	12T x 149.9m	3.77km	All 12 turbines visible mostly to full heights set to left of Drum Hollistan.
Limekiln Extension	Application	5T x 149.9m	4.04km	All 5 turbines seen set to rear of the Revised Consented Development.
Forss III	Application	2T x 125m	10.71km	All 2 turbines seen as distant feature set between Forss and Hill of Lybster.
Strathly Wood	Application	13T x 180m	13.05km	All 13 turbines will be readily visible almost all seen to their full extents.
Strathly South Resubmission	Application	39T x 200m	16.64km	Only the northern half of the wind farm will be visible with the southern half screened by the intervening landform.

### *Cumulative Scenario 1*

9.12.196 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment. Presented in the table below are those wind farms which will have a notable influence on the cumulative situation. All other operational and proposed windfarms within a 40 km radius are shown in the cumulative wirelines.

9.12.197 From the summit of Beinn Ratha, operational and consented wind farms can be seen concentrated in the sector to the east. The close range examples comprise Baillie Hill Wind Farm at a range of 7.49km, Forss Wind Farm at a range of 10.53km and Hill of Lybster at 10.75km. The wirelines and photographs in Figures **9.51b** to e show visibility of a number of other more distant wind farms, especially in the eastern sector, where most occur in clusters. To the left of Ben Dorrery the cluster comprising operational Causeymire (22.31km), Achlachan (21.51km), Camster (32.08km), Halsary (24.25km) and Bad a Cheo (23.95km) is visible along the skyline. This cluster, along with the more distant developments in this sector, will, however, have a limited visual influence on the cumulative situation, largely in respect of their

distant location in comparison to the closer range Baillie Hill Wind Farm in the same sector.

- 9.12.198 In the sectors to the south-east, south and south-west there are no operational, under construction or consented wind farms. It is in the sector to the west that operational Strathy North and Betty Hill are visible. With 33 turbines at 110m to blade tip, and at a range of 13.69 km from the viewpoint, Strathy North is readily visible and establishes wind farm development as a feature of this south-west sector. In respect of the wider cumulative situation, while Strathy North will add to the cumulative context, the Revised Consented Development will be seen in the sector in which there is already a concentration of wind farm development and it is the relationship with the close range wind farms in this sector that will have the most notable bearing on the assessment.
- 9.12.199 All 21 of the Baillie Hill turbines are visible to their full extent, seen set on the low hill ridge. Located in the Mixed Agriculture and Settlement LCT, the turbines appear at variance with the scale of the landscape. From the range of 7.49km they appear as medium scale elements and present an eye-catching feature from the summit of Beinn Ratha. In contrast, the six turbines at Forss and single turbine at Hill of Lybster are less prominent owing to their greater distance as well as lower heights (78m/79m as opposed to 110m). Forss is more closely associated with the coastal edge, although located in the Open Intensive Farmland LCT.
- 9.12.200 The Revised Consented Development introduces wind farm development, not only into a closer range location, but also into a new landscape. Although transmission lines are already visible through the north of the Coniferous Woodland Plantation LCT, the introduction of large scale turbines will create a more notable effect and be seen to extend wind farm development from the Mixed Agriculture and Settlement LCT to the east. The closer range will give rise to a high magnitude of change, as reported in the 'Assessment of effects on views', whilst in relation to Baillie Hill Wind Farm the scale of the Revised Consented Development turbines will be accentuated and this will highlight a notable variance in appearance. Other than that, the developments will appear to be of a similar number of turbines which are arranged in a similarly loose pattern across the landscape. They both form fairly well contained groups with relatively even spacing. While these similarities help to integrate the appearance of the developments the difference in landscape locations and proximity to the viewpoint will add to the cumulative magnitude of change.
- 9.12.201 The location of the Revised Consented Development in the same sector of the view where the majority of the cumulative developments are concentrated helps to reduce the cumulative magnitude of change. While Strathy North and Betty Hill have increased the extent of wind farm development into the western sector, the most expansive and scenic sectors of the view to the south-west, south and south-east will remain unaffected. This concentration of developments within the one sector, combined with the relatively distant location of the cumulative developments other than the Revised Consented Development, results in a **medium-low** cumulative magnitude of change.



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*Cumulative Scenario 2*

- 9.12.202 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.203 The cumulative wireline shows that applications Strathy Wood and Strathy South will be visible to the left of Strathy North from this viewpoint. While all 13 of the Strathy Wood turbines will be visible, Strathy South will be partly screened by the intervening landform such that approximately half of the 39 turbines will be visible. Strathy Wood and Strathy South will form a continuation of the horizontal extent of Strathy North, such that they will appear as an extension to the operational wind farm. At 13.05 km and 16.64 km respectively, Strathy Wood and Strathy South will have a limited influence on the cumulative situation.
- 9.12.204 Other visible application stage wind farms includes Forss III although its more distant location to the east, combined with its association with clusters of existing wind farms, will limit its influence on the cumulative situation.
- 9.12.205 A more notable influence will come from the closer range Drum Hollistan and Ackron application stage wind farms which will be located a minimum of 2.36 km and 3.77 km respectively to the north-west of Beinn Ratha. All seven of the Drum Hollistan turbines will be seen in close proximity to all 12 of the Ackron turbines, such that collectively they will be seen as a single development. Their location across the northern extent of the Sweeping Moorland LCT, where it extends towards the north coast, adds to their prominence, as this is the main draw in the views of walkers on the hill.
- 9.12.206 The addition of the Revised Consented Development to Cumulative Scenario 2 will give rise to a **medium-high** cumulative magnitude of change. While Baillie Hill Wind Farm already establishes wind farm development as a feature in the eastern sector, Drum Hollistan and Ackron, establish a closer range influence in the west. It is in this cumulative context that the addition of the Revised Consented Development in closer proximity to the east, will increase the influence of wind farm development experienced by walkers on Beinn Ratha, as development will be seen in close range on either side of the ridgeline.

*Significance of cumulative effect*

- 9.12.207 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1, as the addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view.
- 9.12.208 In respect of Cumulative Scenario 2, the addition of the Revised Consented Development will result in a **significant** cumulative effect. This will reflect the relatively close range influence of wind farm development on both the west and the east of the Beinn Ratha ridgeline, such that wind farms will become one of the main defining features of the view from this viewpoint.

### Combined Development Cumulative Scenario 1

9.12.209 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the limited influence of the other operational and consented wind farms, despite the strong influence from the Combined Development owing to its close range to the east of the viewpoint.

### Combined Development Cumulative Scenario 2

9.12.210 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be significant. The main cumulative interaction will be between the Combined Development, in close range to the east of the viewpoint, application stage Drum Hollistan and Ackron, in close range to the north, and operational Baillie Hill Wind Farm to the east, with wind farm development becoming one of the defining features of the view.

### Viewpoint 16 - Shurrery

9.12.211 This viewpoint has been assessed as having a medium sensitivity, a medium magnitude of change, and a not significant effect resulting from the Revised Consented Development.

**Table 9.24: Scenario 1 and 2 wind farms relevant to Viewpoint 16**

Wind farm	Status	Number / Size	Distance	Visibility
Baillie Hill	Operational	21T x 110m	6.42km	All 21 turbines seen set on Baillie Hill almost all at their full extent.
Forss	Operational	6T x 78m	11.31km	All six turbines visible as blade tips set behind Baillie Hill Wind Farm and not so readily apparent.
Hill of Lybster	Consented	1T x 79m	11.18km	Single turbine seen as part of Forss development and also set behind Baillie Hill Wind Farm.
Drum Hollistan	Application	7T x 125m	12.01km	Largely concealed by intervening landform with only 3 tips visible behind the Revised Consented Development.
Limekiln Extension	Application	5T x 149.9m	5.32km	All 5 turbines visible to the fore of the Revised Consented Development.
Forss III	Application	2T x 125m	11.32km	Forss III appears as small scale and distant feature behind Baillie Hill Wind Farm.

### Cumulative Scenario 1

9.12.212 The addition of the development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

- 9.12.213 Cumulative Scenario 1 comprises a full view of Baillie Hill Wind Farm visible across the open landscape. At a range of 6.42 km the turbines will appear as medium scale elements and in variance with the scale of the hills on which they sit and the patterns and features of the land use. Visibility of Forss and Hill of Lybster wind farms is limited by the screening of the intervening landform, whereby only blades and tips are visible, their prominence further reduced by their position behind Baillie Hill turbines and seen at the more distant range of 11.18km. Forss and Hill of Lybster wind farms will, therefore, not have a strong influence on the cumulative situation.
- 9.12.214 The addition of the Revised Consented Development will be seen to extend Wind Farm development into a new and distinct LCT, the Limekiln Coniferous Woodland Plantation LCT. While this setting appears appropriate on account of its less settled nature, simpler landform and land cover, the Revised Consented Development will, nonetheless, extend the presence of wind farms into a neighbouring landscape and this will increase the cumulative magnitude of change.
- 9.12.215 The two developments will be contained within the same 90 degree sector of the view and this will help to contain the influence in visual terms and reduce the cumulative magnitude of change. The majority of the view will not feature wind farm development, and this is most notable to the south where the landscape is more scenic and remote.
- 9.12.216 There are some similarities which exist which help to unify the appearance of the developments and, in so doing, reduce the magnitude of change. For example, they both appear similar in terms of number and scale of turbines, with Baillie Hill being only slightly further away. They are also both arranged loosely across the landform, although each appears as a contained group with relatively even spacing of turbines.
- 9.12.217 Taking all these factors into consideration, the overall cumulative magnitude of change is **medium-low**. There are only two wind farms with a strong influence on the cumulative situation and both are seen approximately 6 km from the viewpoint such that they are seen as medium scale components and each occupying a contained proportion of the skyline in the same sector of the view.

#### *Cumulative Scenario 2*

- 9.12.218 The cumulative context in Cumulative Scenario 2 is moderated by the limited influence of application stage wind farms. The wireline in **Figure 9.52b** shows to the north-west that only a few of the Drum Hollistan turbines will be visible and these will be seen as a distant feature behind the Revised Consented Development. While Limekiln Extension is also shown in this sector this could not be built before the Revised Consented Development. The wireline in **Figure 9.52c** shows to the north-east, the two turbines of Forss III will be seen as a distant feature behind Baillie Hill Wind Farm.
- 9.12.219 Despite the increase in wind farm development in respect of Cumulative Scenario 2, its overall limited influence on this view will mean that the cumulative magnitude of change remains **medium-low** as assessed in respect of Cumulative Scenario 1.

