



Chapter 5

Landscape and Visual Impact Assessment

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Chapter 5

5 Landscape and Visual

5.1 Introduction

5.1.1 Background

1. This Landscape and Visual Impact Assessment (LVIA) of the Proposed Development has been undertaken by Chartered Landscape Architects at WSP on behalf of ScottishPower Renewables (UK) Ltd (SPR), the details of whom are presented in **Chapter 1: Introduction**.
2. The LVIA reports the assessment of likely significant effects on the landscape and on visual amenity arising from the Proposed Development. Landscape and visual assessments are separate although linked processes, describing closely related but distinct sets of effects.

5.1.2 Landscape

3. The landscape assessment considers the effects of change and development on landscape as a resource.
4. The character of the landscape derives from a combination of physical factors, natural processes and human intervention. Landscape effects are a combination of the physical changes to the fabric of the landscape arising from the Proposed Development and perceptual changes – the way these physical changes alter how the landscape is perceived.
5. The landscape assessment considers the effect of the Proposed Development on the landscape as a whole, effects on significant individual elements of the landscape, and effects on characteristic combinations or patterns of elements and how these are seen to affect its character and quality.

5.1.3 Visual

6. Visual assessment is concerned with the views that are available to people who may be affected by the Proposed Development, and their perception and responses to changes in these views.
7. Visual effects arise from changes in the composition and character of views available in the area affected. The assessment considers the likely change that would be experienced, including the effects both on specific views and on general visual amenity – the pleasantness of the view or outlook – that the people potentially affected enjoy.
8. For the purposes of assessment, whilst it is the people living, working, passing through or enjoying recreational activities in the area who actually see the views and enjoy the visual amenity, it is the places they may occupy that are mapped and described as the visual receptors.
9. A Cumulative Landscape and Visual Impact Assessment (CLVIA), which considers the cumulative effects of the Proposed Development in addition to or in combination with other relevant windfarms is also included.
10. This chapter should be read in conjunction with the following Appendices:
 - **Appendix 5.1 LVIA Methodology;**
 - **Appendix 5.2 Viewpoint Analysis;**
 - **Appendix 5.3 Preliminary Assessment and Cumulative Context;**
 - **Appendix 5.4 Residential Visual Amenity Assessment (RVAA); and**
 - **Appendix 5.5 Wild Land Assessment.**

11. This chapter is also supported by figures and visualisations as follows:

- **Volume 2: Figures 5.1 to 5.16;**
- **Volume 3: Visualisation Figures 5.17 to 5.40; and**
- **Volume 4: Appendix Figures**

5.1.4 The Proposed Development

12. The Site and Site layout are shown on **Figure 4.1 Site Layout**. The Site falls entirely within the South Ayrshire Council administrative area. For the purposes of the assessment, as agreed in consultation with NatureScot, this LVIA is based on an indicative candidate wind turbine with a 125metres (m) hub height, a 150m rotor diameter and a maximum blade tip height of 200m. Taking into account the 200m blade tip height is fixed, the 125m hub height/150m rotor diameter was considered the realistic worst-case scenario for landscape and visual receptors against a longer rotor diameter and shorter hub height (such as 115m hub height/170m rotor diameter). This is due to the potential greater visibility of a higher hub height. To aid this decision, an analysis of the different proportions of hub height and blade lengths was undertaken and comparison wirelines of wind turbines with the 170m and 150m rotor diameters produced. These wirelines are presented in **Volume 4, Appendix 5.3 Figure 5.3.7 Wind Turbine Options Comparative Wireline**. These illustrate that the 10m difference in hub height and blade length is not noticeable and would not be so considerable to alter the level of effects assessed.
13. On the basis of the potential for significant effects from wind turbine aviation lighting identified during the design and preliminary assessment stages, the Applicant has set out in **Appendix 13.4 Indicative Aviation Lighting Landscape and Visual Impact Mitigation Plan** that no construction would commence until an Aviation Lighting Landscape and Visual Impact Mitigation Plan (ALLVIMP), which includes the use of an aircraft detection lighting system, is approved in consultation with the CAA. This would mean the lights would only be switched on when an aircraft transits the Site. Given the lights are only required for aircraft flying at night in the vicinity of the Site at altitudes of up to 3000ft above mean sea level, it is anticipated that the lights would be rarely on in this quiet airspace. When they are on, as presented in **Appendix 13.4**, the aviation lights would only be on for approximately 1.5 to 3 minutes, resulting in the aviation lights having short duration visual effects of limited frequency. With this mitigation in place it would remove all significant effects on landscape and visual receptors associated with aviation lighting. Therefore no further assessment on turbine aviation lighting is considered necessary in this chapter
14. The agreed LVIA Study Area is a 30 kilometre (km) radius from the proposed wind turbines and is justified and explained in more detail in **Section 5.4**.
15. The description of other elements of infrastructure of the Proposed Development assessed in this chapter can be found on **Figure 4.1 Site Layout** and **Chapter 4: Development Description**. The landscape and visual aspects of the Site selection and design are described in full in **Chapter 3: Site Selection and Design**. **Appendix 4.1 Offsite Access Appraisal** considers the potential landscape and visual effects of the proposed offsite access route to the Site, concluding that there would be no potential significant effects likely to occur as a result of the offsite access route upgrade works and as a result, this has not been assessed further within this chapter.

5.2 Legislation, Policy and Guidance

5.2.1 Legislation

5.2.1.1 European Landscape Convention

16. The UK is a signatory to the European Landscape Convention (ELC) which was ratified in 2006 and became binding in the UK from 1 March 2007. The ELC defines Landscape as “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors” (Council of Europe, 2000). It further states that the ELC “covers natural, rural, urban, and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes.”
17. The ELC requires “landscape to be integrated into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as any other policies with possible direct or indirect impacts on landscape”.

18. Schedule 9 of the Electricity Act 1989 is the only legislation which covers landscape character or visual amenity in the UK. This identifies a duty for developers of electricity infrastructure to have regard to the desirability of preserving natural beauty and mitigate effects on amenity. The spirit of the ELC is also carried through in planning policy and government guidance. It provides a framework for NatureScot's¹ policy and guidance on Scotland's landscapes.

5.2.2 Policy

5.2.2.1 National Policy

19. Scotland's National Planning Framework 3 (NPF3), which was published in 2014 is the long-term strategy and spatial expression of the Governments long-term vision for development and investment in infrastructure. As part of this, the Scottish Planning Policy (SPP) was published in 2014 and sets out the national planning policies on the development and use of land in Scotland, including onshore windfarms. Specifically, SPP sets out the requirement for planning authorities to produce spatial frameworks for onshore windfarm development that are based on the following:

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

20. The spatial frameworks provide the basis of the relevant local policy which is considered in more detail below.

5.2.2.2 Local Policy

21. The Site and north west half of the Study Area falls within South Ayrshire Council's authority boundary, as illustrated on **Figure 1.1 Site Location**. Dumfries and Galloway lies within the south east and East Ayrshire in the north east of the LVIA Study Area.

5.2.2.2.1 South Ayrshire

South Ayrshire Local Development Plan Policy 2014

22. The South Ayrshire Local Development Plan was adopted in September 2014 (the SALDP). In June 2019, South Ayrshire Council approved the Proposed Replacement South Ayrshire Local Development Plan (PLDP2) for publication and consultation, and a subsequent update was made in March 2020 which is referred to as The Modified Proposed Local Development Plan 2 (MPLDP2). It is currently in examination with the Scottish Government's Directorate of Planning and Environmental Appeals (DPEA), with an adoption date anticipated to be towards the end of 2021. When adopted, MPLDP2, would supersede the adopted SALDP but as it is still in examination, the relevant policies to LVIA and the Proposed Development within the SALDP are considered below.

SALDP Policy: Wind Energy

23. In relation to landscape and visual matters, the SALDP Wind Energy Policy states that proposals would be supported if:

- *"they are capable of being accommodated in the landscape in a manner which respects its main features and character (as identified in the South Ayrshire Landscape Wind Capacity Study or in any subsequent updates to that study), and which keeps their effect on the landscape and wider area to a minimum (through a careful choice of site, layout and overall design);*
- *they do not have a significant detrimental visual impact, taking into account views experienced from surrounding residential properties and settlements, public roads and paths, significant public viewpoints, and important recreational assets and tourist attractions; and*
- *their cumulative impact in combination with other existing and approved wind energy development, and those for which applications for approval have already been submitted, is acceptable."*

¹ Formerly Scottish Natural Heritage (SNH).

SALDP Policy: Landscape Quality

24. The Landscape Quality Policy states: "We will maintain and improve the quality of South Ayrshire's landscape and its distinctive local characteristics. Proposals for development must conserve features that contribute to local distinctiveness, including:

- *community setting, including the approaches to settlements, and buildings within the landscape;*
- *patterns of woodland, fields, hedgerow and tree features;*
- *special qualities of rivers, estuaries and coasts;*
- *historic landscapes; and*
- *skylines and hill features, including prominent views."*

SALDP Policy: Protecting the Landscape

25. The 'Protecting the Landscape' Policy states: "We will consider proposals within or next to (South Ayrshire) Scenic Areas (as defined on the LDP environment map) against the following conditions.

- *the significance of impacts and cumulative impacts on the environment, particularly landscape and visual effects as informed by the Ayrshire Landscape Character Assessment (Scottish Natural Heritage² (SNH) 1998));*
- *how far they would benefit the economy; and*
- *whether they can be justified in a rural location".*

26. In accordance with 2017 draft SNH guidance on the selection of local landscape area designations across Scotland, South Ayrshire Council conducted a review on the existing extensive sensitive landscape character area and scenic area designations in South Ayrshire. This concluded the need for new Local Landscape Areas (LLAs) that: "*Conform with Scottish Planning Policy; recognise LLAs may not just be of scenic value, but may have other attributes like nature conservation, cultural heritage or recreational value; and are sufficiently robust to protect and enhance South Ayrshire Council's local landscapes."*

27. Eleven LLAs have been defined across South Ayrshire and proposed within the MPLDP2 to replace the extensive Scenic Area currently defined within the SALDP. As MPLDP2 has not yet been formally adopted, the LLAs within it remain candidate sites in policy terms, however the study identifies valued landscapes, providing a greater level of detail and justification than is given for the larger and less defined Scenic Area which is helpful in focussing the LVIA. The LVIA therefore considers the candidate LLAs within the wider Scenic Area.

South Ayrshire Local Landscape Areas (LLAs)

South Ayrshire LDP Supplementary guidance: Wind Energy 2015

28. The Supplementary Guidance: Wind Energy (2015) document outlines the Spatial Framework for wind energy development within South Ayrshire. The Supplementary Guidance refers to the South Ayrshire Landscape Wind Capacity Study (2013) (now superseded by the 2018 South Ayrshire Landscape Wind Capacity Study (SALWCS)), which examines the landscape character baseline with regard to its sensitivity to different sizes of wind turbine development and provides more locally defined landscape character types on this basis. As windfarm specific landscape character types (LCT), in accordance with NatureScot's advice, the SALWCS LCTs form the main landscape baseline for this LVIA (in addition to the Dumfries and Galloway Council and East Ayrshire Council's character areas, and supplemented by NatureScot's Scotland Landscape Character Assessment, 2019). **Section 5.5** provides details on the relevant landscape character types considered within this assessment.

29. Design and siting criteria noted in the guidance which are relevant to the Study Area include:

- *"Rugged scenery and sense of wildness associated with Loch Doon and the Carrick Hills..."*
- *"Landmark Hills ... form highly visible backdrops and diverse skylines to the Girvan and Stinchar Valleys and the South Ayrshire coast..."*
- *"...the upland landscapes are a more extensive scale and can better accommodate larger scale wind turbines...Mitigation of their visual impact will be sought by setting development well back into the upland interior and considering limitations in the height of wind turbines."*

² Now known as NatureScot.

- "views experienced from surrounding residential properties and settlements, public roads and paths, significant public viewpoints, and important recreational assets and tourist attractions" and
- in relation to cumulative effects, specific sensitive receptors identified include the A714, Stinchar Valley, Girvan Valley and The Merrick.

South Ayrshire Landscape Wind Capacity Study 2018

30. The 2013 Wind Capacity Study was updated by South Ayrshire Council in August 2018. In brief, the updated South Ayrshire Landscape Wind Capacity Study of August 2018 (SALWCS) places the proposed wind turbines within the Foothills with Forest and Windfarm LCT. The Study Area lies between the Girvan Water and Stinchar Valleys. The guidance assesses this typology as a High-Medium sensitivity to change for wind turbines >70m. Specific sensitivities noted are the potential for impacts on the Stinchar and Girvan Valleys and on the adjacent Rugged Uplands, Lochs and Forest character type.
31. The character types in the SALWCS form the landscape baseline for this LVIA in addition to the neighbouring council areas and supplemented by NatureScot's Scotland Landscape Character Assessment, 2019.

5.2.2.2.2 Dumfries and Galloway

Dumfries and Galloway Local Development Plan 2 (LDP2) 2019

32. The Dumfries and Galloway Local Development Plan was adopted in October 2019.
33. Policy relevant to the LVIA and Proposed Development includes:

Policy NE2: Regional Scenic Areas

34. Policy NE2 states that: "...Development within, or which affects Regional Scenic Areas, may be supported where the Council is satisfied that:
- the factors taken into account in designating the area would not be significantly adversely affected; or
 - there is a specific need for the development at that location."

The Galloway Hills Regional Scenic Area is located within the Study Area and it is described, and the potential effects assessed in **Section 5.11**.

Policy NE3: Areas of Wild Land

35. Policy NE3 states that: "Development which would affect the Merrick Wild Land Area (WLA) in Galloway would not be supported unless the Council is satisfied that it is demonstrated that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation."
36. The Merrick WLA lies within the Study Area and is described and assessed in **Appendix 5.4 Wild Land Assessment**.