*Significance of cumulative effect*

9.12.220 The cumulative effect that will result from the addition of the Revised Consented Development to this view will be **not significant** in respect of Cumulative Scenario 1 and Cumulative Scenario 2. The addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view.

*Combined Development Cumulative Scenario 1*

9.12.221 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the limited influence from the Combined Development and the other operational and consented wind farms, owing to their distance from the viewpoint and the limited influence they will have on the cumulative situation.

*Combined Development Cumulative Scenario 2*

9.12.222 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the limited influence from the Combined Development and the other operational, consented and application stage wind farms, owing to their distance from the viewpoint and the limited influence they will have on the cumulative situation.

Assessment of cumulative effects on principal visual receptorsReay

9.12.223 This principal visual receptor has been assessed as having a high sensitivity, a medium-high magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.25: Scenario 1 and 2 wind farms relevant to Reay cumulative assessment**

Wind farm	Status	Number / Size turbines	Distance	Visibility
Baillie Hill	Operational	21T x 110m	4.6-6.5km	Baillie Hill is set behind the Hill of Shebster to the east of Reay with visibility variable depending on screening effect of buildings.
Forss	Operational	6T x 78m	6.4-8.2km	Visibility of Forss is limited by the screening effect of built form and the relatively low elevation of the turbines.
Hill of Lybster	Consented	1T x 79m	6.5-8.3km	Visibility of Hill of Lybster is limited by the screening effect of built form and the relatively low elevation of the turbine.

Drum Hollistan	Application	7T x 125m	2.4-4.3km	While the ZTV shows theoretical visibility to be almost continuous across Reay, actual visibility will be reduced by the screening effect of built form and tree cover.
Ackron	Application	12T x 149.9m	3.4-5.3km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform, built form and tree cover.
Limekiln Extension	Application	5T x 149.9m	3.2-4.7 km	While the ZTV shows theoretical visibility to be almost continuous across Reay, actual visibility will be reduced by the screening effect of intervening landform, built form and tree cover.
Forss III	Application	2T x 125m	6.3-8.0 km	Visible to varying degrees owing to screening effect of intervening landform, tree cover and built form.

### *Cumulative Scenario 1*

- 9.12.224 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.225 The cumulative situation comprises operational Baillie Hill Wind Farm set to the east of Reay and operational Forss Wind Farm set to the north-east. Consented Hill of Lybster also lies to the north-east and owing to its close proximity and similar size turbines to Forss, appears as part of the one development.
- 9.12.226 Visibility of Baillie Hill varies through the length of the settlement. Visibility is most likely to occur along the main street, as Baillie Hill Wind Farm aligns with the orientation of the street for those looking east towards the direction of the turbines. This makes Baillie Hill Wind Farm the focus at the end of the vista. Its prominence is, however, diminished by its setting behind the Hill of Shebster, which has the effect of partially screening the turbines. Buildings in the settlement also partially screen the turbines and they are often seen set behind the towers of the electricity transmission line. Visibility of Forss and Hill of Lybster wind farms is even more limited, owing to a combination of their smaller scale and their location to the north-east where views are more likely to be blocked by the intervening buildings of the settlement.
- 9.12.227 At a range of 4.6 to 6.5km the Baillie Hill turbines will appear as medium scale elements and occupy a contained proportion of the skyline to the east. While the main street will draw views in this direction and, in so doing, make Baillie Hill Wind Farm a feature, the screening effects will reduce its prominence. In contrast, the Revised Consented Development will be seen at a range of 2.8 to 3.1 km, making it closer in range and more prominent, with the turbines appearing as large scale elements. Visibility from the central section of the settlement, as represented by Viewpoint 3 – Reay Church will show the Revised Consented Development at almost its full extent, with only some screening of towers by the knolls which sit along the north of the site. Further to the east the enclosure of built form will partially enclose views to the south, although

the Revised Consented Development will still be visible through gaps and over roof tops. To the west, some sections of the village are open to the south and from these parts clear views of the Revised Consented Development will occur. Where buildings are more continuous, full or partial screening of the turbines will occur.

- 9.12.228 The addition of the Revised Consented Development will mean that wind farm development will be evident to the south and the east of the settlement and this will give a sense of enclosure. An open aspect to the north will remain, although there are surprisingly few views out to the North Atlantic, and to the west views are largely enclosed by local woodland. To the south-west, views to Beinn Ratha will remain uninterrupted, although from the village the hill will be seen in close proximity to the Revised Consented Development. The enclosure of the built form means that clear views of the Revised Consented Development and Baillie Hill Wind Farm will occur in only localised parts of the settlement.
- 9.12.229 In terms of the cumulative magnitude of change, the Revised Consented Development will be seen to add a further Wind Farm development into an area where a relatively close range example already exists. While the Revised Consented Development individually will give rise to a medium-high magnitude of change, the more limited extent to which Baillie Hill Wind Farm is visible means that the overall cumulative magnitude of change will be **low**.

#### *Cumulative Scenario 2*

- 9.12.230 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.231 Application stage Drum Hollistan and Ackron wind farms, along with Baillie Hill Wind Farm will have the most notable influence in Cumulative Scenario 2. The seven Drum Hollistan turbines will be seen as a readily visible feature owing to their location along the northern ridge of the Sweeping Moorlands. At a minimum of approximately 3 km, these 125 m tall turbines will appear comparable in scale to the Revised Consented Development turbines, as they are close to Reay, although smaller in size. Nine of the Ackron turbines will be located directly behind Drum Hollistan with some extension to the right and some screening from intervening landform. Their close proximity means that these two wind farms will be perceived as one development, with contained extents in the context of the wider landscape.
- 9.12.232 Other application stage wind farms that will be visible from parts of Reay, include Forss III, which comprises two turbines, each 125 m to blade tip, located in a cluster with operational Forss. This wind farm will have a very limited influence on the cumulative situation owing to a combination of its separation distance from Reay and the screening effect of intervening landform, tree cover and built form. The cumulative ZTV in **Figure 9.25** highlights the inter-visibility with the application stage Limekiln Extension, although this will not be built prior to Limekiln Wind Farm. This will also be largely screened by intervening landform.
- 9.12.233 The addition of the Revised Consented Development to Cumulative Scenario 2 will give rise to a **medium-low** cumulative magnitude of change. While it will



be seen to add a further 21 turbines to a view in which there is already an influence from Drum Hollistan and Ackron to the west, and an influence from Baillie Hill to the east, these influences are limited by the contained extents of Drum Hollistan and Ackron and the limited visibility of Baillie Hill.

- 9.12.234 The magnitude of change will be moderated by the relatively contained extent of each of the developments, which ensures that they are seen as features within a wider landscape setting, rather than a characterising feature of the wider landscape. Each wind farm is relatively well contained and with sufficient separation space between them to ensure the wider landscape takes precedence in terms of the characterisation of this view. Furthermore, the main attraction from this area is north across the coastal edge and out across the North Atlantic, and this view will remain unaffected.

*Significance of cumulative effect*

- 9.12.235 In Cumulative Scenario 1 and Cumulative Scenario 2, the cumulative effect that will result from the addition of the Revised Consented Development to views from Reay will be **not significant** as the addition of the Revised Consented Development will not result in views from the village being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view.

*Combined Development Cumulative Scenario 1*

- 9.12.236 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the relatively weak influence from Baillie Hill Wind Farm which will mean that the effect is mostly singular, relating to the Combined Development, rather than cumulatively, relating to the effect of both developments.

*Combined Development Cumulative Scenario 2*

- 9.12.237 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant**. This finding relates chiefly to the relatively contained horizontal extents of the Combined Development and the application stage Drum Hollistan and Ackron, which ensures that views from the village continue to be defined by the wider landscape and seascape context.

Shebster

- 9.12.238 This principal visual receptor has been assessed as having a high sensitivity, a medium magnitude of change, and a significant effect resulting from the Revised Consented Development.

**Table 9.26: Scenario 1 and 2 wind farms relevant to Shebster cumulative assessment**

Wind farm	Status	Number / Size turbines	Distance	Visibility

Baillie Hill	Operational	21T x 110m	0.7-1.0km	All 21 turbines seen set on Baillie Hill at very close proximity.
Causeymire	Operational	21T x 100m	18-19km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by midground woodland.
Camster	Operational	25T x 120m	27-28km	Very limited theoretical visibility owing to screening effect of intervening landform.
Achlachan	Operational	5T x 110m	17-18km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Halsary	Operational	15T x 112m	20-21km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Bad a Cheo	Operational	13 x 112m	20-21km	Theoretical visibility of distant blades, whereas actual visibility is likely to be restricted by foreground woodland.
Drum Hollistan	Application	7T x 125m	7.5-8 km	All 7 turbines theoretically visible although actual visibility reduced by intervening tree cover and built form.
Ackron	Application	12T x 149.9m	9.5-10 km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform.
Limekiln Extension	Application	5T x 149.9m	2.5-3 km	Visible to varying degrees owing to screening effect of intervening landform, tree cover and built form.
Forss III	Application	2T x 125m	5.5-6 km	Visible to varying degrees owing to screening effect of intervening landform, tree cover and built form.

### *Cumulative Scenario 1*

9.12.239 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

9.12.240 While the cumulative ZTVs show theoretical visibility of the cluster of operational and consented wind farms around Causeymire, to occur from Shebster, actual visibility is limited by the combination of the intervening landform and forestry such that none of these developments will be readily visible. The cumulative situation, therefore, relates to the effects of the Revised Consented Development in conjunction with Baillie Hill Wind Farm, which sits in very close proximity to the settlement of Shebster on the hill slopes to the north-east. The Revised Consented Development will be situated at a range of 3.7 to 4.1 km in the opposite direction to the south-west.

9.12.241 The more distant range of the Revised Consented Development in comparison to Baillie Hill Wind Farm will make the development turbines appear comparatively smaller in scale. In comparison with the scale of the hills on

which they sit, the proposed turbines will, nonetheless, be seen as medium to large scale elements and as reported in the 'Assessment of effects on views', will give rise to a significant effect from the Shebster viewpoint. While the Revised Consented Development will not have as great an influence on Shebster as Baillie Hill Wind Farm, cumulatively, the two developments together will give rise to an effect in which large scale Wind Farm development lies on either side.

- 9.12.242 The location of the Revised Consented Development in the opposite direction increases the visible extent of Wind Farm development, as well as establishing it in a new and visibly different LCT. While the two developments do not fully encircle the settlement and the Revised Consented Development itself forms a well contained proportion of the skyline, the presence of the large scale turbines of Baillie Hill wind farm and medium to large scale turbines of the Revised Consented Development will give rise to a **medium** cumulative magnitude of change.

*Cumulative Scenario 2*

- 9.12.243 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.244 Application stage Drum Hollistan and Ackron wind farms will be located a minimum of 7.9 km and 9.8 km respectively from this viewpoint. All seven Drum Hollistan turbines and all twelve Ackron turbines are shown in **Figure 9.40d** to be theoretically visible, although the screening effect of intervening landform means that only a few will be seen to their full extents and a few tips will be largely indiscernible. In comparison with the closer range Baillie Hill turbines, Drum Hollistan and Ackron turbines will appear relatively distant and small scale, such that their influence on the cumulative situation will be limited.
- 9.12.245 They will, nonetheless, add further development to the cumulative baseline and it is in this context that the addition of the Revised Consented Development will give rise to a **medium** magnitude of change, albeit principally due to the interaction with operational Baillie Hill Wind Farm, rather than the application stage wind farms.

*Significance of cumulative effect*

- 9.12.246 In respect of Cumulative Scenario 1 and 2, the cumulative effect that will result from the addition of the Revised Consented Development to this view will be **significant** as the addition of the Revised Consented Development will result in wind farms becoming one of the defining features in views from the village. This is chiefly due to the sense of enclosure that the wind farm developments will have on the settlement.

*Combined Development Cumulative Scenario 1*

- 9.12.247 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. The Combined Development will add to a cumulative situation in which there is already a strong influence from close range Baillie Wind Farm.

The location of Baillie Hill Wind Farm to the north-east and the Combined Development to the south-west, means that the influence from close range wind farm developments will occur across the widest possible extents around this viewpoint.

#### *Combined Development Cumulative Scenario 2*

9.12.248 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant**. While the main cumulative interaction will be between the Combined Development and Baillie Hill Wind Farm, there will be an additional influence from application stage Drum Hollistan and Ackron in the middle range to the north-west. While this will add to the cumulative situation, the cumulative magnitude of change will remain medium-high.

#### A836

9.12.249 This viewpoint has been assessed as having a variable sensitivity, a variable magnitude of change, and a significant effect westbound between Dounreay and Reay Church and eastbound between Drum Hollistan and Reay Church, resulting from the Revised Consented Development. The remaining sections both westbound and eastbound will undergo not significant effects.

**Table 9.27: Scenario 1 and 2 wind farms relevant to A836 cumulative assessment**

Wind farm	Status	Number / Size turbines	Closest Distance	Visibility
Baillie Hill	Operational	21T x 110m	2.3km	The ZTV shows almost continuous theoretical visibility of Baillie Hill between Drum Hollistan and Hill of Forss.
Forss	Operational	6T x 78m	0.5km	The ZTV shows patches of theoretical visibility of Forss between Drum Hollistan and Hill of Forss.
Hill of Lybster	Consented	1T x 79m	0.5km	The ZTV shows patches of theoretical visibility of Hill of Lybster between Drum Hollistan and Hill of Forss.
Drum Hollistan	Application	7T x 125m	0.8 km	All 7 turbines readily visible and all seen to almost their full extents.
Ackron	Application	12T x 149.9m	0.9 km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to screening effect of intervening landform.
Limekiln Extension	Application	5T x 149.9m	3.1 km	Largely screened by intervening landform such that only 3 tips and 2 blades are visible.

Forss III	Application	2T x 125m	0.5 km	Visible to varying degrees owing to screening effect of tree cover and built form.
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*Cumulative Scenario 1*

- 9.12.250 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.251 The three Wind Farm developments which will have the most notable influence on the cumulative situation are Baillie Hill, Forss and Hill of Lybster wind farms, which relates largely to their close proximity to the A836. The cumulative ZTVs show how visibility of these three wind farms extends along the A836, largely coinciding with each other as well as the Revised Consented Development to lead to a pattern in which combined visibility of all four covers much of the section between the Drum Hollistan layby and the Hill of Forss. As visibility of all four developments falls away notably at either end, the central section showing visibility has been used as the basis for the cumulative assessment.
- 9.12.252 **Cumulative magnitude of change westbound:** In the section between Hill of Forss and Dounreay, Forss, Hill of Lybster and Baillie Hill wind farms come in close proximity to the A836. In comparison with the Revised Consented Development, they will provide closer range examples which will appear larger in scale and more prominent in views, and by comparison, this will moderate the scale and prominence of the Revised Consented Development. They will be seen as a feature of the foreground landscape while, owing to the location of the turbines behind the ridgeline, the Revised Consented Development will be seen as part of the background landscape. The proposed turbines will often be seen behind or to the side of Baillie Hill Wind Farm and this will reduce the additional extent of wind farm development seen from the road. The cumulative magnitude of change in this section will be **medium-low**. The sensitivity rating for this section is also medium-low.
- 9.12.253 In the assessment of principal visual receptors, significant effects were reported to arise as a result of the Revised Consented Development between Dounreay and Reay Church. In terms of the cumulative situation, once road-users have reached Dounreay Nuclear Power Plant, the influence of Baillie Hill Wind Farm is diminishing as it lies behind the forward range of vision of road-users. The same effect occurs with Forss and Hill of Lybster wind farms at the earlier point where the Borrowstone of Mains access occurs on the A836. While the Revised Consented Development will become the principal influence on road-users' views, this will be singularly and without the cumulative influence of other developments. The cumulative magnitude of change in this section will, therefore, be **low**.
- 9.12.254 **Cumulative magnitude of change eastbound:** Starting at Drum Hollistan, visibility of Baillie Hill Wind Farm at a range of 8.74 km and Forss Wind Farm at 9.94 km, means that in comparison with the Revised Consented Development at a range of 4.53 km, they will appear medium to small in scale and less prominent in the view. As road-users travel along this section of the A836 towards Reay, the Revised Consented Development will become apparently

closer and more prominent in the view while the comparative scale of Baillie Hill and Forss wind farms will not alter so noticeably. This will limit the influence of these other sites on the cumulative situation, such that the addition of the Revised Consented Development to this situation will give rise to only a **medium-low** magnitude of change.

- 9.12.255 Once the A836 has passed through the woodland and entered into Reay, limited visibility of both Baillie Hill Wind Farm and the Revised Consented Development occurs, Baillie Hill Wind Farm aligned with the direction of the main street, making it an obvious feature despite the partial concealment by landform and built-form, and the Revised Consented Development appearing at an oblique angle to the direction of travel but closer range and more apparent where views open up. Baillie Hill Wind Farm already establishes wind farm development as a focal feature in views from the A836. The addition of the closer range Revised Consented Development will give rise to a **medium** cumulative magnitude of change as it will add to the concentration of Wind Farm development within the limited sector of visibility available to road-users.
- 9.12.256 Beyond Reay the Revised Consented Development will lie behind road-users and therefore no longer features readily in views. Views start to concentrate on Baillie Hill Wind Farm and this becomes the new focus and strongest influence on the cumulative situation. The cumulative magnitude of change as a result of the Revised Consented Development on this section will be **low**.
- 9.12.257 **Significance of cumulative effect westbound:** The cumulative effect that will result from the addition of the Revised Consented Development to views seen during travel westbound will be **not significant** as the addition of the Revised Consented Development will not result in the views being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view. This is chiefly due to the stronger influence of Baillie Hill and Forss wind farms in the eastern section and then their limited influence on the cumulative situation from Dounreay westwards.
- 9.12.258 **Significance of cumulative effects eastbound:** The cumulative effect that will result from the addition of the Revised Consented Development to views seen during travel eastbound will be **not significant** as the addition of the Revised Consented Development will not result in the views being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view. This is chiefly due to the distance at which the Revised Consented Development and Baillie Hill Wind Farm will be seen as part of the more open views to the west of Reay and the more limited visibility road users will gain of Baillie Hill Wind Farm whilst travelling through the settlement of Reay.

#### *Cumulative Scenario 2*

- 9.12.259 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.260 There are four application stage wind farms in close proximity to the section of the A836 that lies between Drum Hollistan in the west and Forss in the east. Drum Hollistan and Ackron will make a notable contribution to the cumulative



situation, at the western end of this section of the A836, both coming within 1 km of the A836.