LDP2 SG: Part 1 Wind Energy Development: Development Management Considerations Appendix 'C' Dumfries & Galloway Wind Farm Landscape Capacity Study (February 2020)

37. The Dumfries and Galloway Wind Farm Landscape Capacity Study (DGWLCS) was adopted as part of LDP2's Wind Energy Supplementary Guidance in February 2020. It provides some minor updates (largely relating to small wind typologies) to the adopted June 2017 version of the same name. The DGWLCS landscape character types form the landscape baseline for this LVIA in addition to the neighbouring council areas and supplemented by NatureScot's Scotland Landscape Character Assessment, 2019.

5.2.2.2.3 East Ayrshire

East Ayrshire Local Development Plan 2017

38. The East Ayrshire Local Development Plan (EALDP) was adopted in 2017 and sets out policy relating to some of the sensitive areas within the Study Area. Those of relevance include:
- ENV7: Sensitive Landscape Area – this policy sets out that any developed deemed to have unacceptable impacts on SLAs will not be supported and that proposals would also require to be assessed against policy ENV8: Protecting and Enhancing the Landscape. Non-statutory guidance on Sensitive Landscape Areas

supports policy ENV 7 by providing further detail on which particular qualities make the SLA valuable and important on a local and regional scale; and

East Ayrshire Local Development Plan Background Paper: Sensitive Landscape Areas (March 2015).

39. East Ayrshire have identified Sensitive Landscape Areas which are based on the landscape character types (LCT) within its boundary that are considered to be most sensitive to development. The Rugged Uplands with Loch and Forestry, and Foothills with Forest West of Doon Valley are the two LCTs included within the Sensitive Landscape Area which fall within the Study Area.

East Ayrshire Landscape Wind Capacity Study 2018

40. The 2013 Wind Capacity Study was updated by EAC in June 2018. In brief, the updated East Ayrshire Landscape Wind Capacity Study of June 2018 (EALWCS) considers the landscape and visual sensitivity of 12 landscape character types in East Ayrshire, some of which fall within the north-east of the Study Area.

5.2.2.3 Galloway and Southern Ayrshire UNESCO Biosphere (GSAB)

41. The GSAB includes a core area, buffer zone and transition zone that covers the majority of south west Scotland. The Proposed Development lies at the edge of the GSAB buffer zone and transition zone. The GSAB is defined on GSAB's website (<https://www.gsabiosphere.org.uk/>) in recognition of "the fantastic array of landscapes, wildlife, cultural heritage and learning opportunities that SW Scotland offers communities, businesses and visitors to experience and celebrate in a sustainable way" and "brings no rules or regulations but rather encourages us to work together to create a better future for people and nature".
42. GSAB have published a 'Windfarm Position Statement' (2017). They state that they "represent a broad partnership of public, private and community interests focused on supporting sustainable development that benefits local communities and the natural environment" and that they would not support windfarms within the core or buffer zone of the Biosphere but those within the transition zone could be acceptable if environmental impacts are minimal.
43. The geographical area covered by GSAB will be considered in the landscape and visual assessment against the current defined national and local planning policy.

5.2.3 Guidance

44. The LVIA follows the methodology set out in **Appendix 5.1 LVIA Methodology** and is in accordance with industry best practice set out in Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (Landscape Institute and IEMA, 2013) (GLVIA3).
45. The following sources have also been referred to in the preparation of the methodology for the LVIA and production of visual representations:
- NatureScot (2020). General Pre-application and Scoping Advice for Onshore Wind Farms Guidance;
 - SNH (2017). Siting and Designing Wind Farms in the Landscape Version 3a;
 - SNH (2017). Visual Representation of Wind Farms Version 2.2;
 - SNH (2012) Assessing the Cumulative Impact of Onshore Wind Energy Developments;
 - Institute of Environmental Management and Assessment (IEMA) (2004), Guidelines for Environmental Impact Assessment;
 - Landscape Institute (2019). Technical Guidance Note 2/19 Residential Visual Amenity Assessment;
 - Landscape Institute (2019). Visual Representation of Development Proposals: Landscape Institute Technical Guidance Note 06/19; and
 - NatureScot (2020). Assessing Impacts on WLAs – Technical Guidance.

5.2.3.1 Reference Documents:

- South Ayrshire Council website - cycling routes and core paths (www.south-ayrshire.gov.uk);
- Dumfries and Galloway Council website – cycling routes and core paths (www.dumgal.gov.uk);
- East Ayrshire Council website (east-ayrshire.gov.uk);
- NatureScot, Landscape Character Assessment in Scotland (April 2019);
- NatureScot Wild Land Map and Descriptions;
- Ordnance Survey Mapping 1:25k and 1:50k;

- Sustrans, The National Cycle Network (www.sustrans.org.uk/national-cycle-network); and
- Historic Environment Scotland – Inventory of Gardens and Designed Landscapes (www.historicenvironment.scot).

5.3 Consultation

46. A request for a Scoping Opinion was submitted to the Scottish Government Energy Consents Unit (ECU) in May 2020 and feedback was received in October 2020, with further consultation undertaken in between May and November 2021 with NatureScot and South Ayrshire Council. A summary of the full scoping opinion is provided in **Chapter 2: Environmental Impact Assessment (EIA) Process and Methodology**. Relevant to this LVIA chapter, a summary is provided of the key points raised by NatureScot and South Ayrshire Council and is set out in **Table 5.1: Consultation Responses** below. A detailed consultation record is presented in **Appendix 2.5 Further Consultation**.

Consultee	Consultation	Action
NatureScot	<p>The LVIA should take into account both day and night time impacts of wind turbine aviation lighting on the Merrick WLA, with the inclusion of night time viewpoints within the WLA, modelling lighting at 2000cd. The lighting assessment should consider cumulative windfarms with lighting and illustrated on night-time photomontages, noting Shalloch on Minnoch as a key viewpoint.</p> <p>Request in October 2021 to include viewpoints from additional locations within the WLA consistent with NatureScot's additional information requests for the Craiginmoddie Windfarm submission.</p>	<p>A Wild Land Assessment is presented in Appendix 5.5 Wild Land Assessment. A photomontage from Merrick summit (Figure 5.31 Viewpoint 15 Merrick) Illustrative wirelines from other locations within the WLA including Benyellary, Mullwharchar and Craigmashenie are presented in Appendix 5.5 Wild Land Assessment. The assessment has been undertaken to the recent update to the WLA Assessment guidance.</p> <p>No lighting assessment has been included due to the commitment that the Proposed Development would not be operational without a regional solution to an aircraft detection lighting system being in place. This would mean that there would be no potential for significant effects from lighting on landscape designations, character or visual amenity.</p>
NatureScot and South Ayrshire Council	Consultation to obtain agreement to realistic worst case scenario of wind turbine model for the LVIA.	Agreement to the 150m rotor diameter and 125m hub height wind turbine model for a worst-case assessment.
South Ayrshire Council	<p>The assessment should address and reference the relevant findings of the 2018 South Ayrshire Landscape Wind Capacity Study (SALWCS).</p> <p>Consideration of felling and restocking proposals for the commercial forestry in the LVIA and should be illustrated in visualisations from nearby viewpoints.</p>	<p>The SALWCS has informed the design development, mitigation and assessment, with the defined character types forming the landscape character baseline.</p> <p>The Applicant's forestry consultants have input to the EIA in respect of key areas of felling and restocking, taking into account landscape and visual impacts. Visualisations at nearby viewpoints have modelled planned forestry felling where relevant.</p>
	Lighting effects should be assessed from each of the representative viewpoints and not just from the viewpoints selected to	No lighting assessment has been included due to the commitment that the Proposed Development would not be operational

	illustrate night-time effects. The effect on the sense of seclusion and naturalness (due to existing low lighting levels) on character areas should be considered in the LVIA and addressed even if the viewpoint does not lie within the Dark Sky Park Core Area. The cumulative effects of lighting should be considered in relation to the nearby Clauchrie Windfarm proposal.	without a regional solution to an aircraft detection lighting system being in place. This would mean that there would be no potential for significant effects from lighting on landscape designations, character or visual amenity.
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Table 5.1: LVIA Consultation Summary

5.4 Assessment Methodology and Significance Criteria

5.4.1 Search and Study Areas

47. An initial 45km radius Search Area from the outermost wind turbines was considered, as recommended in the SNH guidance 'Visual Representation of Windfarm Guidance'. For the purpose of this assessment, this is referred to as the 45km radius Search Area and is shown in **Figures 5.1a and 5.1b Blade Tip and Hub Height Zone of Theoretical Visibility (ZTV)**.
48. Due to the topography, potential visibility of the Proposed Development is largely within a 15 to 20km radius, becoming more dispersed out to 30km, with a more limited area of potential visibility up to and beyond 45km. Where theoretical visibility is shown on the bare ground ZTV (**Figure 5.1a and Figure 5.1b Blade Tip and Hub Height Zone of Theoretical Visibility**) and beyond 30km, visibility would likely be further limited by a combination of distance and/or intervening built form and woodland or forestry. **Figure 5.1c Blade Tip ZTV with Woodland and Settlement Screening** provides a ZTV taking into account screening by woodland and settlements which shows the considerable extent of forestry from north east to south west across the Study Area which would reduce potential visibility in and surrounding these areas, acknowledging this would vary based on commercial felling and planting operations.
49. Taking the above into account, the assessment focusses on the area within a 30km radius from the outermost wind turbines, reducing in extent where relevant to do so, for effects upon landscape character, landscape designations, visual amenity and cumulative. This 30km radius is referred to as the Study Area. It has been agreed through consultation with South Ayrshire Council and NatureScot.

5.4.2 Desk Study

50. The first step of the assessment was to undertake a desk study of the Site and the Study Area to identify the landscape and visual baseline. This included landscape planning designations, landscape character and typology, other operational and potential windfarm developments (cumulative), views from Public Rights of Ways (PRoW), National Cycle Routes, National and Long-Distance walking routes, visitor/tourist attractions, promoted viewpoints, transport network (e.g. road, rail and ferry) and residential settlements.
51. The desk study also includes the use of Geographical Information System (GIS) and Resoft Windfarm software to explore the potential visibility of the Proposed Development. The resulting ZTVs (**Figures 5.1a-c**), ZTV in **Figure 5.2 Blade Tip ZTV - No. of Wind Turbines Visible** which illustrates the number of wind turbines visible, and wirelines and photomontages (**Figures 5.17-5.40**) informed the scope of landscape and visual receptors included in the LVIA.

5.4.3 Field Surveys

52. To inform the LVIA and wind turbine layout design process, an initial field survey was undertaken in May 2020, assessment surveys in August 2020 and May 2021. During the field surveys the landscape character of the Site and the wider landscape character of the Study Area was assessed against published landscape character assessments (NatureScot 2019, SALWCS 2018, DGWLCS 2020, EALWCS 2018) so that the key relevant

characteristics of the landscape could be identified. Visual amenity was also surveyed during these field surveys and both static (viewpoints) and sequential views were surveyed. Surveyed visual receptors were from a range of distances, aspects and elevations, and covered a range of receptor types. The receptor types included transport routes, tourist locations, promoted viewpoints, PRoW's, residential settlements/properties and areas recognised for their landscape value.

53. Viewpoint photography was taken by a professional photographer experienced in windfarm LVIA photography during August and September 2020 in periods of good weather and clear visibility.

5.4.4 Assessment Methodology

54. The detailed LVIA methodology is presented in **Appendix 5.1 LVIA Methodology** and is in accordance with 'Guidelines for LVIA: Third Edition' (Landscape Institute and IEMA, (2013) ('GLVIA3').
55. In summary, the assessment involves the following key stages:
- establishment of the baseline conditions; the landscape character and visual context of the receiving environment and the sensitivity to change of these resources;
 - contributions to the iterative process of design and mitigation based on understanding the nature, form and features of the Proposed Development in relation to the key landscape and visual sensitivities;
 - an evaluation of the magnitude of change likely to result from the Proposed Development, both during construction and in operation on visual amenity and the landscape;
 - an evaluation of the cumulative magnitude of change likely to result from the Proposed Development in conjunction with other similar existing or future developments, both during construction and in operation on visual amenity and the landscape resource;
 - an assessment of the significance of landscape and visual effects considering the sensitivity of resources and the magnitude of change; and
 - an assessment of the cumulative significance of landscape and visual effects considering the sensitivity of resources and the magnitude of change.

56. A brief overview of the key methodology terminology is provided below.

5.4.5 Sensitivity

57. The sensitivity of the landscape and visual receptors is arrived at by separately considering the receptor value and the susceptibility of the receptor to the change proposed.
58. The value of a landscape is often based on its designation or recognition through national or local consensus and because of its quality including cultural associations, scenic or aesthetic qualities. The absence of a landscape designation however should not preclude an area being defined as important. Such locations may be of local value informed by local cultural or natural heritage records, works of art or levels of use.
59. Landscape susceptibility considers the ability of the receptor to accommodate the specific proposed change and the resulting consequences on the maintenance of the baseline situation.
60. Susceptibility and value can be combined in different ways although it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity. As noted in GLVIA3 there can be complex relationships between the value attributed to a landscape and its susceptibility to change, which can be particularly important when considering change in designated landscapes.
61. Value attributed to visual amenity relates to the level of recognition of the view, from highly celebrated nationally known views to views of no particular recognition. Susceptibility to the proposed change for visual receptors relates to the location of the person and their occupation, for example residents at home being highly susceptible, to low or negligible susceptibility for people using indoor facilities where the nature of the surroundings is irrelevant to their activity.

62. As with landscape, susceptibility and value can be combined in different ways to form a judgement about the visual sensitivity of a given receptor. Whilst a valued view may serve to increase the overall sensitivity of the visual receptor, a low value would not necessarily reduce sensitivity. Visual receptors considered highly susceptible to the proposed change are normally considered to be of high sensitivity unless there are features associated with the value of the view that lead to a reduction in sensitivity.

5.4.6 Magnitude of Change

63. The magnitude of landscape and visual change depends upon a combination of factors including:
- the size, scale and nature of change in relation to the context;
 - the geographical extent of the area influenced; and
 - its duration and reversibility.
64. Like with sensitivity, combining the assessment of the above aspects together requires careful consideration and professional judgement.