- 9.12.261 **Westbound cumulative magnitude of change:** Travelling west-bound from Forss, the cumulative situation is formed by the interactions of close range Forss to the north and Baillie Hill to the south and towards Dounreay, the westerly alignment of the road towards Drum Hollistan and Ackron, emphasis their prominence despite their more distant ranges of 6 km and 8 km respectively. It is in this cumulative context that the addition of the Revised Consented Development will give rise to a **medium** magnitude of change. Although not so close range to the A836 as the other cumulative developments, it will, nonetheless, be seen as a large scale development increasing the spread of wind farm development into the southerly sector of road-user's views. This effect will continue into Reay, with Drum Hollistan, Ackron and the Revised Consented Development all acting as relatively large scale and close range influences on road-user's views. West of Reay, the location of the Revised Consented Development to the rear of road-users will notably reduce its influence and the cumulative magnitude of change will reduce to **low**.
- 9.12.262 **Eastbound cumulative magnitude of change:** The cumulative ZTVs in **Figures 9.26** and **9.27** show that visibility of Drum Hollistan and Ackron will occur much more continuously westwards from the Drum Hollistan layby than visibility of the Revised Consented Development. Drum Hollistan and Ackron will form prominent features travelling westwards from Melvich, owing to their proximity to the road and their simplicity and openness of the Sweeping Moorland LCT in which they are located. Their presence will establish wind farm development as a feature in the views of A836 road-users, prior to visibility of the Revised Consented Development from opening up.
- 9.12.263 The addition of the Revised Consented Development will give rise to a **medium** cumulative magnitude of change in the section of the A836 adjacent to Drum Hollistan Wind Farm. It will be seen to add a further 21 turbines to a view in which there is already a close range influence from Drum Hollistan and middle range influences from Baillie Hill, Forss and Forss III. It will present an additional wind farm in an area of low afforested hills which will otherwise separate Drum Hollistan from Baillie Hill.
- 9.12.264 The magnitude of change will, however, be moderated by the favourable scale comparison that the closer range Drum Hollistan turbines present and which reduces the perceived scale of the proposed turbines. Furthermore, the Revised Consented Development will be located in a relatively unremarkable section of the view, set back from the more sensitive coastal edge and set to the fore of the more pronounced sweeping moorlands and hills which characterise the hinterland. The view to the north and west will remain unaffected by wind farm development.
- 9.12.265 With travel further east-bound into Reay, the cumulative magnitude of change will reduce to **medium-low** as Drum Hollistan and Ackron come to be located to the rear of road-users' direction of travel and the cumulative influences are presented by the more distant Baillie Hill Wind Farm. Beyond Reay, the Revised Consented Development comes to be located to the rear of road-users'

direction of travel and the cumulative magnitude of change reduces to **low** as a result.

9.12.266 **Significance of cumulative effect westbound:** The cumulative effect that will result from the addition of the Revised Consented Development to views seen during travel westbound will be **significant** in the section between Dounreay and the western end of Reay, as wind farms will become one of the defining features in views from this section of the A836. The cumulative effect on the remaining west-bound sections will be **not significant**.

9.12.267 **Significance of cumulative effects eastbound:** The cumulative effect that will result from the addition of the Revised Consented Development to views seen during travel eastbound will be **not significant** as the addition of the Revised Consented Development will not result in the views being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the view.

#### *Combined Development Cumulative Scenario 1*

9.12.268 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **not significant** for both westbound and eastbound road-users. This finding relates chiefly to the limited influence of the Combined Development and / or Baillie Hill Wind Farm from different sections and from different directions, which prevents wind farm development from becoming the defining feature in the views of road-users .

#### *Combined Development Cumulative Scenario 2*

9.12.269 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** for westbound road-users between the Dounreay and the western end of Reay and **not significant** for all remaining sections, both westbound and eastbound. The main cumulative interaction will be between the Combined Development and application stage Drum Hollistan and Ackron in the middle range to the north-west and this will introduce a significant cumulative effect in this westbound section.

#### Shebster minor road

9.12.270 This principal visual receptor has been assessed as having a medium sensitivity, a variable magnitude of change, and a significant effect westbound between Bardnaheigh and Isauld, but no other significant effects either westbound or eastbound, resulting from the Revised Consented Development.

9.12.271 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

#### **Table 9.28: Scenario 1 and 2 wind farms relevant to Shebster minor road cumulative assessment**

Wind farm	Status	Number / Size turbines	Closest Distance	Visibility
Baillie Hill	Operational	21T x 110m	0.5 km	ZTV shows almost continuous theoretical visibility of Baillie Hill from the Shebster minor road with the exception of the far west and far east end.
Drum Hollistan	Application	7T x 125m	3.5 km	Continuous inter-visibility across western and central parts.
Ackron	Application	12T x 149.9m	6.2 km	Continuous inter-visibility across western and central parts.
Limekiln Extension	Application	5T x 149.9m	2.2 km	Continuous inter-visibility across western and central parts.
Forss III	Application	2T x 125m	5.0 km	Patch of visibility at western end – influence will be limited by intervening landform.

*Cumulative Scenario 1*

9.12.272 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.

9.12.273 While cumulative ZTVs show that a number of operational and consented wind farm developments are theoretically visible from this road, it is only Baillie Hill Wind Farm that will have a notable influence on the cumulative situation. The cluster of operational and consented wind farms that lie to the south-east, centring around Causeymire occur at distances beyond 15 km. Furthermore, the ZTV shows visibility from the Shebster minor road is on the margins of visibility and wirelines show that the turbines are set behind the ridgeline and intervening forestry practically screens what little visibility there might otherwise be.

9.12.274 Visibility of operational Forss and consented Hill of Lybster wind farms is closer range at 6 to 8 km but limited in its extent with only a couple of small patches, one at the western end and one at Westfield and the extent of actual visibility limited such that it will be barely indiscernible. In contrast, visibility of Baillie Hill Wind Farm is practically continuous along the length of the road and at its closest, comes to within 1 km of the road. It will have the greatest influence on the cumulative situation.

9.12.275 **Cumulative magnitude of change eastbound:** At Isauld, where the minor road connects with the A836, the Revised Consented Development is due south of road-users and so will be seen at an angle perpendicular to the direction of travel. The full extent of the Revised Consented Development is partially screened by the intervening knolls and then fully screened by the woodland cover around Achvarasdal. The turbines will be seen at a range increasing from 3.1 km and combined with visibility of Baillie Hill Wind Farm seen at a range decreasing from 4.2 km. Baillie Hill Wind Farm aligns with the direction of the

road and will form a focal feature in the views of road-users. The turbines will be seen set behind Hill of Shebster and will become increasingly more exposed as road-users come closer.

- 9.12.276 Once the road comes parallel to the Hill of Shebster, the Revised Consented Development lies to the rear of road-users and is no longer readily visible. The addition the Revised Consented Development makes to the cumulative situation beyond this point for east-bound travellers is a **low** to **negligible** cumulative magnitude of change.
- 9.12.277 Over the section between Isauld and the Hill of Shebster, the magnitude of change will be **medium-low**. Although the Revised Consented Development will be visible at the relatively close range of 3.1 km, its perpendicular position, relative to the road-users, combined with the comparative prominence of Baillie Hill Wind Farm as a focal feature in the view, limits the extent to which the Revised Consented Development will add to the cumulative situation.
- 9.12.278 **Cumulative magnitude of change westbound:** Combined visibility of Baillie Hill Wind Farm and the Revised Consented Development will occur along much of the length between Newlands of Geise and Shebster. The two developments will be seen in the same westerly sector, set side by side but with a sufficient gap between to ensure the developments are seen to be separate. Baillie Hill Wind Farm is seen set in the Mixed Agriculture and Settlement LCT while the Revised Consented Development will be seen to extend the influence of wind farm development into the Coniferous Woodland Plantation LCT which is distinctly different on account of its homogenous land cover of forestry and absence of field patterns, settlement and roads.
- 9.12.279 Baillie Hill Wind Farm will always form the closer range example and this will have the effect of diminishing the scale of the Revised Consented Development which will appear comparatively smaller. Between Newlands of Geise and Westfield, the Revised Consented Development will be located 12 km to 7 km from road-users, which means the turbines will appear as small scale structures. In contrast, the Baillie Hill turbines at a range of 6.5 km to 2.1 km will appear as medium to large scale structures. Similarities between the two developments will exist in that they will be seen to be of a similar number of turbines and arranged in a similarly loose layout across low hills. The cumulative magnitude of change across this section will be **low** at the Newlands of Geise end and medium-low at the Westfield end.
- 9.12.280 Passing west-bound out of Westfield, the road aligns with Baillie Hill Wind Farm such that views are focused on this close range development at 2.1 km and the Revised Consented Development will be seen at a more oblique angle at 6.1 km. From the access road to Bardnaheigh to Shebster, although the road does not align exactly with the Revised Consented Development it will appear within the forward range of road-users and at a range of 5.4 km to 3.7 km will start to appear more prominent in the views from the road. The addition of the Revised Consented Development to a situation in which Baillie Hill Wind Farm will be seen at close range to the right of the road will lead to a **medium** magnitude of change as together they will appear as two large scale developments which will occupy much of the forward view of road-users.

9.12.281 Beyond Shebster, Baillie Hill Wind Farm lies to the rear of road-users and will no longer have a direct influence on the cumulative situation. The Revised Consented Development will be seen on its own and the cumulative magnitude of change will be **low** to **negligible**.

9.12.282 **Significance of cumulative effect eastbound:** The cumulative effect that will result from the addition of the Revised Consented Development to the views from this receptor travelling eastbound will be **not significant** as the addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the views.

9.12.283 **Significance of cumulative effect westbound:** The cumulative effect that will result from the addition of the Revised Consented Development to the views from this receptor travelling westbound will be **significant** across the section between the Bardnaheigh access and Shebster as the addition of the Revised Consented Development will result in the view being defined or characterised primarily by wind farms. This relates chiefly to the close proximity of Baillie Hill combined with the location of the Revised Consented Development in the forward vision of road-users. The cumulative effect will be not significant for the remaining sections.

#### *Cumulative Scenario 2*

9.12.284 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.

9.12.285 In Cumulative Scenario 2, the application stage wind farms will have relatively limited influence on the cumulative situation owing to their separation distance from the minor road, the enclosure of landform, especially to the north and the closer range influence of Baillie Hill Wind Farm, which, by comparison, will make the other cumulative wind farms appear more distant and smaller in scale.

9.12.286 **Cumulative magnitude of change eastbound:** Travelling east-bound, Drum Hollistan and Ackron will be to the rear of the direction of travel and, therefore, will have a very limited influence on the cumulative situation. The cumulative magnitude of change for east-bound road-users will relate principally to the cumulative interactions between the Revised Consented Development and Baillie Hill Wind Farm and, therefore, will be the same as assessed in respect of Cumulative Scenario 1, that is **medium-low** in the western section between Isauld and the Hill of Shebster, and **low** or **negligible** in the sections further east. This reflects the very limited additional influence that the application stage wind farms will have on road-users travelling east-bound.

9.12.287 **Cumulative magnitude of change westbound:** Travelling west-bound, it will be Drum Hollistan and Ackron that will be visible from the Shebster Minor road, seen almost continuously between Westfield and Isauld. These will be seen from a minimum distance of 11 km at Westfield to a minimum distance of 3.5 km at Isauld, albeit with the Ackron Wind Farm set a further 1.5 km to 2 km west.

9.12.288 While these wind farms will add to the cumulative context, they will not alter the cumulative magnitude of change, assessed in respect of Cumulative Scenario 1 as **medium** between the Bardnaheigh access and Shebster. They would,

however, increase the extent of this medium cumulative magnitude of change between Shebster and Isauld, where despite road-users having passed by closer range Baillie Hill Wind Farm, the influence of Drum Hollistan and Ackron will increase as the separation distance decreases. It is in this context that the addition of the Revised Consented Development, will be seen as a notable addition in views to the south-west. In those sections of the Shebster minor road to the east of the Bardnaheigh access, the cumulative magnitude of change will be **low** or **negligible**.

9.12.289 **Significance of cumulative effect eastbound:** The cumulative effect that will result from the addition of the Revised Consented Development to the views from this receptor travelling eastbound will be **not significant** as the addition of the Revised Consented Development will not result in the view being defined or characterised primarily by wind farms, and baseline characteristics will still be apparent within a large part of the views.

9.12.290 **Significance of cumulative effect westbound:** The cumulative effect that will result from the addition of the Revised Consented Development to the views from this receptor travelling westbound will be **significant** across the section between the Bardnaheigh access and Isauld as the addition of the Revised Consented Development will result in the view being defined or characterised primarily by wind farms. This relates chiefly to the close proximity of Baillie Hill combined with the location of the Revised Consented Development in the forward vision of road-users, as well as the presence of Drum Hollistan and Ackron in the views to the west.

#### *Combined Development Cumulative Scenario 1*

9.12.291 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** for westbound road-users between the Bardnaheigh access and Shebster and **not significant** for all remaining sections, both westbound and eastbound. The Combined Development will add to a cumulative situation in which there is already a strong influence from close range Baillie Hill Wind Farm.

#### *Combined Development Cumulative Scenario 2*

9.12.292 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** for westbound road-users between the Bardnaheigh access and Isauld and **not significant** for all remaining sections, both westbound and eastbound. While the main cumulative interaction will be between the Combined Development and Baillie Hill Wind Farm, there will be an additional influence from application stage Drum Hollistan and Ackron in the middle range to the north-west and this will increase the extent of the significant cumulative effect westwards to Isauld.

#### NCR1

9.12.293 As the section of NCR1 relevant to this assessment coincides with a section of the A836 and a section of the Shebster minor road, the cumulative effect on NCR1 can be informed by the cumulative assessment of these two routes. This



leads to the finding that **significant** cumulative effects will arise only in respect of west-bound cyclists in the section between the Bardnaheigh access and Shebster, under Cumulative Scenario 1, and Bardnaheigh access and Reay, and in respect of Cumulative Scenario 2. The assessment that has led to these conclusions is presented in respect of the A836 and Shebster minor road assessment presented above.

*Combined Development Cumulative Scenario 1*

9.12.294 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be significant for westbound cyclists between the Bardnaheigh access and Shebster and **not significant** for all remaining sections, both westbound and eastbound, as described in respect of the assessment for the A836 and Shebster Minor Road.

*Combined Development Cumulative Scenario 2*

In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** for westbound road-users between the Bardnaheigh access and Reay and **not significant** for all remaining sections, both westbound and eastbound, as described in respect of the assessment for the A836 and Shebster Minor Road.  
CA 11.02 – Achvarasdal Woodland / CA11.10 – Achvarasdal East Drive

9.12.295 These principal visual receptors have been assessed as having a medium sensitivity, a variable magnitude of change, and a significant effect on CA 11.10 and a short section of CA 11.02 over the farm access to Achvarasdal Farm, but no other significant effects on CA 11.02, resulting from the Revised Consented Development.

**Table 9.29: Scenario 1 and 2 wind farms relevant to CA 11.02 / CA 11.10 cumulative assessment**

Wind farm	Status	Number / Size turbines	Closest Distance	Visibility
Baillie Hill	Operational	21T x 110m	3.5 km	ZTV shows continuous theoretical visibility of Baillie Hill from CA 11.02 / CA 11.10. Actual visibility will be reduced by mature tree cover.
Drum Hollistan	Application	7T x 125m	4 km	All 7 turbines will be visible to varying degrees owing to the screening effect of intervening landform and tree cover.
Ackron	Application	12T x 149.9m	6 km	Set behind Drum Hollistan, 9 turbines are visible to varying degrees owing to the screening effect of intervening landform and tree cover.
Limekiln Extension	Application	5T x 149.9m	2.5 km	All 5 turbines will be visible to varying degrees owing to the screening effect of tree cover.

Forss III	Application	2T x 125m	5.5 km	Visible to varying degrees owing to screening effect of rising landform and forestry to the north.
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#### *Cumulative Scenario 1*

- 9.12.296 The addition of the Revised Consented Development to the operational, under construction and consented wind farms is considered in this cumulative assessment.
- 9.12.297 The cumulative ZTVs show that while there are small patches of theoretical visibility of operational Forss and consented Hill of Lybster, actual visibility will be negligible from these core paths and it will only be Baillie Hill Wind Farm that will have a notable bearing on the cumulative situation. While the ZTV shows theoretical visibility across the core paths, actual visibility will be greatly reduced by the extent of mature trees which cover the majority of the grounds.
- 9.12.298 While the farm access to Achvarasdal Farm, covered by a section of CA11.02, will gain visibility of the Revised Consented Development, the cover of the close range trees will mean that visibility of Baillie Hill Wind Farm in the opposite direction will be largely screened. This means there will be no change and, therefore, no cumulative effect on this core path.
- 9.12.299 In respect of CA11.10 East Achvarasdal Drive, actual visibility of both the Revised Consented Development and Baillie Hill Wind Farm will occur. The cumulative magnitude of change on this core path will be **medium**. This relates principally to the existing influence of Baillie Hill Wind Farm as a close range development and the addition that the Revised Consented Development will make as another close range development, its location in the opposite sector maximising the influence of this type of development in extent around the core path.

#### *Cumulative Scenario 2*

- 9.12.300 The addition of the Revised Consented Development to the operational, under construction, consented and application stage wind farms is considered in this cumulative assessment.
- 9.12.301 From CA11.02, while visibility of Baillie Hill Wind Farm to the north-east will be partly screened by close range trees and rising landform, visibility of Drum Hollistan and Ackron will occur to the west. These developments will be seen grouped together in the Sweeping Moorland LCT at minimum distances of 4 and 6 km respectively. While the Revised Consented Development will be visible to the south, the cumulative magnitude of change will be medium-low, as the wind farms will be seen as distinct developments with a substantial extent of separation space between them, such that they will appear as features within the landscape rather than the defining feature of the landscape.
- 9.12.302 From CA11.10 East Achvarasdal Drive, the mature tree cover to the west will mean that visibility of Drum Hollistan and Ackron will be largely screened. The cumulative magnitude of change will remain **medium** as assessed in respect of the interaction with Baillie Hill Wind Farm under Cumulative Scenario 1.

*Significance of cumulative effect*

9.12.303 In respect of both Cumulative Scenario 1 and Cumulative Scenario 2, the effect of the Revised Consented Development on CA 11.10 will be **significant**. This path follows a short section of drive to Achvarasdal House. The effect on CA 11.02 and the remaining parts of CA 11.10 will be **not significant** owing to the screening effect of mature tree woodland.

*Combined Development Cumulative Scenario 1 and Scenario 2*

9.12.304 In considering the cumulative effect of the Combined Development in respect of Cumulative Scenario 1 and Cumulative Scenario 2, the cumulative magnitude of change will remain as assessed in respect of the Revised Consented Development and the effect will be **significant** on CA 11.10 and **not significant** on CA11.02 and the remaining parts of CA 11.10. The Combined Development will add to a cumulative situation in which there is already a strong influence from close range Baillie Hill Wind Farm in Cumulative Scenario 1 and with the addition of the influence from Drum Hollistan and Ackron in Cumulative Scenario 2.

Summary of cumulative effects

9.12.305 The cumulative effects of the Revised Consented Development on the landscape character receptors, viewpoints and principal visual receptors that have potential to undergo a significant cumulative effect are summarised in Table 9.33 below. The table does not include the landscape character receptors and visual receptors that do not have potential to undergo a significant cumulative effect, and the preliminary assessment of these can be read in **Appendix 9.D**.

*Cumulative Scenario 1*

9.12.306 In respect of Cumulative Scenario 1, the assessment shows that significant cumulative effects will occur in localised parts of two of the LCTs, from two of the viewpoints, from one settlement, from a west-bound section of one route, including the coinciding section of NCR1, and from one core path. The two LCTs that will be affected include those parts of the Broubster Sweeping Moorland LCT and the North-East Mixed Agriculture and Settlement LCT which lie between the Revised Consented Development and Baillie Hill Wind Farm and, as such, are closely influenced by the close proximity of both developments.

9.12.307 The two viewpoints which will undergo significant cumulative effects are Viewpoint 4 – Shebster and Viewpoint 6 – A836 Dounreay Road Junction both of which are situated in very close proximity to Baillie Hill Wind Farm and it is in this context that the addition of the Revised Consented Development, albeit at a more distant range, will give rise to significant cumulative effects.

9.12.308 Significant cumulative effects will occur in the small settlement of Shebster, largely owing to its location between the very close range Baillie Hill Wind Farm on one side, and the Revised Consented Development on the other. A significant cumulative effect will also occur along a short section of the Shebster Minor Road between Reay and Thurso for road-users travelling westbound between Bardnaheigh Access and Shebster. In this section Baillie Hill Wind Farm is in very close proximity and the Revised Consented

Development aligns with the direction of the road making it a prominent feature despite its more distant location. This significant cumulative effect also applies to the short section of the NCR1 west-bound, which coincides with this route. A further significant cumulative effect will occur in respect of core path CA 11.02 east Achvarasdal Drive. This will relate to the close proximity to Baillie Hill Wind Farm and the Revised Consented Development.

- 9.12.309 In respect of Cumulative Scenario 1, the remaining landscape and visual receptors will undergo not significant cumulative effects or no cumulative effects. These findings are the result of a range of different cumulative situations, although typically relating to the limited visibility of the Revised Consented Development; the limited visibility of the cumulative developments; the concentration of the developments within a specific direction to the LCT or sector of the view; and the extent to which the developments appear to integrate with each other and the landscape setting.