5.4.7 Level of Effect and Significance

65. Professional judgement is used to combine sensitivity and magnitude to gauge the level of effect and determine whether it is significant or not with a clear rationale for the overall judgement.
66. **Table 5.2** provides general guidance on the inter-relationship between magnitude of change and sensitivity of receptor. However, this matrix is used as a framework and guide for consistency, not as a prescriptive formula: the level of effect (and thus significance) would vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors as set out in the previous sections.
67. As set out in **Chapter 2: EIA Process and Methodology**, using professional judgement and with reference to the Guidelines for Environmental Impact Assessment (IEMA 2004), the assessments within this chapter generally consider effects of moderate or greater to be significant (grey boxes in **Table 5.2**), while those less than moderate to be non-significant.

Significance matrix					
		Magnitude			
		High	Medium	Low	
Sensitivity	High	Major	Major to Moderate	Moderate	Minor to Negligible
	Medium	Major to Moderate	Moderate	Moderate to Minor	Negligible
	Low	Moderate	Moderate to Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Table 5.2 Significance matrix

5.4.8 Nature of Effect

68. Effects can be either beneficial or adverse and, in some cases, neutral (neither beneficial nor adverse).
69. The aim of the LVIA is to provide an objective assessment of the relationship between the Proposed Development and the landscape in which it would be located and seen. As part of this it is also important to consider the nature of the proposed change in the context of the key characteristics of the landscape. As large engineered structures being added to the landscape, it is unlikely that a beneficial nature of effect would be found, but neutral effects could occur where it is considered the Proposed Development does not change the defining characteristics of the landscape.
70. For the purposes of this LVIA, and to ensure this LVIA assesses the worst-case scenario, the nature of all effects is considered as adverse, unless otherwise identified.

5.4.9 Cumulative Assessment

71. SNH's guidance 'Assessing the Cumulative Impact of Onshore Wind Energy Developments (SNH, 2012) provides the basis for the cumulative assessment methodology, in addition to GLVIA3.
72. The assessment of cumulative effects is essentially the same as for the assessment of the stand-alone landscape and visual effects, in that the level of landscape and visual effect is determined by assessing the combination of sensitivity of the landscape or visual receptor and the magnitude of change. The cumulative assessment is the result of the addition of the Proposed Development to the identified cumulative baseline scenario. However, in the case of the submitted application for Craiginmoddie Windfarm and in-scoping Knockcronal Windfarm, both of which would lie directly beside the Site, the combined effects of the Proposed Development with either Craiginmoddie Windfarm or Knockcronal Windfarm, or both where relevant, has been assessed.
73. The principle of magnitude of cumulative change thus makes it possible for the Proposed Development to have a major effect on a particular receptor, while having only a minor cumulative effect in conjunction with other existing developments.
74. The cumulative assessment considers the windfarms status and assessment scenarios as the following:
- **Operational** = operational and in-construction windfarms. These are included as part of the baseline assessment on which the main LVIA assessment is undertaken;
 - **Consented** = windfarms that have gained consent and not built. These are included as part of the Future Baseline within the main LVIA assessment; or
 - **Application** = windfarms at application stage, the subject of appeal, or those at scoping stage (where relevant). These are considered within the Cumulative Assessment.

5.4.10 Limitations to Assessment

5.4.10.1 ZTV Analysis

75. The following ZTV limitations, should be taken into consideration when being considered and used in this assessment:
- The ZTV (unless otherwise specified) is based on 'bare ground' and does not take into account the screening effects of built form, forestry, vegetation, distance and visibility (e.g. weather conditions). All of which can prevent or reduce visibility; and
 - variation within the visibility bands shown on the ZTV: For example, an area shown as potentially having visibility of all of the wind turbine blades may in reality only experience views of a few tips of the wind turbine blade.. As a result, the effects of the Proposed Development can vary within the same visibility band.
76. With these limitations, the ZTV's are used as a starting point in the assessment, providing an indication of where the Proposed Development would theoretically be visible. The ZTV's should not be relied upon to accurately represent or definitively show the extent of the Proposed Development's visibility.

5.4.10.2 Visualisations and Wirelines

77. SNH's Guidance on Visual Representation of Windfarms states that: "*Visualisations are illustrations that aim to represent the appearance of a proposed development. Visualisations of wind farms most commonly comprise photographs, wireline diagrams, photomontages, sketches and diagrams.*"
78. SNH's Guidance on Visual Representation of Windfarms sets out the following visualisation limitations:
- "*visualisations provide a tool for assessment that can be compared with an actual view in the field; they should never be considered as a substitute to visiting a viewpoint in the field;*
 - *neither photographs nor visualisations can replicate a view as seen in reality by the human eye.*
 - *visualisations are only as accurate as the data used to construct them;*
 - *visualisations can only represent the view from a single location at a particular time and in particular weather conditions; and*
 - *static visualisations cannot convey the effect of turbine blade movement.*"

5.4.10.3 Cumulative Data

79. Given the continuously changing nature of windfarm development within the Study Area and lack of any current national database, there are inherent limitations in obtaining the full and correct data for windfarm developments. Cumulative data has been collected directly from the windfarm developers where possible, planning application information and from aerial photography for operational sites. Where information has not been readily available this is noted within the assessment.

5.5 Baseline Conditions

5.5.1 Introduction

80. The baseline assessment establishes the landscape and visual conditions of the Site and the surrounding area. As stated by GLVIA3 para 3.15:
- the landscape baseline provides "*an understanding of the landscape in the area that may be affected – its constituent elements, its character and the way this varies spatially, its geographical extent, its history, its condition, the way the landscape is experienced and the value attached to it*"; and
 - the visual baseline aims to "*establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity at those points.*"
81. The future baseline with relevance to LVIA is also considered in descriptive terms highlighting where significant effects are likely to arise in relation to the future baseline as far as can be reasonably predicted for consented windfarms in particular but could include other changes such as forestry works, implications of tree diseases,

changes to land use and settlement patterns for example (operational wind energy developments are regarded as part of the existing baseline landscape character of the Study Area).

82. As explained in **Section 5.4** a Study Area of 30km was judged appropriate to capture all potential significant effects for the LVIA and Cumulative Assessment and was proposed and agreed with consultees.

5.5.2 Landscape Baseline Overview

5.5.2.1 Site Context

83. The Site is located within South Ayrshire, close to the administrative boundaries of East Ayrshire to the east and Dumfries and Galloway to the south/south east. It lies between 242.7-430.2m above ordnance datum (AOD); the highest point is at Garleffin Fell within the western section of the Site.
84. As shown in **Figure 5.3 Landscape Character Areas**, the Site lies predominantly within South Ayrshire's Foothills with Forestry and Windfarms LCT (17c), covering the north western fringes of the Carrick Forest. The landscape of the Site is generally large scale commercial forestry over a lower lying gently undulating area in the east which rises to the west. Beyond the southern boundary of the Site, the forestry opens out to the rugged moorland uplands of Eldrick Hill and Balloch forest plantation to the south.
85. A number of small unnamed watercourses are found across the Site, some of which drain into the River Girvan to the north and the River Stinchar to the south of the Site. Linfern Loch lies outside of the Site Boundary, just south of the central part of the Site. Landcover across the Site is predominantly coniferous commercial forestry with some small pockets of open elevated moorland.
86. An overhead transmission line (associated with the Northern Ireland-Scotland Interconnector) passes through the south east corner of the Site, to the south of the Stinchar Valley as illustrated on **Figure 4.1 Site Layout**. This feature marks the transition from coniferous plantation to rugged moorland north of Eldrick Hill.
87. The Site is generally isolated from main transport routes. The A77 lies approximately 8.5km to the north west and north, and the A713 lies approximately 10km to the north east. Between these main roads and the Site, the network of minor roads including the B741, B7203 and the B7045, provide access to houses and farmsteads. The Site includes a series of unnamed tracks associated with access and maintenance as well as accessible recreational access. National Cycle Network (NCN) 7 passes close to the west of the Site as it follows the minor road network between Crosshill and Glentrool. A number of South Ayrshire core paths run through the Site. Linfern Loch has historically been used as a recreational fishing loch with users accessing it through the Site with permission from Forestry and Land Scotland (FLS) but has not been used for this purpose since 2016.

5.5.3 Landscape Character

88. The most recent Landscape Character Assessment covering the Site and Study Area is NatureScot's Scottish Landscape Character Types dataset, 2019 (SLCT). In their guidance, NatureScot state that: "*Where there are topic-specific landscape capacity or sensitivity studies, they would take precedence for informing that development type, e.g. wind farms.*"³ As discussed in **Section 5.2** above, South Ayrshire Landscape Wind Capacity Study⁴, 2018 (SALWCS), East Ayrshire Landscape Wind Capacity Study, 2018 (EALWCS) and Dumfries and Galloway Council's Windfarm landscape Capacity Study⁵, 2020 (DGWLCS) provide a landscape character and sensitivity assessment of the respective county's landscape specifically for windfarms. Therefore, the SALWCS, EALWCS, and DGWLCS have been used as the primary landscape baseline, supplemented and cross referenced with the SLCT where necessary. It is noted that the LCTs between the two assessments do not differ significantly but as would be expected, more focus on characteristics relating to wind development is provided by the SALWCS, EALWCS and DGWLCS. The SALWCS, EALWCS and DGWLCS landscape character types are illustrated on **Figure 5.3 Landscape Character Areas** and **Figure 5.4 Landscape Character Areas and ZTV**.

³ <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/landscape-character-assessment-scotland>

⁴ Supplementary Guidance - Wind Energy Development: Development Management Considerations 'C' Dumfries & Galloway Wind Farm Landscape Capacity Study. Dumfries and Galloway Council, Dumfries.

89. The Site and adjacent areas with South Ayrshire include the following LCTs from the SALWCS which are the key LCTs within the assessment (numbers denote SALWCS LCT reference):

- Foothills with Forestry and Wind Farms (17c);
- Intimate Pastoral Valleys (Water of Girvan and Stinchar Valley) (13);
- Rugged Uplands, Lochs and Forest (21); and
- Middle Dale (12).

90. The SLCT has identified broadly similar areas of the same types. The Site lies within the following from north to south:

- Foothills – Ayrshire (76);
- Pastoral Valleys – Ayrshire (72);
- Southern Uplands – Ayrshire (81);
- Rugged Upland – Ayrshire (83); and
- Southern Uplands with Forest (82).

91. In addition to the host SALWCS LCTs, other LCTs from the SALWCS, EALWCS and DGWLCS within the Study Area that have potential inter-visibility that could lead to significant effects with the Proposed Development, are considered in the assessment, **Section 5.9**.

92. The SALWCS⁶ also sets out the importance of Landmark Hills and their setting as a consideration in relation to windfarm schemes. These include the following hills which are considered as part of the landscape character assessment:

- Glenalla Fell (north of the Site): It is an isolated hill within the forested upland plateau lying between the Stinchar and Girvan Valleys. Dense coniferous forestry encircles the western and southern slopes of this hill;
- Genoch Inner Hill (north-east of the Site): together with Kildoach, Big Hill of the Baing and Craig Hill, contain the upper Girvan Valley, providing contrast with this farmed small-scale settled valley;
- Barony Hill (north of the Site): the steep slopes of this hill constrain the southern edge of the Girvan Valley and forms the backdrop and wider setting to the Kilkerran garden and designed landscape;
- Craig of Dalwhine (west of the Site): is a craggy hill sited on the north side of the upper Stinchar Valley. Very steep slopes strongly constrict the valley. This hill lies close to the Carrick Forest hills; and
- Carrick Forest Hills (south, south east and east of the Site): these hills extend into East Ayrshire and Dumfries and Galloway. They are characterised by their rugged complex rocky form and sense of wildness (lying close to the Merrick WLA) and lie within the Dark Sky Park. Within South Ayrshire the long ridge of Shalloch on Minnoch lies in this area.

5.5.4 Landscape Designations

93. Landscape designations are areas of the landscape identified as being important on an international, national or local level. These designated landscapes are designated either through statute or local planning policy in relation to their special qualities and/or features of landscape value.

94. Landscape designations are one of the criteria that are considered when assessing the value of the landscape. All landscapes have some importance, particularly to those people who live and work in them and those who use them for leisure activities. Landscape designations provide an indication of the value that both national and local government and other agencies attach to these landscapes.

⁵ Supplementary Guidance - Wind Energy Development: Development Management Considerations 'C' Dumfries & Galloway Wind Farm Landscape Capacity Study. Dumfries and Galloway Council, Dumfries.

95. The Site is located within Galloway Forest Park and Galloway Dark Sky Park Buffer Zone. The Merrick WLA is 3km from the closest proposed wind turbine. A number of local landscape designations lie within or in close proximity to the Site including the candidate High Carrick Hills LLA, Water of Girvan Valley LLA and the Stinchar Valley LLA.

96. In summary, designated landscapes within the Study Area are illustrated on **Figure 5.5 Landscape Designations** and **Figure 5.6. Landscape Designations with Blade Tip ZTV**. East Ayrshire's Sensitive Landscape Areas are shown on **Figure 5.3 Landscape Character Area** and **Figure 5.4 Landscape Character Areas and ZTV** as they follow the same boundaries as the landscape character areas. Those included for consideration in the LVIA and its appendices are:

- Merrick WLA (refer to **Appendix 5.5 Wild Land Assessment**);
- Water of Girvan Valley Local Landscape Area (Candidate Area - South Ayrshire Council);
- High Carrick Hills Local Landscape Area (Candidate Area - South Ayrshire Council);
- Stinchar Valley Local Landscape Area (Candidate Area - South Ayrshire Council);
- Galloway Hills Regional Scenic Area (Dumfries and Galloway Council);
- Rugged Uplands with Lochs and Forestry Sensitive Landscape Area (East Ayrshire);
- Foothills west of Doon Valley Sensitive Landscape Area (East Ayrshire); and
- Inventory Garden and Designed Landscapes:

97. Gardens and Designed Landscapes identified in Historic Scotland's Inventory are considered in the LVIA in terms of their contribution to landscape character and visual amenity where they are visitor destinations. Impacts on their cultural heritage and setting is addressed in **Chapter 10: Archaeology and Cultural Heritage**.

98. Due to the distance from the Proposed Development, minimal potential visibility as illustrated by the ZTV overlaid on the landscape designations (**Figure 5.6 Landscape Designations with Blade Tip ZTV**) and/or qualities which relate to aspects or views unrelated to the Site and type of development proposed, the following landscape designations have been scoped out, in agreement with NatureScot and South Ayrshire Council, and have not been considered further:

- Culzean Castle and Country Park;
- Culzean Castle Garden and Designed Landscape; and
- Dumfries House Garden and Designed Landscape.

99. The South Ayrshire Candidate LLAs: Girvan to Ballantrae Coast & Hills, Glen App Coast & Hills, The Turnberry Coast, Culzean, Brown Carrick Hills and Coast, Doon Valley, and The Ayr Valley; and The Garden and Designed Landscapes: Skelton House, Rozelle, Auchincruive, and Glenapp have no or very limited inter-visibility with the Proposed Development and are not considered further in this assessment.

100. The Galloway Dark Sky Park has not been included in the assessment as there will be no significant effects from turbine lighting due to the commitment that the Proposed Development would not be operational without a regional solution to an aircraft detection lighting system being in place.

5.5.5 Visual Baseline Overview

101. Principal visual receptors within the Study Area comprise of residents in isolated properties and local settlements, users of long distance walking routes, core paths, local and national cycle routes and visitors to recreational/tourist destinations (as illustrated on **Figure 5.7 Blade Tip ZTV With Visual Receptors**).

102. Visual receptors including local residents, walkers and road users within the upper reaches of the Water of Girvan Valley and the Stinchar Valley have been grouped together for the assessment.

103. The visual receptors are listed below and described further in the assessment, **Section 5.12**.

5.5.5.1.1 Settlements

104. The closest settlements to the Site within 5km are shown on **Figure 5.7 Blade Tip ZTV With Visual Receptors** and include:

- Barr to the west within the Stinchar Valley;
- Dailly to the north west within the Girvan Valley
- Straiton to the north within the Girvan Valley; and
- Crosshill to the north within the Girvan Valley.

105. There are a number of relatively isolated individual houses and farmsteads located along the Stinchar and Girvan valleys within 5km which would be assessed as part of the visual receptor groups in these areas. Those within 2km of the proposed wind turbines are considered in **Appendix 5.4 Residential Visual Amenity Assessment**.

106. Within the wider context, those with potential intervisibility of the Proposed Development as shown on the ZTV (**Figure 5.1 a-b**) include:

- Maybole, 8km to the north west;
- Kirkmichael, 9km to the north;
- Patna, 12km to the north north-east;
- Dalmellington, 12km to the north-east; and
- Bellsbank, 11km to the north-east.

107. The following settlements within the Study Area are not considered further due to none or limited visibility and are not considered further in this assessment:

- Dalrymple;
- Dunure;
- Girvan;
- St Johns Town of Dalry;
- New Cumnock;
- Cumnock;
- Auchinleck;
- Barhill; and
- Drogan.

108. All the settlements along the western coastline south of Ayr within the Study Area would not have any visibility of the Proposed Development and are not considered further. Settlements at Ayr, Prestwick, and the many villages which lie north of the A70 illustrated as having potential visibility on the ZTVs (**Figures 5.1-5.2**), are over approximately 20km from the Proposed Development and taking into account the settlement pattern and vegetation, as well as distance, it is very unlikely residents in these areas would experience significant effects from the Proposed Development. These are not considered further in the assessment.

5.5.5.2 Roads

109. The Site is generally isolated from the main transport routes within the Study Area. An unnamed road referred to as C46W forms the eastern boundary of the Site and from where the Site would be accessed. The A77 lies approximately 8.5km to the north west and north, and the A713 lies approximately 10km to the north east. Between these main roads and the Site, the network of minor roads provide access to houses and farmsteads including the B741, B7203 and the B7045. The Site includes a series of unnamed tracks associated with access and maintenance. There are a number of other roads within the Study Area ranging from small A and B roads to unclassified lanes.

5.5.5.3 Rail

110. The Glasgow South Western Line between Glasgow Central to Stranraer runs through the Study Area from north to south along the west of the Study Area passing through: Ayr, Dalrymple, Cassillis, Maybole, Crosshill, Kilkerran, Dailly, Girvan, Pinmore, Pinwherry and Barrhill then heads southwest out of the Study Area. Due to none or very limited visibility with the Proposed Development as illustrated by the ZTVs (**Figures 5.1-5.2**) and confirmed during the Study Area survey, the rail line has been excluded from this assessment and not been considered further.

5.5.5.4 Recreational routes

111. The Site has recreational access which also combine as access tracks for forestry activities. The assessment considers the following routes:

- National Cycle Network (NCN) 7;
- Old Road through Straiton Heritage Path;
- Cornish Hill Trail; and
- Carrick Forest Drive.

112. The Southern Upland Way: runs east-west to the south of the Study Area. Due to none or very limited visibility with the Proposed Development as illustrated by the ZTV on **Figure 5.7 Blade Tip ZTV With Visual Receptors**, this route has been excluded from this assessment and not been considered further. This was agreed during the scoping stage.

113. In addition to this, the Alloway Burton Route and Ayr Auchincruive Route, have also been scoped out and would not be considered further due to none or very limited visibility with the Proposed Development as illustrated by the ZTV on **Figure 5.7 Blade Tip ZTV With Visual Receptors**, and during the Study Area survey.

5.5.5.5 Core Paths

114. In addition to the routes identified above, there is a network of core paths that lie within and around the Site and Study Area. These are identified on **Figure 5.7 Blade Tip ZTV With Visual Receptors** and those within the Site (north to south) include:

- SA47: Straiton via Bennan to Knockskae and the Dalquarn Burn linking to the NCN 7 at Sally Pollocks Bridge;
- SA1: Follows the same route as NCN7 described above;
- SA49: Junction of NCN 7 just south of the Nick of the Balloch to Loch Braden; and
- SA56: West of Stinchar Bridge to Ballochbeatties and to Loch Braden.

115. Those within the Study Area that are shown to have intervisibility with the Proposed Development on the ZTV (**Figure 5.7 Blade Tip ZTV With Visual Receptors**) and confirmed during the Study Area survey include:

- SA32: Minor road parallel to the A77 from Kirkoswald to Crossraguel Abbey then footway to Maybole;
- SA39: Crosshill via Dalhowna to the B741 near Blairquhan to Straiton;
- SA46: Lindsaystib east of Dailly via Delamford through Hadyard Hill Windfarm on the B734 and to the junction with the Girvan to Barr right of way;
- SA43: Kilgrammie Wood via Dailly along the south bank of the Water of Girvan, Glegee Wood to the junction with the NCN 7;
- SA48: Bennan to Straiton Monument, Craigengower and Culdoch; and
- SA57: Ballochbeatties to border with East Ayrshire at Loch Riecawr.

116. Local Paths Network: 72 from Straiton to Dalwyne follows the same route as core path SA47 described below. 75 from Loch Braden to Loch Riecawr broadly follows core path SA57 described below and follows the western side of Loch Bradan. These would be considered within the assessment of the core paths.

117. Barr Trails are a series of tracks and paths (including core paths SA52, SA53 and SA54) primarily within the Change forestry plantation promoted by South Ayrshire Council and FLS as walking, cycling and horseriding routes. They lie to the west of the Site and National Cycle Network (NCN) 7, with potential visibility of the Proposed Development within the western parts (core path SA52 and SA54) of the routes as illustrated on **Figure 5.7 Blade Tip ZTV With Visual Receptors**.

5.5.5.6 Recreational Destinations and Visitor Attractions

118. Potential effects on tourism and recreation are addressed in **Chapter 12: Socio-economics, Tourism and Recreation**. The LVIA focusses on the effects upon the visual amenity of visitors and recreational users. This includes the consideration of the following locations which are illustrated on **Figure 5.5 Landscape Designations and Figure 5.7 Blade Tip ZTV With Visual Receptors**:

- Galloway Forest Park;
- Loch Doon;
- Loch Braden;
- Merrick summit viewpoint;
- Colonel Hunter Blair Monument viewpoint;
- Dalquharran Castle;
- Bargany GDL;
- Kilkerran GDL;
- Blairquhan GDL; and
- Craigengillan GDL.

119. The Glentool Visitor Centre, Girvan Beach and Bruce's Stone are located within the Study Area, however as set out during the scoping stage there is very limited visibility from these locations and so these are not considered further. Culzean Castle, Garlies Castle, Loch Doon Castle, Dumfries House, also have none or limited visibility and are not considered further.

5.5.5.7 Viewpoints Overview

120. Viewpoints at 24 locations have been selected based on the ZTV, Study Area survey, NatureScot and South Ayrshire Council Scoping responses, shown on **Figures 5.1 a-b**. They represent various sensitive landscape and visual receptors within the Study Area. The viewpoints have also been selected to ensure that a range of viewing distance, direction and elevation are also represented. The full list is provided in **Section 5.12** and within **Appendix 5.2 Viewpoint Assessment**.

121. Viewpoints are a tool to aid the assessment and unless a specific destination viewpoint, only the scale of potential visual effect is assessed. This judgement can then be used to inform the assessment of effects upon the identified visual and landscape receptors of which the viewpoint represents, which may include more than one viewpoint. An assessment of the scale of effect at each viewpoint is presented in **Appendix 5.2 Viewpoint Assessment** which includes cumulative effects.

5.5.6 Windfarm Development Baseline

5.5.6.1 Introduction

122. In accordance with GLVIA3, paragraph 7.5 and SNH guidance on Assessing Cumulative Impacts of Onshore Wind Energy Developments (2012), paragraph 33, the cumulative assessment in this LVIA focuses on any likely significant cumulative impacts which are reasonably foreseeable.

123. The cumulative assessment considers the additional changes to the landscape character and visual amenity caused by the Proposed Development in conjunction with other similar developments.

124. An initial map (**Figure 5.8 Cumulative Sites Location Plan 45km Search Area**) of cumulative wind turbine developments was produced for a 45km radius from the Proposed Development so that a full understanding of the pattern of windfarm development in the landscape could be gained. This map includes all operational, under construction/ consented, application, refused, and scoping (pre-application) windfarm developments as of 16 July 2021. Post this date, checks have been made for any application windfarms that would have a significant bearing on the assessment and none have been found.

125. Through study of the pattern of windfarm development, topography and visibility of the Proposed Development it is considered that the probability of significant cumulative effects between the Proposed Development in addition to any cumulative windfarm developments beyond approximately 30km of the Proposed Development is very unlikely. Therefore, all cumulative windfarm developments that lie substantially beyond 30km have been excluded from the cumulative assessment and have not been considered further.

126. Through a further sieving process, using combined ZTVs, windfarms within the east south east of the Study Area including Glenshimmeroch and Shepherds Rig Windfarms were considered to have no potential to create significant simultaneous or sequential cumulative effects due to distance and very contained ZTVs which do not overlap with the Proposed Development. These windfarms are not considered further in the assessment. The cumulative assessment focuses on those within 10km, and the clusters of windfarms to the north east and south west within

30km. Cumulative windfarm developments within the Study Area and considered in the detailed assessment are shown on **Figure 5.9 Cumulative Sites Location Plan 30km Study Area**.

5.5.7 Scope of Cumulative Assessment

5.5.7.1 Existing Windfarm Developments

127. Operational and in-construction windfarms are considered as part of the baseline and are assessed as such within the LVIA. Dersalloch Windfarm is 5.2km north-east of the proposed wind turbines and Hadyard Hill is 4.5km to the west, with Tralorg Windfarm and Assel Valley Windfarm sitting beyond Hadyard Hill, approximately 12km and 13km respectively north west of the Site. These existing windfarms have the most potential to be seen with the Proposed Development and have been important to consider in relation to the design and layout as described in **Chapter 3: Site Selection and Design**.

128. At the edges of the Stinchar and Girvan Valleys, as the land rises to the uplands, approximately 20km east from the Site, there are several operational windfarms. The closest are Windy Standard and its extension with Hare Hill and its extension beyond. To the south west, the closest at approximately 14km sits Mark Hill with Arecleoch and Kilgallioch beyond. **Figure 5.10 Cumulative ZTV – All Operational Sites** illustrates the combined ZTV of the Proposed Development in addition to all operational windfarms within the Study Area.

5.5.7.2 Consented Windfarm Developments

129. The consented windfarms form the future baseline. Benbrack at approximately 14km to the east and Kirk Hill at 8km to the west are the closest. The pattern of consented development sites broadly covers the same general locations of the operational sites, mainly to the north east and to the south west. **Figure 5.11 Cumulative ZTV – All Operational and Consented Sites** illustrates the combined ZTV of the Proposed Development in addition to all operational and consented windfarms within the Study Area.

5.5.7.1 Application Windfarms

130. The 'application scenario' assesses all windfarm developments at the application stage, including those at appeal, against the windfarm baseline and future baseline. There is a level of uncertainty in predicting potential changes as a result of application stage windfarm developments as these may or may not be built. There are currently 14 application windfarms within the Study Area. Craiginmoddie Windfarm is the closest, less than 2km west of the Proposed Development. Clauchrie Windfarm is the next closest sitting 8.6 km south-west of the Site. The other application windfarms are all beyond 15km from the Proposed Development. **Figure 5.12 Cumulative ZTV – All Application Sites** illustrates the combined ZTV of the Proposed Development in addition to all application windfarms within the Study Area.