*Cumulative Scenario 2*

- 9.12.310 In respect of Cumulative Scenario 2, the assessment shows that significant cumulative effects will occur in localised parts of four of the LCTs, from four of the viewpoints, from one settlement, from west-bound sections of two routes, including the coinciding sections of NCR1, and from one core path. The four LCTs that will be affected include those parts of the Broubster Sweeping Moorland LCT and the North-East Mixed Agriculture and Settlement LCT that lie between the Revised Consented Development and Baillie Hill Wind Farm; and those parts of the West Sweeping Moorland LCT and the Beinn Ratha Moorland Slopes and Hills, that lie between the Revised Consented Development and Drum Hollistan and Ackron wind farms. In parts of these LCTs, the close proximity of the Revised Consented Development in conjunction with the cumulative developments will lead to significant cumulative effects.
- 9.12.311 The four viewpoints which will undergo significant cumulative effects are Viewpoint 4 – Shebster and Viewpoint 6 – A836 Dounreay Road Junction both of which are situated in very close proximity to Baillie Hill Wind Farm and Viewpoint 14 and Viewpoint 15, both of which present elevated views with close range views of Drum Hollistan and Ackron. It is in these contexts that the addition of the Revised Consented Development will give rise to significant cumulative effects.
- 9.12.312 Significant cumulative effects will occur in the small settlement of Shebster, largely owing to its location between the very close range Baillie Hill Wind Farm on one side, and the Revised Consented Development on the other. A significant cumulative effect will also occur along a short section of the Shebster Minor Road for road-users travelling westbound between Bardnaheigh Access and Isauld and along a short section of the A836 for road-users travelling west-bound between Dounreay and Reay. These significant cumulative effects also apply to the short section of the NCR1 west-bound, which coincides with these routes. A further significant cumulative effect will occur in respect of core path CA 11.02 east Achvarasdal Drive. This will relate to the close proximity to Baillie Hill Wind Farm and the Revised Consented Development.

9.12.313 In respect of Cumulative Scenario 2, the remaining landscape and visual receptors will undergo not significant cumulative effects or no cumulative effects. These findings are the result of a range of different cumulative situations, although typically relating to the limited visibility of the Revised Consented Development; the limited visibility of the cumulative developments; the concentration of the developments within a specific direction to the LCT or sector of the view; and the extent to which the developments appear to integrate with each other and the landscape setting.

*Combined Development Cumulative Scenario 1*

9.12.314 mm

*Combined Development Cumulative Scenario 2*

9.12.315 mm

In combination cumulative effects.

9.12.316 The cumulative assessment set out in this section of the LVIA assesses only the additional landscape and visual effects of the Revised Consented Development, in the context of different baseline scenarios that make assumptions about existing and proposed wind farms. It does not present an assessment of the combined effects of all of the relevant wind farms on the landscape.

9.12.317 While the combined effects are of relevance to the Decision Maker, the applicant does not have detailed information about each of the other projects that would allow a combined effects assessment to be presented. The difficulty with combined effects is acknowledged by the Landscape Institute in the Guidelines for Landscape and Visual Impact Assessment (GLVIA) at paragraph 7.18:

9.12.318 *"Agreement should also be reached about whether the cumulative effects assessment is to focus primarily on the additional effects of the main project under consideration, or upon the combined effects of all of the past, present and future proposals together with the new project. Some of those involved may tend to favour a limited view focused on the additional effects of the project being assessed, on top of the cumulative baseline. Some stakeholders may however be more interested in the combined effects of all the past, current and future proposals, including the proposed scheme. Again discussion will be needed at the scoping stage with the competent authority and the consultation bodies about what can reasonably be expected, especially as assessing combined effects involving a range of different proposals at different stages in the planning process can be very complex. Furthermore, the assessor will not have assessed the other schemes and cannot therefore make a fully informed judgement. A more comprehensive overview of the cumulative effects must rest with the competent authority."*

9.12.319 The methodology adopted in the cumulative assessment was agreed with THC and NatureScot at the scoping stage.

9.12.320 It is the authors' professional opinion that the Revised Consented Development would contribute to the perception of a 'landscape with wind farms' in this location, where wind farms become one of a number of key characteristics in the landscape. The Development would not give rise to a perception of a 'Wind

Farm landscape' in Caithness, except within the application site itself, where the wind turbines will be the prevailing characteristic.

9.12.321 This assessment is supported by the Reporters' finding from the 2015 Limekiln Inquiry, where they found that Limekiln would not give rise to a 'Wind Farm landscape', as set out in paragraph 3.73 of their Report to the Scottish Ministers:

9.12.322 *"3.73 We note Mr Young's contention that large parts of Caithness have the attributes of a Wind Farm landscape. While we are required only to consider the cumulative impacts of this proposal, we did take the opportunity to view wider cumulative impacts from the routes we were directed to in Mr Young's evidence. In reporting to Ministers we are required to make no comment on those wider impacts, but conclude overall that the cumulative impacts of the proposal would not lead to the creation of a Wind Farm landscape within the Study Area. We find it significant in this regard that the proposal would relate closely to the Baillie and Forss grouping around Dounreay, sharing similar ZTV coverage to Baillie. It would thus largely avoid the introduction of cumulative visibility into areas which are not influenced by wind farms at present."*

9.12.323 It is also supported by the Reporters' findings from the 2018 Consented Development Inquiry. This is set out in paragraph 3.141 and in paragraph 9.16 of the Report to Scottish Ministers:

9.12.324 *"3.141 Overall, we find Limekiln 2 would be consistent with the emerging pattern of wind energy development in north Caithness. It is set back from the coast sufficiently to avoid any obvious association with the coastal landscapes and the considerable visual amenity it provides."*

9.12.325 *"9.16 In regard to cumulative effects, overall, we find that none of the significantly affected LCTs (in either scenario) would become a 'wind farm landscape' as wind turbines would not become a defining characteristic."*

### **9.13 Comparative Assessment**

9.13.1 A re-assessment of the effects of the Revised Consented Development has been requested by The Highland Council, which has involved compiling a full and detailed LVIA, despite only incremental changes being proposed.

9.13.2 In order to understand the differences between the assessment of the Consented Development and the Revised Consented Development, it is useful to highlight the physical differences between the proposals. Both proposals comprise 21 turbines, so there will be no change in terms of the number of turbines proposed. Both proposals present these 21 turbines in essentially the same arrangement, so there will be no change in terms of layout. The key difference will, however, relate to the proposed dimensions of the 21 turbines.

9.13.3 In the Consented Development, 15 turbines have a maximum blade tip height of 139 m and 6 turbines have a maximum blade tip height of 126 m. The blade tip height of all 21 of the turbines proposed for the Revised Consented Development is 149.9 m, representing an increase of 10.9 m in respect of 15 of the turbines and 23.9 m in respect of the remaining 6 turbines.

9.13.4 With the turbine numbers and turbine layout staying the same, there will be very little change in terms of the horizontal extent of the Revised Consented



Development, as can be seen in the comparative wirelines in **Figures 9.55 to 9.72** A comparative ZTV is also presented in **Figure 9.23** which shows that the extent to which the Revised Consented Development will be visible is broadly the same as the extent to which the Consented Development will be visible, albeit with a few marginal increases in localised parts.

- 9.13.5 While the 10.9 m increase in the vertical extent of 15 of the Revised Consented Development turbines will not be readily apparent, the 23.9 m increase in six of the turbines is apparent from the closer range viewpoints. The apparency of the slightly larger dimensions dissipates with distance, such that from the middle to distant range viewpoints, the differences are not readily discernible.
- 9.13.6 In terms of the effect that the slightly larger dimensions have on the findings of the assessment, this has been found to be relatively limited. The fact that the Revised Consented Development will occupy the same layout, on the same site, in the same landscape, leads to the finding that the level and extent of significant effects will broadly stay the same. While the increase in dimensions will inevitably lead to an incremental increase in the magnitude of change experienced in respect of both landscape and visual receptors, this increase will not be sufficient to change the ratings of magnitude of change set out in the 2016 LVIA. This means that the assessment of significant effects remains largely unaltered.

#### **9.14 Summary of Assessment of Effects**

- 9.14.1 The assessment of landscape and visual effects has been carried out to identify the significant effects that are likely to arise as a result of the Revised Consented Development. It has considered the effects on landscape and visual receptors, as well as the cumulative effect of the Revised Consented Development in combination with other wind farm developments on these receptors.
- 9.14.2 The assessment reports significant effects will arise as a result of the Revised Consented Development in the Limekiln Coniferous Woodland Plantation LCT, Beinn Ratha Moorland Slopes and Hills and in localised parts of five other closely surrounding LCTs; from seven viewpoints; in two settlements; from sections of two routes, including coinciding parts of NC500 and NCR1 and from nine local core paths. In respect of Cumulative Scenario 1, significant cumulative effects are reported to arise in localised parts of two LCTs; from two viewpoints; in one settlement, from a short section of one route, including coinciding parts of NCR1, and from one core path. In respect of Cumulative Scenario 2, significant cumulative effects are reported to arise in localised parts of four LCTs; from four viewpoints; in one settlement, from short sections of two routes, including coinciding parts of NC500 and NCR1, and from one core path.
- 9.14.3 The landscape of the site comprises low and sweeping hills with a blanket covering of coniferous woodland. The landscape has a scale and depth which makes it potentially suitable for wind farm development and the woodland cover makes the Revised Consented Development appear contained in the wider landscape. The significant effects arise principally as a result of the close proximity of the immediate LCT and closely surrounding LCTs to the large scale turbines of the Revised Consented Development whose influence will alter the character of these LCTs despite there already being an influence from other

- baseline wind farm developments. These effects on landscape character extend out to a maximum distance of 7 km from the Revised Consented Development.
- 9.14.4 The area surrounding the Revised Consented Development is not covered by the local / regional landscape designation of the Sensitive Landscape Area (SLA) or the national landscape designation of the National Scenic Area (NSA). These designations do, however, occur in the 40 km radius Study Area. Of the two Special Landscape Areas assessed in detail, neither were found to be significantly affected by the Revised Consented Development, owing to a combination of separation distance, limited extents of visibility and a closer association with the coast than the hinterland where the Revised Consented Development will be located. The Revised Consented Development will not have a significant effect on any of the locally or nationally designated landscapes in the Study Area.
- 9.14.5 Visibility of the Revised Consented Development is limited across the landscapes to the west and south owing to the screening effect of the intervening landform which surrounds the close range of the site. These landscapes are rural with little development such that viewpoints and receptors are typically representative of hill top views. Visibility is more extensive across the flatter landscape to the immediate north and east, where the landscape is more settled and the viewpoints representative of roads and settlements. The site marks a transition between the settled landscapes to the north and north-east and the unsettled landscapes to the west and south.
- 9.14.6 Seven of the viewpoints are reported to undergo significant effects as a result of the Revised Consented Development. All seven lie within approximately 5 km of the Revised Consented Development and the significant effects relate principally to the close proximity of the turbines which will appear as large scale structures that will form a focus in the views. The majority of the viewpoints are representative of settlements and routes and lie in the settled landscapes to the north and north-east. The surrounding landscape is not covered by any regional or national designations and there are few obvious viewpoints other than close range hill tops.
- 9.14.7 The significant cumulative effects which arise in respect of Cumulative Scenario 1 relate principally to the combined effect of the Revised Consented Development with Baillie Hill Wind Farm which is situated 4.5 km to the east. The two LCTs, two viewpoints, one settlement, section of one route, including the coinciding part of NCR1, and core path which are significantly affected, are situated in the area which lies between, or in close proximity, to the two developments.
- 9.14.8 The significant cumulative effects which arise in respect of Cumulative Scenario 2 relate principally to the combined effect of the Revised Consented Development with Baillie Hill Wind Farm which is situated 4.5km to the east and Drum Hollistan and Ackron which are situated 3.5 km and 5 km respectively to the north-east. The four LCTs, four viewpoints, one settlement, section of two routes, including the coinciding parts of NC500 and NCR1, and core path, which are significantly affected, are situated in the area which lies between, or in close proximity, to the four developments.

- 9.14.9 An assessment of the effects of the Combined Development comprising the Revised Consented Development and Limekiln Extension has been included for completeness. In respect of the landscape and visual receptors assessed in the main assessment in Sections 9.8, 9.9, 9.10 and 9.11, and the cumulative assessment in Section 9.11, the findings do not change between the assessment of the Revised Consented Development and the Combined Development.
- 9.14.10 In respect of effects on the East Halladale Flows Wild Land Area, **Appendix 9.E** presents a full and detailed assessment. While the assessment shows that the Revised Consented Development will affect the perception of wildness qualities in parts of WLA 39, these effects will arise, in the main, in locations where the wildness qualities are not expressed to their optimum and where other external influences have resulted in a diminution of their strength. In areas where wildness qualities are better expressed and high levels of visibility arise (Viewpoints B and C) the extent of these areas is small and localised, and they are areas subject to visibility from other wind farms. Importantly, in the parts of WLA 39 which display wildness qualities to their optimum, Revised Consented Development Wind Farm will not cause any significant effects. On this basis, OPEN considers that Revised Consented Development will not harm the integrity of WLA 39 as a whole.
- 9.14.11 In respect of effects on Residential Visual Amenity, **Appendix 9.F** presents a full and detailed assessment. The assessment shows that there are no properties within a 2 km radius which is typically the outer extent of a Residential Visual Amenity Assessment following Landscape Institute Guidance (2019). While the effects of the Revised Consented Development will give rise to significant effects in respect of 11 of the 14 properties assessed, none of these will undergo a high magnitude of change, and, therefore, none will reach the 'Residential Visual Amenity Threshold' where effects may become overwhelming or overbearing.
- 9.14.12 While significant and cumulative significant effects are reported to arise within the first 7 km radius of the Revised Consented Development, the remaining receptors will undergo not significant effects or no effects. Not all receptors within a 7 km radius of the Revised Consented Development will be significantly affected.

**Table 9.30: Summary of Effects on Landscape Character**

Landscape Receptor	Sensitivity	Magnitude of change construction	Significance of effect construction	Magnitude of change operation	Significance of effect operation
Coniferous Woodland Plantation	Medium	Medium-high	<b>Significant</b>	Medium- high	<b>Significant</b>
Coniferous Woodland Plantation / Limekiln	Medium-low	High	<b>Significant</b>	High	<b>Significant</b>
Sweeping Moorland / Broubster	Medium	Medium – north-west Medium-low – remaining parts	Not significant	Medium-high – north-west Medium – remaining parts	<b>Significant</b> – north-west Not significant – remaining parts

Landscape Receptor	Sensitivity	Magnitude of change construction	Significance of effect construction	Magnitude of change operation	Significance of effect operation
Sweeping Moorland / Loch Scye	Medium-high	Medium-low – north Low / Negligible – south	Not significant	Medium – north Low / Negligible – south	<b>Significant</b> – north Not significant – south
Sweeping Moorland / West	Medium-high – south Medium – north	High – immediate east Medium-high / medium – north and south Negligible – west of ridge	<b>Significant</b> – east, north and south  Not significant – remaining parts	High – immediate east Medium-high / Medium – north and south Negligible – west of ridge	<b>Significant</b> – east, north and south  Not significant – remaining parts
Moorland Slopes and Hills / Beinn Ratha	Medium-high	Medium-high	<b>Significant</b>	Medium-high	<b>Significant</b>
Moorland Slopes and Hills / Beinn nam Bad Mor	Medium-high	Medium-low – north Negligible – south	Not significant	Medium – north Negligible – south	<b>Significant</b> – north Not significant – south
Mixed Agriculture and Settlement / North East	Medium-low	Medium – north and north-east Medium low / Low – remaining parts	Not significant	Medium-high – north and north-east Medium / Medium-low / Low – remaining parts	<b>Significant</b> – north and north-east Not significant – remaining parts
Small Farms and Crofts / Broubster	Medium-low	Medium-low	Not significant	Medium	Not significant
Farr Bay, Strathy and Port Skerra SLA	Medium-high	Low	Not significant	Medium-low / Low	Not significant
Dunnet Head SLA	Medium-high	Low	Not significant	Low	Not significant

**Table 9.31: Summary of Effects on Views**

<b>Viewpoint / Distance</b>	<b>Sensitivity</b>	<b>Magnitude of change construction</b>	<b>Significance of effect construction</b>	<b>Magnitude of change operation</b>	<b>Significance of effect operation</b>
1. A836, Drum Hollistan Layby (4.53km)	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
2. Reay Footpath (2.68km)	High	Medium-high	<b>Significant</b>	High	<b>Significant</b>
3. A836, Reay Church, A836 (2.93km)	Medium	Medium-high	<b>Significant</b>	High	<b>Significant</b>
4. Shebster (3.76km)	High – residents Medium – road-users	Medium-low	<b>Significant</b> Not significant	Medium-high	<b>Significant</b>
5. Sandside Bay Harbour (4.32km)	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
6. A836, Dounreay Road Junction (5.09km)	Medium-low	Medium-low	Not significant	Medium	Not significant
8. Angler's Car Park, Loch Calder (8.02km)	Medium	Medium-low	Not significant	Medium	Not significant
9. Ben Dorrery (8.61km)	Medium	Medium-low	Not significant	Medium	Not significant
10. Minor Road Lythmore Junction (7.99km)	Medium	Low	Not significant	Medium-low	Not significant
14. Borlum Hill (1.58km)	Medium	Medium-high	<b>Significant</b>	High	<b>Significant</b>
15. Beinn Ratha (1.57km)	Medium-high	Medium	<b>Significant</b>	High	<b>Significant</b>
16. Shurrery (5.93km)	Medium	Medium-low	Not significant	Medium	Not significant
17. A836, Hill of Forss (10.34km)	Medium-low	Low	Not significant	Medium-low	Not significant
Reay	High	Medium	<b>Significant</b>	Medium-high	<b>Significant</b>
Shebster	High	Medium-low	<b>Significant</b>	Medium	<b>Significant</b>
Westfield	High	Low	Not significant	Medium-low / Low	Not significant

Viewpoint / Distance	Sensitivity	Magnitude of change construction	Significance of effect construction	Magnitude of change operation	Significance of effect operation
A836 Westbound	Medium Medium-low	Medium-low / Low	Not significant NCR1 westbound between Bardnaheigh access and Reay / eastbound between Drum Hollistan and Achvarasdal	Medium-high / Medium Medium-low	<b>Significant</b> between Dounreay and Reay <b>Not significant</b> in remaining sections
A836 / NC500 Eastbound	Medium Medium-low	Medium-low / Low	Not significant	Medium-high / Medium  Low / Negligible	<b>Significant</b> between Drum Hollistan and Reay <b>Not significant</b> in remaining sections
Shebster Minor Road Westbound	Medium	Medium-low / Low	Not significant	Medium-high / Medium Medium-low / Low	<b>Significant</b> between Bardnaheigh access and Achvarasdal <b>Not significant</b> in remaining sections
Shebster Minor Road Eastbound	Medium	Medium-low / Low	Not significant	Medium / Negligible	Not significant
NCR1 Westbound	medium	Medium-low / Low	Not significant	Medium-high / Medium Medium-low	<b>Significant</b> between Bardnaheigh access and Reay <b>Not significant</b> in remaining sections
NCR1 Eastbound	medium	Medium-low / Low	Not significant	Medium-high / Medium  Low / Negligible	<b>Significant</b> between Drum Hollistan and Achvarasdal <b>Not significant</b> in remaining sections
CA11.02 Achvarasdal Wood	Medium	Low	Not significant	Medium-high No change	<b>Significant</b> <b>No effect</b>
CA11.03 Limekiln Forest	Medium	High	<b>Significant</b>	High	<b>significant</b>
CA11.04 Sandside Head	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
CA11.05 Achins / Helshetter	Medium	Medium-high	<b>Significant</b>	High	<b>Significant</b>
CA11.06 Reay Roadside Link	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
CA11.07 Reay Golf Course via Mary's Cottage	Medium	Medium	Not significant	Medium-high	<b>Significant</b>