131. Scoping stage windfarm developments within the Study Area have been shown on **Figure 5.8 Cumulative Sites Location Plan 45km Search Area** for reference but generally have not been considered further due to design uncertainty at the pre-application stage and the possibility that only some or none of these pre-applications would progress onto full applications. However, given the close proximity of Knockcronal Windfarm⁷ which sits less than 1km to the north of the nearest proposed wind turbine and the sharing of layout information from the developer, combined cumulative effects have been included in the assessment on all receptors. The in-scoping Knockodhar Windfarm lies 10.9km to the south west of the Proposed Development and has less potential for significant cumulative effects, but is considered in relation to combined cumulative effects upon the WLA, and sequential effects where relevant.

5.5.7.2 List of Cumulative Windfarms

132. The cumulative assessment focuses on the cumulative windfarm developments within the Study Area which are listed in **Table 5.3**, grouped geographically and ordered by status and then distance from the Proposed Development. These windfarms are presented on **Figure 5.9 Cumulative Sites Location Plan 30km Study Area**. Cumulative ZTVs of the closest windfarms with the Proposed Development are presented on **Figures 5.13-5.16 and 5.3.1-5.3.6** within **Appendix 5.3 Preliminary Assessment and Cumulative Context**.

Wind Energy Development	No. of Wind Turbines	Blade Tip Height (m)	Approx. Distance from Nearest Proposed Wind Turbine (km)	Local Authority	Status
Windfarms within approximately 10km of the Proposed Development					
Hadyard Hill	52	110	4.5	South Ayrshire	Operational
Dersalloch	23	115-125	5.2	South Ayrshire	Operational
Penwhapple	1	101	9.3	South Ayrshire	Operational
Kirk Hill	8	110	9.8	South Ayrshire	Consented
Clauchrie	18	200	8.6	South Ayrshire	Application
Craiginmoddie	14	200	1.8	South Ayrshire	Application
Knockcronal	9	200/180	<1km	South Ayrshire	Scoping
Knockodhar	32	200	10.9km	South Ayrshire	Scoping
Windfarms in North West and West of Study Area					
Tralorg	8	126.5	12.0	South Ayrshire	Operational
Assel Valley	10	125	13.0	South Ayrshire	Operational
Windfarms in North of Study Area					
Knockshinnoch	2	126.5	15.2	East Ayrshire	Consented
Polquhairn	9	100	17.1	East Ayrshire	Consented
Polquhairn (variation to consent)	9	125	17.1	East Ayrshire	Application
Windfarms in North East and East of Study Area					
Windy Standard (I)	36	53.5	19.8	Dumfries and Galloway	Operational
Windy Standard Extension (II)	30	100-120	22.7	Dumfries and Galloway	Operational
Afton	27	120	23.6	East Ayrshire	Operational
Hare Hill	20	64	27.9	East Ayrshire	Operational
Hare Hill Extension	35	70-91	28.2	East Ayrshire	Operational
Benbrack	18	149.9	14.3	Dumfries and Galloway	Consented

⁷ An application for Knockcronal Windfarm was submitted to the ECU on 25th November 2021. As this change has happened post the completion of the Carrick Windfarm LVIA, just prior to submission date, Knockcronal Windfarm continues to be referred

to as scoping status throughout this chapter. It should be noted that the Knockcronal Windfarm layout presented in the application is the same as used in this chapter's cumulative assessment.

Wind Energy Development	No. of Wind Turbines	Blade Tip Height (m)	Approx. Distance from Nearest Proposed Wind Turbine (km)	Local Authority	Status
South Kyle	50	149.5	15.2	East Ayrshire	Under Construction
Windy Rig	12	125	22.8	Dumfries and Galloway	Under Construction
Lorg	9	149.9/130	29.4	Dumfries and Galloway	Consented
Enoch Hill	16	130	19.6	East Ayrshire	Consented
Pencloe	19	125	22.0	East Ayrshire	Consented
Sanquhar Six	6	130	29.5	Dumfries and Galloway	Consented
North Kyle	54	149.9	15.2	East Ayrshire	Application
Windy Standard III	20	125-177.5	18.1	Dumfries and Galloway	Application
Over Hill	10	149.9	18.3	East Ayrshire	Application
Enoch Hill (variation to consent)	16	149.9	19.6	East Ayrshire	Application
Pencloe (variation to consent)	19	149.9	22.0	East Ayrshire	Application ⁸
Greenburn	16	149.9	22.0	East Ayrshire	Application
Euchanhead	21	225	27.0	Dumfries and Galloway	Application
Sanquhar II	42	200/149	27.2	Dumfries and Galloway	Application
Windfarms in South West of Study Area					
Mark Hill	28	110	14.3	South Ayrshire	Operational
Arecleoch	60	118	24.1	South Ayrshire	Operational
Kilgalloch	96	146.5	25.2	Dumfries and Galloway	Operational
Chirmorie	21	146.5	24.7	South Ayrshire	Consented
Stranoch	24	125	28.9	Dumfries and Galloway	Consented
Arecleoch Extension	13	200	22.9	South Ayrshire	Application
Stranoch 2 (variation to consent)	20	149-175	28.9	Dumfries and Galloway	Application

⁸ The variation to consent for Pencloe has now been granted. As this was after the cumulative cut off date for this assessment it continues to be referred to as Application status.

Wind Energy Development	No. of Wind Turbines	Blade Tip Height (m)	Approx. Distance from Nearest Proposed Wind Turbine (km)	Local Authority	Status
Kilgalloch Extension	11 ⁹	180	29.3	Dumfries and Galloway	Application

Table 5.3: Cumulative Windfarms Within 30km of the Proposed Development

5.6 Potential Effects

133. The Proposed Development is described in detail in **Chapter 4: Development Description**. In summary, the main permanent components of the Proposed Development with the potential for creating landscape and visual effects include:
- 13no. 200m to blade tip height wind turbines;
 - associated concrete hardstandings at each wind turbine;
 - 100m x 200m Substation Compound (includes Energy Storage Facility¹⁰ (i.e battery, approximately 14m x 23m x 7m high SPR Control Building and associated infrastructure);
 - one of the temporary construction compounds would be converted to a permanent car park upon completion of the construction works. The details of the car park would be agreed with FLS and SAC; and
 - new access tracks connecting the proposed wind turbines to existing forestry tracks and access routes.
134. The EIA and design processes interact with each other, with EIA identification of potential environmental effects, combined with ongoing engagement with stakeholders, leading to design refinements to reduce the significance of adverse environmental effects.
135. The description of the Site selection rationale and the iterative design process is described in **Chapter 3: Site Selection and Design**. This includes embedded mitigation that is an intrinsic part of the project design and a clear description of the way in which all of the potential effects have been considered in reaching an optimised 'design freeze' for the Proposed Development.
136. In accordance with IEMA Guidance (EIA Guide to Shaping Quality Development, IEMA, 2015) the landscape and visual effects assessed in this LVIA start from this point of 'design freeze', so potential effects which have been designed out would not be considered further as these would not arise from the development as proposed.
137. Mitigation measures that were identified and embedded into the design evolution of the Proposed Development, relevant to landscape and visual effects are described in **Section 5.7**. The assessment of residual effects on landscape and visual receptors, after taking into account all the inherent mitigation measures designed into the Proposed Development are presented in **Sections 5.8-5.11**.

5.7 Embedded Mitigation

138. The design process for the layout of the Proposed Development is a vital part of the EIA process and it is at this early stage, where the largest contribution can be made to mitigate landscape and visual effects. The intended result is a windfarm which responds to the landscape character and visual amenity of the area it lies within. **Chapter**

⁹ Kilgalloch Extension Application has been amended to 9 turbines instead of 11. As this change was after the cumulative cut off date for this assessment, the original 11 turbine layout continues to be represented in the assessment and accompanying wirelines.

¹⁰ Subject to landowner agreement

3: Site Selection and Design describes the iterative design process for the Proposed Development that responds to landscape and visual constraints and opportunities as well as technical and economic requirements.

139. Mitigation measures that were identified and embedded into the design evolution of the Proposed Development, relevant to landscape and visual effects are described in **Table 5.5**.

Parameter	Mitigation Measures Embedded into the Project Design
Landscape Character	<p>The Proposed Development would lie within the Foothills with Forest and windfarms LCT. As set out within SALWCS, this comprises prominent steep-sided peripheral hills with well-defined summits. Within and around the Site these include Barony, Hadyard, Genoch Inner Hill, Craig of Dalwine, wind turbines have been located to avoid the higher points of these hills. The location of wind turbines at lower elevations within the 'interior' of the foothills allows the outer hills to provide screening of the proposed wind turbines to the wider landscape.</p> <p>Within SALWCS, it is indicated that the less visually prominent densely forested lower hills and shallow basins within the eastern core of these uplands could provide a degree of visual containment for wind turbines while minimising effects on adjacent landscapes. The Developable Area within the Site has been narrowed to ensure wind turbines fall within these lower forested hills.</p>
Landmark Hills	<p>Glenalla Fell forms a prominent high top seen from the Carrick Forest Drive. The Developable Area was reduced to ensure wind turbines at the foot of Glenalla Fell were avoided.</p> <p>Key views from landmark hills in the Study Area were also considered in the design process in order to optimise the layout by ensuring balanced spacing, avoiding stacking to ensure the focus is upon the wider landscape including the valleys and Merrick.</p>
Stinchar and Girvan Valleys	<p>Stinchar Valley: The southern section of the Site was discounted as Developable Area for wind turbines at an early stage due to the sensitivity of the Stinchar Valley. Wind turbines have been sited to avoid being viewed from along the floor of the upper reaches of the valley within the Site.</p> <p>Girvan Valley: Key viewpoints along these valleys were used during the design iteration stages to understand which wind turbines were most prominent along these valleys. The layout was optimised to ensure wind turbines were hidden behind existing landform where possible from these sensitive locations. Views from Straiton (VP6 and VP23) were key in the design stages. Wind turbines in the east of the Site have been kept as far west as possible to minimise views along the valley with the majority hidden behind topography of Bennan Hill and its forested area providing screening.</p>
Merrick WLA	<p>The wind turbines are sited to maximise the distance of the Proposed Development from the Merrick WLA, affording a separation of 3km between the closest wind turbine to the closest edge of the WLA and 12.8km from the Merrick summit.</p> <p>In views from the Merrick WLA, the wind turbine layout has been optimised so that the configuration of the proposed wind turbines has a balanced and consistently spaced appearance. The reduction from 17 wind turbines in the scoping layout to 13 reduces the horizontal extent visible from Merrick. The reduction of the Proposed Development allows the hill of Shalloch on Minnoch to hide a proportion of the wind turbines from this location.</p> <p>The siting of infrastructure has been positioned to ensure that Black Hill provides as much screening as possible from views within the WLA. Detailed mitigation design</p>

Parameter	Mitigation Measures Embedded into the Project Design
	work was carried out at the open area of Glester Cairn to move the track to the northern side of the hill to ensure it is hidden from key views within the WLA.
Residential Visual Amenity	There would be no wind turbines within 1km of any property. Wind turbines were removed from the scoping layout, reducing effects on residents to the east and west of the Site. These changes increased the distance between residents and the nearest wind turbine.
Users of NCN7, core path SA47, SA1 and SA49	<p>There would be no wind turbines within 1km of NCN7/SA1 as a result of changes made from the scoping layout.</p> <p>Core path SA47 runs through the centre of the Site and Developable Area. An offset of 220m has been provided.</p> <p>Core path SA49 runs through the south west of the Site. The main Developable Area has been kept away from this footpath and an offset of 0.8km has been provided.</p>
Craiginmoddie	The proposed Craiginmoddie Windfarm lies directly to the west of the Site. The project proposals considered refinements to the scoping layout to provide a larger separation between the two schemes.
Wind turbine aviation lighting	The Proposed Development would require visible aviation lighting. As set out within Appendix 13.3: Indicative Aviation Lighting Landscape and Visual Impact Mitigation Plan (ALLVIMP) of the EIAR an aircraft detection lighting system is proposed and the windfarm will not be built without this in place. This system will prevent significant landscape and visual effects arising from aviation lighting.

Table 5.4: Mitigation Measures

5.8 Effects During Construction

5.8.1 Overview

140. The potential for landscape and visual effects during the construction phase would relate primarily to the activity of clearing of forestry, creation of the wind turbine foundations, hardstandings for cranes, new tracks and erection and occupation of temporary construction compound buildings, vehicular activity and associated lighting.
141. The construction programme would be within a 22-month period, which would be considered short term and minor in respect of landscape and visual effects.

5.8.2 Effects of Construction on the Landscape Fabric

142. The construction phase would create short term effects on the landscape fabric as a result of the temporary construction phase features such as borrow pits. These would be located in areas off existing tracks and enclosed by forestry. The proposed temporary construction compound would be located towards the east of the Site, near the upper reaches of the River Stinchar, north of the overhead power line, as illustrated in **Figure 4.1 Site Layout**. Localised ground disturbance alongside proposed new access tracks caused by the construction of undergrounding of the proposed cabling, cut and fill to accommodate the access track and hardstandings, and any further areas subject to disturbance during construction, would be reinstated after construction is complete.

5.8.3 Effects of Construction on Landscape Character

143. The construction of the Proposed Development would result in some short-term effects within the LCT: 17c Foothill with Forest and Windfarms from the initial ground level preparation, to the erection of the wind turbines. The construction stage increased activity would have potential to disturb the general quieter qualities of the landscape character, but in the context of an existing operational forestry site where extensive felling and associated activities are undertaken frequently. It is considered that effects on landscape character during the construction stage would not be significant.

5.8.4 Effects of Construction on Visual Amenity

144. The construction of the Proposed Development would be using existing access routes into the Site and much of the preliminary construction work would be at ground level which would be largely contained within the existing forestry. The potential for views beyond the immediate forest area to see the construction activities would be minimal except at the latter stages with the cranes and the erection of the wind turbines. People travelling along NCN7 and core paths SA1, SA47, SA49 and SA56 through the Site would experience the most noticeable changes but would be very localised along the routes and for a short term. It is considered that effects on visual amenity during the construction stage would not be significant during the early stages and the same as for the completed development as standing wind turbines increasingly become a feature of the Site.

5.9 Residual Effects – Landscape Fabric

5.9.1 Introduction

145. Physical effects are direct effects on the fabric of the Site, such as the removal of vegetation and the change of land use. The assessment methodology can be found in full in **Appendix 5.1 LVIA Methodology**. Physical landscape features are assessed with reference to their contribution to the landscape and not in ecological terms. Ecological impacts are assessed in **Chapter 7: Ecology and Biodiversity**.

5.9.2 Effects on the Landscape Fabric of the Site

146. The landscape of the Site is commercial forest plantation and part of the National Forest Estate. Forestry is a key characteristic of the LCT the Site lies within. The Site is also characterised by a network of tracks across the forestry area for forestry operations. A number of watercourses and small lochs are found within the Site and drain into the River Stinchar and Water of Girvan.
147. The key impacts on the landscape fabric that would arise from the Proposed Development are summarised below:
- advanced felling of 192ha of commercial forestry through keyholing and clear felling;
 - up to four borrow pits;
 - 6.8km of new access tracks, with average running width of 5.5m and related cut and fill;
 - reinforced concrete foundations for the wind turbines (30m diameter, with excavation graded back to a 37m diameter);
 - crane hardstandings adjacent to each wind turbine location (approximately 94m x 34m) and auxiliary crane hardstandings of 12m x 12m, and related cut and fill to accommodate the hardstandings;
 - blade laydown areas 78m x 28m;
 - temporary construction compounds (one of which will be converted to a permanent car park upon completion of the construction works); and
 - Substation Compound (approximately 125m x 200m).
148. The Proposed Development would require areas of keyholing into the forestry plantations where wind turbines and the associated infrastructure cannot be located within clear felled areas, existing tracks or within gaps between coups. Details of the forestry approach is in **Chapter 13: Other Issues**.
149. The proposed access route would be located off the existing minor road (C46W) to the east of the Site and 8.8km of existing tracks and 6.8km of new tracks would be used to access the proposed wind turbine locations.
150. Disturbance of the landscape fabric would be limited to the footprint occupied by the various components of the Proposed Development, including cut and fill areas, leaving the majority of the landform and landcover unaffected and continuing to be managed as commercial forestry.

5.10 Residual Effects - Landscape Character

5.10.1 Introduction

151. Landscape Character results from the different combinations and spatial distribution of physical, natural and cultural features. Aesthetic, perceptual and experiential aspects of the landscape are also important in providing distinction between different places.
152. The effects of the Proposed Development on the landscape character of the Study Area have been assessed through review of the ZTV overlaid on to the LCTs (**Figure 5.4 Landscape Character Areas and ZTV**) field survey work and informed by the viewpoint assessment (**Appendix 5.2 Viewpoint Assessment**). The assessment of effects on landscape character has been carried out on the basis of the addition of the Proposed Development with the baseline of operational windfarms identified in **Section 5.5.6**. Effects with consented windfarms, application windfarms, and the in-scoping Knockcronan Windfarm are also assessed.

5.10.2 Initial Assessment

153. Through analysis of the ZTV (**Figure 5.4 Landscape Character Areas and ZTV**) the pattern of potential visibility across LCTs is concentrated within approximately 10-15km to the west, north and east, with much more intermittent visibility to the south and south east beyond approximately 5km. Whilst there is potential visibility within LCTs beyond 15km, on review of the key characteristics of these areas and taking into account distance, it is very unlikely that significant effects on their landscape character would occur and these have not been considered further. An initial assessment of LCTs which lie within approximately 15km and are shown on the ZTV to have potential visibility of the Proposed Development is presented in **Appendix 5.3 Preliminary Assessment** with those considered relevant for detailed assessment identified and considered below.

- Foothills with Forest and Windfarm (17c);
- Intimate Pastoral Valleys (13);
- Middle Dale (12); and
- Rugged Uplands, Lochs and Forest (21 - South Ayrshire and East Ayrshire).

5.10.3 Detailed Assessment of Landscape Character Effects

154. The following tables describe the baseline description of the LCTs and their units, their value and susceptibility and subsequent sensitivity to the type of development proposed. An assessment is made on the magnitude of change of the Proposed Development based on scale, extent and duration, and the level of effect identified. Effects with the future baseline (consented application sites and forestry felling) and cumulative effects with application windfarms are also considered. Separately, where relevant, due to their close location to the Site, the combined effects of the Proposed Development with the application Craiginmoddie Windfarm, and the Proposed Development with the in-scoping Knockcronan Windfarm and Knockodhar Windfarm are assessed.
155. The assessment takes into consideration that the residual effects of the Proposed Development would be a long-term and permanent change. As this would be the same for all receptors, it is not explicitly stated within each receptor assessment.

LCT: 17c Foothill with Forest and Windfarms	
Distance and Direction from Proposed Development:	0km (Host LCT)
The SALWCS provides a detailed baseline description and sensitivity assessment for wind turbines >130 m against different attributes of the LCT. SALWCS includes a sensitivity rating for each attribute.	
SAWLCS Baseline Description	SAWLCS Sensitivity Assessment
Landscape Context: <i>This upland landscape is broader in extent to the east where it forms a more expansive undulating plateau. To the west it forms a</i>	Landscape Context: <i>High Sensitivity: Wind turbines of this size sited within the narrower western part of these foothills would be likely to be highly visible</i>

LCT: 17c Foothill with Forest and Windfarms	
<p>narrower band of hills between the Girvan Water and Stinchar Valleys. More pronounced hills on the outer fringes of this landscape form highly visible 'landmark' features seen from the Middle Dale (12) of the Girvan Valley and Intimate Pastoral Valleys (13) of the Stinchar Valley and the Upper Girvan Water. This landscape merges with the more dramatic hills of the Rugged Uplands, Lochs and Forest (21) at the heads of the upper Girvan and Stinchar Valleys.</p>	<p>from Girvan and the coast and from the smaller scale, well-settled Girvan and Stinchar Valleys. The interior of the more extensive eastern area of these foothills may be less sensitive to wind turbines towards the lower height band of this typology although there would be relatively close views from the Carrick Hills within the Rugged Uplands, Lochs and Forest (21). Fixed lighting on wind turbines >150m could additionally affect dark skies and wilder landscapes in LCT 21 and 18c.</p>
<p>Scale: A gently undulating upland plateau with relief lower to the west but rising to the east to between 300-380m and with Glenalla Fell, the highest summit, attaining 425m. This landscape is very sparsely settled and there are few small-scale features. The horizontal extent of these foothills is reduced in the west.</p>	<p>Scale: Medium Sensitivity: Wind turbines >150m would be likely to dominate the lower relief and the reduced extent of these foothills in the west. Broader areas of plateau in the east would be less sensitive in terms of scale although this is not an extensive upland landscape and effects on adjacent smaller scale valleys will be a key constraint.</p>
<p>Landform: This gently undulating plateau rises to form subtly rounded indistinct hills and occasional more pronounced hills with steep slopes and defined tops such as Glenalla Fell and the 'landmark' hills lying on the outer fringes of this landscape which include Barony, Hadyard, Maxwellton hills lying on the southern edge of the Girvan Water, Genoch Inner Hill in the upper Girvan Valley and Craig of Dalwine, Auchensoul and Kirkland Hills lying on the northern edge of the Stinchar Valley. The core of these uplands includes some lower-lying basins which are contained by these higher 'edge' hills.</p>	<p>Landform: High-Medium Sensitivity: The predominantly simple, gently undulating landform lying at the core of this landscape reduces sensitivity although wind turbines of this size sited on or nearby more pronounced hills which tend to lie on the outer fringes of these Foothills would significantly detract from these 'landmark' features.</p>
<p>Landscape Pattern: This landscape has a simple land cover pattern dominated by extensive coniferous plantations and grass moorland. Some walled pastures and small riparian broadleaved woodlands occur on outer hill slopes.</p>	<p>Landscape Pattern: Medium-Low Sensitivity: The relatively simple land cover pattern of this landscape reduces sensitivity.</p>
<p>Built Environment: These foothills are very sparsely settled. The B734 and two minor public roads cross the interior of this landscape and access tracks are also present within forestry. The small reservoir of Penwhapple is located in the western part of these foothills.</p>	<p>Built Environment: Low Sensitivity: This typology could be accommodated with minimal effects on this sparsely settled character type.</p>
<p>Perceptual Qualities: The presence of extensive commercial forestry and windfarm development limits the sense of naturalness, although this landscape can feel secluded due to the absence of settlement and major roads.</p>	<p>Perceptual Qualities: Medium-Low Sensitivity: Although this landscape is modified to some degree, windfarm development could affect the sense of seclusion that can be experienced within the less accessible eastern part of these foothills.</p>
Sensitivity	
<p>Overall, the SALWCS identifies that this LCT would have a High sensitivity to the very large typology (wind turbines >130 m) which when considering the various elements detailed above is principally due to the narrower western extents of the LCT and the likely effects on surrounding sensitive valleys. It is clear there are differing characteristics between the east and the west within the LCT, and that the eastern extents are less sensitive due to the containment of this interior area of the LCT. This lower sensitivity also relates to the existing windfarm development, broad scale, simple and uniform landcover of this part of the landscape and lack of settlement, which are all attributes which reduce susceptibility to windfarms. On this basis, it is considered that the</p>	

LCT: 17c Foothill with Forest and Windfarms
<p>susceptibility of the LCT to the Proposed Development would be Medium owing to its location within the eastern part of the LCT.</p> <p>The value of the LCT is considered Medium-Low as it lies outside any local landscape designations, and the extensive forestry and windfarm development are obvious human interventions. It has local value relating to its distinctive periphery landform and recreational routes.</p> <p>It is considered that the overall sensitivity of the LCT to the Proposed Development is Medium-Low.</p>
Assessment
<p>The Proposed Development would lie within the eastern extents of the LCT, within commercial forestry and set back from the peripheral hills, within an undulating plateau, which becomes more basin-like around Linfern Loch. It would sit separately from Hadyard Hill, Assel Valley and Dersalloch Windfarms, further away from the edge of the Water of Girvan Valley to the north and north east than the existing windfarms, although closer to the upper reaches of the Stinchar Valley to the south. The new tracks and hardstandings associated with the Proposed Development would create some slight changes in the forestry cover through keyholing and areas of felling where necessary.</p> <p>The Proposed Development would introduce large wind turbines into an area of the LCT which has a broad open scale and characterised by an extensive area of commercial forestry, considered by SAWLCS to be the less sensitive interior of the eastern part of the LCT. The proposed wind turbines would not be located on any of the landmark hills that SAWLCS identify at the fringes of this LCT. They would be set back from Glenalla Fell and Genoch Inner Hill which are the closest of these hills, which lie to the north and north east of the Site. However, views of these hills from within and outside the LCT would be also influenced by the presence of the proposed wind turbines.</p> <p>The ZTVs illustrate that visibility of the Proposed Development across the LCT would be immediately surrounding the Site, within 5km to the west of the proposed wind turbines within the LCT. Due to the containment by the periphery foothills the visibility would considerably reduce across much of the rest of the LCT to the west, which would be further reduced by the screening from commercial forestry. The Proposed Development would not have any visual influence over the western parts of the LCT towards the coastline.</p> <p>Windfarms are a characteristic of the LCT and the Proposed Development would extend the presence of windfarms from the west to the eastern extents of the LCT, although a gap would be retained between Hadyard Hill Windfarm to the west and Dersalloch Windfarm to the east. As illustrated on the ZTVs (Figure 5.4: Landscape Character Areas and ZTV and Figure 5.14 Cumulative ZTV – Dersalloch and Proposed Development) the intervisibility within the LCT between the Proposed Development and Hadyard Hill Windfarm, as well as Dersalloch Windfarm (that lies in the Foothills with Forest west of Doon Valley LCT (17b) to the east), is limited by the undulating landform of the foothills.</p> <p>The scale of effect on this LCT is considered High-Medium across a wide (high) extent from the Site up to approximately 5km to the west. This would reduce to Medium-Low across a localised extent (low) of the remaining western parts of the LCT. The magnitude of change would be High-Medium within 5km of the Site, reducing to Medium-Low elsewhere within the LCT.</p> <p>Taking into account the Medium-Low sensitivity to the Proposed Development, the significance of effect is considered Moderate and Significant within 5km reducing to Moderate-Minor and Not Significant elsewhere within the LCT.</p>
Cumulative Effects
<p>Kirkhill Windfarm is the only consented windfarm in close proximity to the LCT. Kirk Hill Windfarm lies within the Maybole Foothills, north of Dailly, approximately 10km north west of the Proposed Development. It increases the influence of windfarms from the LCT to the north but would be a small site and separated from the LCT by the Girvan Valley. The Proposed Development would lie separately within the eastern interior of the LCT, separate from the consented and operational windfarms. It is considered the addition of the Proposed</p>

LCT: 17c Foothill with Forest and Windfarms

Development to a future baseline with Kirkhill windfarm would not change the level of effect assessed for the baseline above.

Clauchrie Windfarm (Application)

Clauchrie Windfarm would lie approximately 8km to the south west of the Proposed Development, within the Plateau Moorland with Forest and Windfarms LCT. The CZTV (Figure 5.15 Cumulative ZTV – Clauchrie and Proposed Development) illustrates combined visibility is generally intermittent across the LCT, with more visibility of Clauchrie within the western sections of the LCT. It is considered that the addition of the Proposed Development to a baseline with Clauchrie Windfarm would increase the influence of large scale wind turbines on the western extents of the LCT but would not change the level of effect assessed for the baseline above.

Craiginmoddie Windfarm (Application)

Craiginmoddie Windfarm would lie within this LCT and directly to the west of the Site. Of all the cumulative sites, it has the most potential for cumulative effects in combination with the Proposed Development.

Craiginmoddie Windfarm would appear as an extension to Hadyard Hill, continuing the pattern of wind development across the foothills between the Girvan and Stinchar Valleys. Craiginmoddie's wind turbines would appear noticeably larger than the adjacent Hadyard Hill Windfarm and would be visible across the LCT.