<b>Viewpoint / Distance</b>	<b>Sensitivity</b>	<b>Magnitude of change construction</b>	<b>Significance of effect construction</b>	<b>Magnitude of change operation</b>	<b>Significance of effect operation</b>
CA11.08 Reay Golf Course via Clubhouse	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
CA11.09 Borlum Circuit	Medium	Medium-high	<b>Significant</b>	High	<b>Significant</b>
CA11.10 Achvarasdal East Drive	Medium	Low	Not significant	Medium-high	<b>Significant</b>

**Table 9.33: Summary of Cumulative Effects**

<b>Landscape / Visual Receptor</b>	<b>Sensitivity</b>	<b>Cumulative Scenario 1 magnitude of change</b>	<b>Cumulative Scenario 1 significance of effect</b>	<b>Cumulative Scenario 2 magnitude of change</b>	<b>Cumulative Scenario 2 significance of effect</b>
Sweeping Moorland: Broubster	Medium	Medium	<b>Significant</b>	Medium	<b>Significant</b> – north-west
		Medium-low / low	Not significant	Medium-low / low	Not significant – remaining parts
Sweeping Moorland: West	medium medium-high	Medium-low	Not significant	Medium-high	<b>Significant</b> – north
				Medium-low / low	Not significant – remaining parts
Moorland Slopes and Hills: Beinn Ratha	Medium	Medium	Not significant	Medium-high	<b>Significant</b> – north-east
				Low / negligible	Not significant – remaining parts
Mixed Agriculture and Settlement: North-east	Medium	Medium-high	<b>Significant</b>	Medium-high	<b>Significant</b> – north and north-east
		Medium-low / low	Not significant	Medium-low / low	Not significant – remaining parts
1. A836, Drum Hollistan Layby	Medium	Medium	Not significant	Medium	Not significant
2. Reay Footpath	High	No Cumulative Scenario 1	No Cumulative Scenario 1	Medium	Not significant
3. A836, Reay Church,	Medium	Medium	Not significant	Medium	Not significant
4. Shebster	High / Medium	Medium-high	<b>Significant</b>	Medium-high	<b>Significant</b>
5. Sandside Bay Harbour	Medium	Medium	Not significant	Medium	Not significant
6. A836, Dounreay Road Junction	Medium-low	Medium-high	<b>Significant</b>	Medium-high	<b>Significant</b>
8. Angler's Car Park, Loch Calder	Medium	Medium	Not significant	Medium	Not significant
9. Ben Dorrery	Medium	Medium	Not significant	Medium	Not significant

14. Borlum Hill	Medium	Medium	Not significant	Medium-high	<b>Significant</b>
15. Beinn Ratha	Medium-high	Medium-low	Not significant	Medium-high	<b>Significant</b>
16. Shurrery	Medium	Medium-low	Not significant	Medium-low	Not significant
Reay	High	Low	Not significant	Medium-low	Not significant
Shebster	High	Medium	<b>Significant</b>	Medium	<b>Significant</b>
A836 / NC500 Westbound	Medium Medium-low	Medium-low	Not significant	Medium	<b>Significant –</b> Dounreay to Reay
		Low	Not significant	Medium-low Low	Not significant
A836 / NC 500 Eastbound	Medium Medium-low	Medium	Not significant	Medium	Not significant
		Medium-low	Not significant	Low	Not significant
Shebster Minor Road Westbound	Medium	Medium	<b>Significant –</b> Bardnaheigh access to Shebster	Medium	<b>Significant –</b> Bardnaheigh access to Isauld
		Medium-low / low / negligible	Not significant – remaining sections	Medium-low / low / negligible	Not significant – remaining sections
Shebster Minor Road Eastbound	Medium	Medium-low	Not significant	Medium-low	Not significant
		Low / negligible	Not significant	Low / negligible	Not significant
NCR1 Westbound	Medium	Medium	<b>Significant –</b> Bardnaheigh access to Shebster	Medium	<b>Significant –</b> Bardnaheigh access to Reay
		Medium-low / low / negligible	Not significant – remaining sections	Medium-low / low / negligible	Not significant – remaining sections
NCR 1 Eastbound	Medium	Medium-low / low / negligible	Not significant	Medium-low / low / negligible	Not significant
CA 11.02	Medium	Low	Not significant	Low	Not significant
CA11.10	Medium	Medium	<b>Significant</b>	Medium	<b>Significant</b>

## 9.15 Statement of significance

9.15.1 The objective of this chapter has been to report the significant effects on the landscape elements, landscape character and views of the Study Area, as a result of the introduction of the Revised Consented Development. The development of a wind farm is likely to result in effects that are assessed to be

significant. The assessment of the Revised Consented Development has reported significant effects as well as not significant effects. The aim of this Statement of Significance is to summarise the key points that have led to the determination of significant and not significant effects as a means to highlight the relative suitability of the site for wind farm development.

- 9.15.2 As reported in the summaries, significant effects are predicted to occur within the following receptors:
- the landscape character type in which the Revised Consented Development is located and the landscape character type immediately adjacent;
  - localised parts of five of the closely surrounding landscape character types;
  - seven of the close range views;
  - two close range settlements;
  - sections of two close range routes, including coinciding parts of NC500 and NCR1; and
  - nine close range core paths.
- 9.15.3 Significant effects are concentrated within the local area and predominantly to the north and north-east of the Revised Consented Development where there is a concentration of roads and settlement. All other receptors are predicted to undergo not significant effects.
- 9.15.4 The determination of these significant and not significant effects relate principally to the following factors;
- The suitability of the site and context for wind farm development;
  - The landscape character and landscape designations;
  - The extent of visibility; and
  - The relationship between the development and Baillie Hill Wind Farm.
- 9.15.5 The suitability of the site and context relates to the character of the landscape in which the Revised Consented Development is situated and how it, in turn, relates to the contrasting landscapes which surround it. The low hills on which the Limekiln Coniferous Woodland Plantation LCT is located form a transition between the settled and farmed landscapes to the north and east and the unsettled and unfarmed landscapes to the west and south. The site is well positioned in that it is far enough removed from the less developed and wilder landscapes to the south while at the same time recessed from the more settled landscapes along the coastal edge to the north.
- 9.15.6 The landscape in which the Revised Consented Development is situated comprises low hills, which are of local, rather than regional or national importance. They lack the scale and scenic qualities of the landscapes to the west and south. At the local level, they form a low ridgeline that marks the transition from the Mixed Agriculture and Settlement landscapes to the north and east and the Sweeping Moorlands to the west and south. Their influence on the surrounding landscapes is most pronounced within the localised area.

- 9.15.7 The sensitive landscapes in the Study Area are designated as NSAs, SLAs, and Gardens and Designed Landscapes. The development is not covered by any designation and the closest local / regional designated area lies 9 km from the nearest proposed turbine. The closest NSA lies 26 km from the nearest proposed turbine and visibility of the Revised Consented Development does not occur in this area. The only designed landscape is Castle of Mey which lies 32 km from the Revised Consented Development and from which the possibility of visibility is very limited. **Figure 9.12** demonstrates the limited extent of visibility within these designated areas. Limekiln forms part of the large area of undesignated landscape that lies central to the Study Area. This area is typically lower in elevation and with a wider extent of commercial forestry and does not have such high sensitivity as the designated areas. No significant effects are predicted to arise in relation to the designated areas.
- 9.15.8 The extent of visibility across the Study Area is relatively well contained and the pattern of visibility reflects the shape and orientation of the landscape, as illustrated in the ZTV in **Figure 9.8a** and **9.8b**. There is a concentration of visibility within the first 5 km. Beyond this to the north, visibility extends out across the North Atlantic where there are a very limited number of receptors. To the west the close range ridgeline reduces visibility across the wider landscape in this direction, limiting more distant views to visibility of reduced extents of turbines seen set behind the intervening landform. A similar pattern occurs to the south where visibility is typically limited in terms of extent across the landscape and extent of turbines visible. To the east and north-east where the landscape is comparatively flatter, the extent of visibility is greater. These landscapes have a greater presence of development, including existing wind farm development and this has reduced the magnitude of change which the Revised Consented Development has brought to receptors in these areas. Overall, the pattern of visibility has meant large parts of the Study Area will undergo no effect as a result of the Revised Consented Development.
- 9.15.9 Viewpoints represent hill tops, roads and settlements. Roads and settlements are also assessed as principal visual receptors. There are no extremely close range viewpoints other than Borlum Hill and Beinn Ratha, the tops of which lie less than 2 km from the Revised Consented Development. The next closest range viewpoints are from the A836 and Reay to the north. Significant effects on sections of, and viewpoints along, the road arise as a result of the scale at which the turbines will be seen from such close proximity. The settlements, such as Reay and Shebster have a heightened sensitivity on account of the potential effects on the visual amenity of residents.
- 9.15.10 The issues which have arisen in respect of the cumulative assessment relate principally to the relationship between the Revised Consented Development and Baillie Hill Wind Farm, which is located 4.5 km to the east of the Revised Consented Development, Drum Hollistan, which is located 3.5km to the north-west and Ackron, which is located 5 km to the north-west. Visibility of Baillie Hill Wind Farm generally coincides with the extent of visibility of the Revised Consented Development. The Revised Consented Development will, therefore, not be introducing a new or unfamiliar feature to the setting of the majority of the receptors. The developments will often be seen in close proximity but always with a substantial separation so as not to appear as one. The location of the

developments within close proximity serves to concentrate the cumulative effects in respect of the effects on surrounding receptors.

- 9.15.11 Notwithstanding the suitability of the Limekiln Coniferous Woodland Plantation LCT as a location for the Revised Consented Development, the introduction of wind farm development into this LCT will increase the perceived spread of wind farm development from the Mixed Agriculture and Settlement LCT where Baillie Hill Wind Farm is located. The Revised Consented Development will introduce another large scale wind farm development into this area and cumulative significant effects are reported to occur from a select number of receptors which are notably influenced by both the Baillie Hill Wind Farm and the Revised Consented Development.
- 9.15.12 Significant and cumulative significant effects have been reported in respect of close range visual and landscape receptors. These effects are localised within the first 7 km, with the remaining receptors across the Study Area undergoing either not significant effects or no effects.

## 9.16 References

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