The Proposed Development and Craiginmoddie Windfarm would extend the influence of large scale wind turbines within the LCT, potentially perceived as one development. However, the Proposed Development sits further south within the LCT in a more contained part of the landscape at a slightly lower elevation such that intervisibility with the rest of the LCT is slightly more limited and a separation from Craiginmoddie wind turbines would be perceptible. The combined cumulative scale of effect of the Proposed Development and Craiginmoddie Windfarm together is considered to be High across a wide (high) extent of the LCT as Craiginmoddie Windfarm has greater influence over the LCT to the west than the Proposed Development. The magnitude of change would be High. Taking account of the Medium-Low sensitivity to change, the combined cumulative effect would be **Moderate and Significant**.

Knockcronal Windfarm (Scoping)

Knockcronal Windfarm would sit within the north eastern edge of this LCT appearing as an extension to the Proposed Development, approximately half the size in site area. In combination with Knockcronal, the Proposed Development would intensify the presence of wind turbines within the eastern end of the LCT, increasing the perception of a windfarm landscape. Knockcronal Windfarm's relatively tight cluster and location to the north east of the Site would not affect the relationship of the Proposed Development with Craiginmoddie Windfarm or other windfarms within or near the LCT. Taking this into account, it is considered that the combined cumulative effects of the Proposed Development and Knockcronal Windfarm on the LCT would be a slightly higher level of effect but within the same category of effect as assessed for the Proposed Development on its own, or cumulatively with Craiginmoddie Windfarm.

Table 5.5: Foothills with Forest and Windfarm LCT Assessment

LCT: 13 Intimate Pastoral Valleys

Distance and direction from nearest proposed wind turbine:	1.5km to North East (Girvan Water) and 1km South and South West (Stinchar)
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The Intimate Pastoral Valleys LCT comprises two separate areas within the Study Area: the Stinchar Valley and its tributary the Duisk Water Valley; and the upper reaches of the Water of Girvan Valley.

SAWLCS Baseline Description

Landscape Context: *These valleys are relatively narrow and strongly contained by adjacent upland character types. The landscape increases in scale on upper slopes particularly at the transition with the very sparsely settled Plateau Moorland with Forest and Wind Farms (18c). A number of prominent hills with open rugged slopes and defined summits occur on the edge of the Foothills (17b/17c/17e) and Rugged Uplands Lochs and Forest (21) character types which contain the Stinchar and Girvan Valleys. The Plateau Moorland with Forest and Wind Farms (18c) generally forms more simple even skylines seen from these valleys.*

LCT: 13 Intimate Pastoral Valleys

Scale: *These gently sinuous valleys are strongly contained by adjacent uplands with occasional higher and more pronounced summits occurring along the edges of the valleys, particularly where they about the Foothills (17b/17c/17e). The lower Stinchar has a relatively open and broad floodplain although in general these valleys are narrow with the upper Girvan and Stinchar constricted by dramatic steep-sided hills. The often pronounced field enclosure pattern, small woodlands and regularly spaced dispersed small farms, houses and tightly clustered settlements combine with the confined extent of these valleys to create a small to Medium scale landscape. Scale increases on more open and less settled upper valley sides, particularly at the transition with the very gently sloping Plateau Moorland with Forest and Wind Farms (18c).*

Landform: *A smooth, flat floodplain of varying width is contained by undulating, occasional hummocky and often steep valley sides. A series of steep-sided rugged hills, well-defined and cut by incised side valleys, occurs on the north-western edge of the Stinchar valley and fringing the Girvan valley. These landmark hills include the craggy-topped Knockdolian, Craig and Bargain Hills and Craig of Dalwine along the Stinchar valley and the Big Hill of the Baing, Kildoach Hill and Genoch Hill on the edge of the upper Girvan valley. Broader terraces and gentler, smoother slopes occur on upper valley sides either side of the Duisk Valley and on the south-eastern edge of the Stinchar valley at the transition with the Plateau Moorland with Forest and Wind Farms (18c).*

Landscape Pattern: *These valleys have a diverse vegetation cover which includes areas of semi-natural woodland on steeper hill slopes, policy woodlands including avenue trees and ornamental plantings in the Girvan and lower Stinchar Valley and some coniferous forestry, generally on upper slopes. Small to medium sized pastures on the valley floor and lower slopes are enclosed by walls or hedges while more extensive rough grassland occurs on upper valley sides.*

Built Environment: *These valleys are accessed by a network of narrow tree-lined winding roads. The small villages of Barrhill, Colmonell and Barr are sited within the valley floor and there is a rich heritage of archaeological sites, castles and mansion houses.*

Perceptual Qualities: *Lush rolling pastures with intact hedgerows, traditional small farms, the rich heritage of castles, mansion houses and their designed landscapes and small attractive villages give a distinctly rural character to this landscape and a strong sense of timelessness.*

Sensitivity

Both valleys lie within the South Ayrshire Scenic Area and candidate Local Landscape Area designations, valued for their picturesque and rural qualities. It is considered they have a High-Medium value. The surrounding foothills and uplands contain the valleys and provide the backdrop and focus to many of the enclosed views along the valleys such that any development in the adjacent foothills/uplands would be highly visible. Reducing this susceptibility is the extent of tree and woodland cover along the valleys and the commercial forestry at the edges of the foothills. The susceptibility of this LCT to the Proposed Development is considered High-Medium. It is considered that the overall sensitivity of the LCT to the Proposed Development is High-Medium.

Assessment

Water of Girvan Valley

The source of the Water of Girvan is Loch Braden which lies east of the Proposed Development, and just beyond this LCT. From Loch Braden, the Water of Girvan flows directly north through forestry for approximately 2km before changing direction to meander westwards for approximately 5km to Genoch. At Genoch, the Water of Girvan changes direction again, flowing north to Straiton.

Within the first section north of Loch Braden to where the Water of Girvan changes direction, the ZTVs illustrate there would be no visibility of the Proposed Development except from a small area at the edge of the top of the eastern valley side where only the upper half of the wind turbines would be visible, set back behind the opposite valley sides.

Along the next section where the Water of Girvan flows west, the ZTVs illustrate visibility along the south facing slopes of the northern side of the valley, except to the east and west of Craig Hill. In these elevated views, all the proposed wind turbines would be visible, appearing set within the forested foothills behind the immediate opposite valley sides including Genoch Inner Hill and Halfmark Rig. There would be no visibility along the valley floor or southern side of the valley.

LCT: 13 Intimate Pastoral Valleys

There would be an area of visibility around and to the south of Tairlaw where a tributary valley joins from the south, and the LCT extends around the eastern side of Genoch Inner Hill into the edge of the forested foothills. This is the closest part of the LCT to the Proposed Development, at 1.5km from the nearest proposed wind turbine. Views would be restricted to the eastern wind turbines only and due to proximity, they would be a prominent feature.

From Genoch, where the Water of Girvan flows north, the ZTV illustrates visibility across much of this area with localised areas of screening from landform such as at north west of Balbeg. **Blade Tip ZTV - No. of Wind Turbines Visible** illustrates that much of the potential visibility on the western side of the valley would not include all the wind turbines due to the screening by the periphery foothills, in particular, Genoch Inner Hill and Halfmark Rig. Viewpoint 23 (**Figure 5.39 Viewpoint 23 – Craigenallie, Straiton**) illustrates a view from near Craigenallie in the bottom of the valley where the proposed wind turbines would appear on the skyline beyond the valley sides. Viewpoint 6 just north of the LCT (**Figure 5.22 Viewpoint 6 – Newton Stewart Road, Straiton**) illustrates the potential screening of the Proposed Development by landform, forestry and woodland that can occur along the valley.

The main influence of the Proposed Development within the LCT would be on the valley of the northern extents between Craighfad, (south of Bennan Hill) to Linfairn, between approximately 3-5km from the nearest proposed wind turbine. This includes the elevated plateau-like area on the western valley side between Balbeg and Knockskae. Due to the orientation of this part of the valley in relation to the location of the Site, the proposed wind turbines would appear framed between Craig Hill to the east and Glenalla Fell to the west but set back behind the immediate valley sides. **Appendix 5.2 Viewpoint Assessment, Figure 5.2.1 Water of Girvan Illustrative Wirelines** shows the potential views from this area near Craighfad and Linfairn Lane junction with Newton Stewart Road. The proposed wind turbines would become a characteristic of the views from this section of the LCT. From the elevated sides of this part of the LCT, the Proposed Development would be visible, but within a wider landscape context, appearing separate to the containment and intricacies of the valley landscape below.

Summary

The Proposed Development would lie to the south of this LCT, within a separate character area, set back from the immediate valley sides. Due to the proximity and orientation, the character of the Water of Girvan Valley between Linfairn and Craighfad, and a small area south of Tairlaw (approximately 20% in total of the LCT extents) would change to one where wind turbines would become a prominent feature in the backdrop to the valley, becoming a defining characteristic. Taking this into account, the scale of effect would be High-Medium across this part of the LCT, a localised (low) extent. The magnitude of change would be Medium.

Elsewhere within the ZTV in the LCT (primarily the south facing slopes between Genoch and Knockdon) the proposed wind turbines would be a discernible addition within the wider landscape context, with less potential to affect the intimate characteristics and views along the valley. The scale of effect on this medium-low extent is considered Medium-Low. The magnitude of change would be Medium-Low.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of effect on the character of the Intimate Pastoral Valley - Water of Girvan LCT is considered to be **Major-Moderate and Significant** for the area 3-5km north of the Site (between Linfairn and Craighfad), and south of Tairlaw. Elsewhere effects would be **Moderate-Minor and Not Significant**.

Stinchar Valley

The Stinchar Valley unit of this LCT covers an extensive area between the River Stinchar's source in the Carrick Hills in the east to where it enters the Firth of Clyde at Ballantrae in the west. The eastern most section lies south of the proposed wind turbines, flowing in a westerly direction to Milton Bridge, north of Barr. The LCT also includes the small tributary Dalquhairn Burn which flows south west from the Site to join the River Stinchar west of North Balloch, approximately 4km from the nearest proposed wind turbines. From Milton Bridge, the River Stinchar changes direction to meander south west for approximately 8km to Asselfoot. It then flows south for approximately 3km to Pinwherry where the Duisk River joins it. It then meanders south west for approximately

LCT: 13 Intimate Pastoral Valleys

12km to Ballantrae. Hadyard Hill Windfarm and Assel Hill Windfarm lie to the north of the valley between Milton Bridge and the B714/B734 junction, largely contained within the foothills.

The ZTV illustrates that visibility would vary considerably across this LCT unit. The closest section of the LCT to the proposed wind turbines would have limited visibility as the narrow valley and forested landform provides screening. Slightly further west, as the valleys open out, there would be visibility of the proposed wind turbines from along the Dalquhairn Burn area except some areas of localised screened by landform. Visibility would also extend along the Stinchar Valley floor and north facing valley sides between South Balloch and east of Milton Bridge. The proposed wind turbines would appear above the valley sides to the north east of the Stinchar Valley which flows east/west in this area. Viewpoint 3 (**Figure 5.19 Viewpoint 3 – West of South Balloch, Nether Barr**), west of South Balloch, lies 3.59km from the nearest proposed wind turbine. The wireline and photomontage illustrate that up to six of the proposed wind turbines would be visible within the skyline above the forestry that lies behind the foothills at the edge of the Dalquhairn Burn Valley to the north east.

South of Milton Bridge to Asselfoot, between 6 -16km from the nearest proposed wind turbines, the valley lies directly in line with the proposed wind turbines and the ZTV illustrates visibility along the valley floor and more intermittently along the valley sides. The woodland and vegetation along the valley floor considerably reduce the open visibility along this section of the valley and the influence of the proposed wind turbines would be very limited. From the higher valley sides, the proposed wind turbines would be partially obscured by the intervening foothills, set back beyond the immediate valley landscape. This is illustrated by Viewpoint 12 (**Figure 5.28 Viewpoint 12 – B734, Auchensoul Hill**) at the edge of Auchensoul Hill, above Barr, 7.84km from the nearest proposed wind turbine. Beyond Asselfoot, the change in direction of the river limits visibility to only some small areas of the upper valley sides north and south of Pinwherry. There would be no visibility along the Duisk River valley.

Summary

The Proposed Development's main influence on this LCT unit would be within 5km (approximately 15% of the total extent of the LCT unit) due to the orientation of the valleys, including the Dalquhairn Burn tributary, and close proximity to the proposed wind turbines. The eastern proposed wind turbines would appear prominent above the skyline to the north east of the head of the upper reaches of the valley, set back behind the periphery hills within the forestry. They would extend the existing influence of wind turbines as a characteristic of the backdrop to the wider extents of the valley in addition to Hadyard Hill Windfarm and Assel Valley Windfarm which lie to the north west. The Proposed Development would create a partial change to the baseline but would not intrude on the containment and intricacies of the rural valley landscape so that the key characteristics of the valley landscape would be retained. The scale of effect would be Medium within a localised (Low) extent of the LCT. The magnitude of change would be Medium-Low. Beyond 5km, the Proposed Development would have a low to negligible scale of effect over a wide (high) extent of the LCT. The magnitude of change would be Low.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of effect on the Intimate Pastoral Valley - Stinchar Valley LCT is considered to be **Moderate and Significant** within 5km, reducing to **Moderate-Minor and Not Significant** elsewhere within the LCT.

Cumulative Effects

Clauchrie Windfarm (Application)

The application Clauchrie Windfarm would lie approximately 3km south of the Stinchar Valley unit of the LCT and approximately 1.7km east of the valley of the Muck Water within the Duisk Valley unit of the LCT. The cumulative ZTV (**Figure 5.15 Cumulative ZTV – Clauchrie and Proposed Development**) illustrates that potential visibility of Clauchrie Windfarm is very variable across the LCT: it would be visible along the nearby Duisk Valley extending the windfarm influence in addition to the visibility of the operational Mark Hill Windfarm. Along the River Stinchar, west of the A714 the visibility is patchy, and eastwards along the valley the visibility is limited to the higher elevations, particularly the south facing valley side slopes. The addition of the Proposed Development to Clauchrie Windfarm would extend the influence of windfarms along the outer and upper slopes of the Stinchar Valley unit of the LCT, largely perceived sequentially, with only combined visibility potential between Barr and the A714.

LCT: 13 Intimate Pastoral Valleys

The scale of cumulative effect is considered to be Medium within the upper slopes of the Stinchar Valley between the eastern extents of the LCT to the A714 in the west (approximately 15km distance), a medium-low extent of the LCT. The magnitude of change would be Medium-Low. Elsewhere, within the western extents of the Stinchar Valley, the scale of cumulative effect would be low to negligible, a limited (low) extent of the LCT. The magnitude of change in this area would be Low.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of cumulative effect of Clauchrie Windfarm and the Proposed Development on the character of the Intimate Pastoral Valley – Stinchar Valley LCT is considered to be **Moderate and Significant** within 15km of the Site. Elsewhere, within the western extents of the Stinchar Valley, the cumulative effects would be **Moderate-Minor and Not Significant**.

Craigimoddie Windfarm (Application)

The main potential for cumulative effects on the LCT would occur with the Proposed Development and Craigimoddie Windfarm which would lie north of the Stinchar Valley. Craigimoddie Windfarm would not be notably visible from the upper reaches of the Water of Girvan Valley and the addition of the Proposed Development would relate to the effects of it on its own, as assessed above for the baseline.

Craigimoddie Windfarm lies at the edge of the Stinchar Valley behind Daljedburgh Hill appearing as an extension to Hadyard Hill. As illustrated by the CZTV (Figure 5.12 Cumulative ZTV – All Application Sites) and cumulative wirelines from viewpoints within the Stinchar Valley (Viewpoint 3, Figure 5.19 Viewpoint 3 – West of South Balloch, Nether Barr, and Viewpoint 12, Figure 5.28 Viewpoint 12 – B734, Auchensoul Hill), Craigimoddie Windfarm would be more visible from a wider extent of the Stinchar Valley than the Proposed Development as it has a more elevated position over the main valley, whereas the Proposed Development would be located towards the head of the valley. The combined effects of the Proposed Development and Craigimoddie Windfarm together would increase the influence of the wind development on the upper parts of the Stinchar Valley, so that the northern side of the valley from the A714 to the Site would be characterised by a backdrop which includes wind turbines along its full length. Both windfarms would be associated with the forested foothills and set back from the immediate valley landscape with the foothills at the periphery of the Site screening much of the Proposed Development from the wider LCT extents. Within approximately 8km of the Site, the combined scale of effect is considered to be High across a medium extent of the LCT. Beyond, the scale of effect would be Low-Negligible over a medium extent. The magnitude of change would be High-Medium within 8km of the Site reducing to Low-Negligible elsewhere. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect on the Stinchar Valley is considered **Major-Moderate and Significant** within 8km, reducing to **Moderate-Minor and Not Significant** elsewhere.

Considering the cumulative effects of the Proposed Development in addition to both Craigimoddie and Clauchrie Windfarms, the extent of effects would increase along a slightly longer length of the upper slopes of the Stinchar Valley, between the Proposed Development in the east to the A714 in the west, an approximate 15km distance. The influence of windfarms would become continuous along the upper slopes although with limited potential to affect the intimate characteristics of the valley floor. The combined scale of effect is considered to be High across a medium extent of the LCT. Beyond the A714 to the west, the scale of effect would be Low-Negligible over a low extent. The magnitude of change would be High-Medium within approximately 15km of the Site reducing to Low-Negligible elsewhere. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect of the Proposed Development in addition to Clauchrie and Craigimoddie Windfarms on the Stinchar Valley is considered **Major-Moderate and Significant** within 15km, reducing to **Moderate-Minor and Not Significant** elsewhere.

Knockcronal Windfarm (Scoping)

The main potential for cumulative effects on the LCT would occur with the Proposed Development in combination with the in-scoping Knockcronal Windfarm on the northern reaches of the Water of Girvan Valley. Knockcronal

LCT: 13 Intimate Pastoral Valleys

Windfarm would not be notably visible from the Stinchar Valley, and the addition of the Proposed Development would relate to the effects of it on its own, as assessed above for the baseline.

Knockcronal Windfarm lies closer to the upper reaches of the Water of Girvan Valley than the Proposed Development, as shown on Viewpoint 6 and Viewpoint 23 (Figure 5.22 Viewpoint 6 – Newton Stewart Road, Straiton and Figure 5.39 Viewpoint 23 – Craigenallie, Straiton). The CZTV (Figure 5.41 Cumulative ZTV - Knockcronal and Proposed Development CZTV) shows that Knockcronal Windfarm would be visible on its own north of Linfairn and slightly further down the valley slopes to the east. Elsewhere within the LCT it would be seen with one or more of the Proposed Development's wind turbines. The Proposed Development lies intentionally set back from the valley sides and within the interior of the forested foothills, whereas Knockcronal Windfarm would become a much more prominent feature in the setting of this LCT. The effects of Knockcronal Windfarm on the character of this LCT would be greater than the Proposed Development on its own. Due to the proximity and orientation, the character of the Water of Girvan Valley between Linfairn and Tairlaw (approximately 30% in total of the LCT extents) would change to one where wind turbines would become a prominent feature at the edge and beyond the valley sides, becoming a defining characteristic. Taking this into account, the combined cumulative scale of effect would be High across this part of the LCT, a localised (low) extent. The magnitude of change would be High-Medium.

Elsewhere the potential visibility in the LCT (primarily the south facing slopes between Genoch and Knockdon) of the proposed wind turbines of Knockcronal Windfarm and the Proposed Development would be a discernible addition within the wider landscape context, but with less potential to affect the intimate characteristics and views along this stretch of the valley. Due to the location of the Knockcronal Windfarm from this part of the valley, the combined windfarms would not notably increase the effects assessed for the Proposed Development on its own.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of cumulative effect on the character of the Intimate Pastoral Valley - Water of Girvan LCT is considered to be **Major-Moderate and Significant** for the area 3-5km north of the Site (between Linfairn and Tairlaw). Elsewhere effects would be **Moderate-Minor and Not Significant**.

Knockodhar Windfarm (Scoping)

Knockodhar Windfarm lies close to the southern edge of the Stinchar Valley and eastern edge of the Duisk Valley. The CZTV (Figure 5.42 Cumulative ZTV – Knockodhar and Proposed Development) and Figure 5.36 Viewpoint 20 - Knockodhar summit illustrate that it would be potentially perceived from the valley sides and floors in the south west of the LCT becoming a defining feature in views. It would have the potential to be perceived sequentially with the Proposed Development given the distance between the two sites and the route of the Stinchar Valley, such that the two windfarms would have effects on separate ends of the LCT. In combination and considering the existing and application windfarms beside the edges of the LCT, a continuous extent of wind turbines could be perceived along the full extent of the LCT. However, these would be within the wider landscape context of the Stinchar Valley, with limited potential to affect the intimate characteristics of the valley floor.

The combined scale of effect of Knockodhar Windfarm and the Proposed Development in addition to the application scenario is considered to be Medium across a high extent of the LCT. The magnitude of change would be High-Medium. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect on the Stinchar Valley LCT is considered **Major-Moderate and Significant**.

Table 5.6: Intimate Pastoral Valleys LCT Assessment

LCT: Rugged Uplands, Lochs and Forest (SA 21 and EA21) and Rugged Granite Upland (DG 21)

Distance and direction from nearest proposed wind turbine:	1km South
Due to the local authority boundaries, the uplands to the south and south east of the Proposed Development are separated into different character types but essentially retain the same characteristics and are considered as	

LCT: Rugged Uplands, Lochs and Forest (SA 21 and EA21) and Rugged Granite Upland (DG 21)

one area for the purposes of this assessment. This takes into account that there is very limited potential visibility with the Rugged Granite Upland in Dumfries and Galloway.

SAWLCS and EAWLCS Baseline Description (SA21 and EA21)

Landscape Context: *This character type is generally remote from more settled lowland areas although lower rugged hills in the north of this landscape provide an integral part of the setting to the diverse Upland River Valley (10) of the Doon Valley which accommodates Craigengillan House and its designed landscape. The higher hills lying at the core of this landscape form a rugged mountainous backdrop in distant views from elevated roads within the more open parts of the Foothills (17c) and Plateau Moorland (18c) landscapes of South Ayrshire. This landscape forms part of an expansive upland area which extends southwards into Dumfries and Galloway.*

Scale: *Relief ranges from around 300m with higher hills between 500 and 768m. Although the hills have a large vertical scale they commonly have confined pronounced summits. The complex form of this landscape creates myriad narrow valleys and loch basins which are strongly contained and of a smaller scale.*

Landform: *Exposed crags and boulders give a notably 'Highland' appearance to steep-sided north/south orientated granite ridges. The landform of the western Southern Uplands is less craggy but still features steep-sided interlocking rounded hills and the dramatic cleft of the Nick of the Balloch. Some smoother and gentler hill slopes occur on the edge of loch basins although generally the scenery is rugged and dramatic.*

Landscape Pattern: *While vegetation cover is simple, largely comprising grass moorland with patchy heather, the landscape is strongly patterned in places with exposed rock. A number of lochs, of which Loch Doon is the largest, are located on the lower northern edge of the more pronounced granite peaks and these add to the diversity of this landscape. Coniferous forestry extends into some of the valleys on lower hill slopes and fringing lochs.*

Built Environment: *This landscape is very sparsely settled with small farms and occasional estate houses sited on the west side of Loch Doon and with some archaeological features on small knolly hills. A public road is aligned on the west side of Loch Doon and the Carrick Forest Drive links with this and the minor road south of Straiton. Forest tracks are present on lower hill slopes.*

Perceptual Qualities: *The very sparsely settled nature of this landscape and difficulty of access, particularly to the higher and more rugged hills extending north from Merrick, can give a strong sense of seclusion. The rugged landform and lochs (where not impounded) have strong natural qualities although commercial coniferous woodland diminishes this in places.*

Sensitivity

The South Ayrshire extent of the LCT lies within their Scenic Area and the High Carrick Hills candidate local landscape area designation. It also lies partly within the Merrick WLA, defined due to its wildness characteristics. The Galloway Forest Park lies across this LCT indicated its recreational value. It is considered the Rugged Uplands have a High-Medium value.

The Rugged Uplands by the nature of their elevated topography include expansive and long distance views as a characteristic that would be susceptible to views of windfarms outside of the LCT in terms of potential influence on its wild and naturalness characteristics. Factors such as the existing human interventions visible in these views including commercial forestry and operational windfarms, and the separation of the landform of the uplands from the surrounding landscape reduce the susceptibility. The susceptibility of this LCT to the Proposed Development is considered Medium. It is considered that the overall sensitivity of the LCT to the Proposed Development is High-Medium.

Assessment

The ZTVs illustrate that the main area of potential influence from the Proposed Development would be across the northern end of the LCT, north of Shalloch on Minnoch which overlooks the Site area. Further south and south west within the LCT, in the areas which are higher, more rugged and secluded, there would be little influence except to the highest ridgeline and summits including Merrick and the Rhinns of Kells. The upland landform at the northern edge of the LCT would partially screen and limit the influence of the Proposed Development further within the LCT.

LCT: Rugged Uplands, Lochs and Forest (SA 21 and EA21) and Rugged Granite Upland (DG 21)

The Proposed Development would increase the influence of large scale wind turbines closer to the northern end of the LCT, where they would be backdropped by forestry, and further in the distance by the more settled and active coastal landscapes. They would create a partial change to the baseline characteristics in this northern part of the LCT which has more influences from human activity and artefacts than elsewhere within the LCT.

The Proposed Development would not have an influence on the views within the more secluded and remote parts of the LCT. Where the Proposed Development would be visible from the summits and ridgelines it would be seen as a small or very small proportion of the overall expansive panoramas, clearly associated with the adjacent foothills with forest and existing windfarm context. The rugged and natural qualities of the LCT would be retained.

The scale of effect is considered to be High-Medium across a localised (Low) extent of the LCT (within approximately 6km of the Site). Beyond 6km, the scale of effect would be Low-Negligible across a limited (low-negligible) extent of the LCT, with no effect on the majority of the LCT. The magnitude of change would be Medium within 6km reducing to Low-Negligible beyond.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of effect within approximately 6km of the Proposed Development would be **Major-Moderate and Significant**. Beyond 6km it would be **Minor and Not Significant**.

Cumulative Effects

There are numerous consented windfarms that would lie to the north east, east, west and south west of the Rugged Uplands, generally beyond 20km from the LCT, and largely lie in locations adjacent to existing operational windfarms. They would intensify the presence of wind turbines within these areas but would not change the baseline notably that the addition of the Proposed Development would create additional cumulative effects to that assessed in the baseline above.

Clauchrie Windfarm (Application)

The application Clauchrie Windfarm is the closest application windfarm that has potential to create cumulative effects with the Proposed Development on this LCT. It's north eastern wind turbines would lie just within the western boundary of the LCT, with the majority of wind turbines located within the plateau moorlands, notably separate to the forested foothills where the Proposed Development is located. The Rugged Uplands south of the Proposed Development limits open views from the LCT that include both Clauchrie Windfarm and the Proposed Development together except from the highest points of the LCT. At these points, they would be perceived within separate areas of the views and within a different landscape context. The addition of the Proposed Development to Clauchrie Windfarm would extend the influence of large scale wind turbines from the west to closer to the north of the LCT where successive and sequential cumulative effects would occur on the perceptual qualities of the LCT.

It is considered the scale of cumulative effect in addition to Clauchrie Windfarm would be Medium, across a medium to low extent of the LCT. The magnitude of change would be Medium-Low. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of cumulative effect would be **Moderate and Significant**.

Craigimoddie Windfarm (Application)

The application Craigimoddie Windfarm would lie approximately 3km at closest to the LCT and appear in views from the LCT directly east of Hadyard Hill Windfarm within the forested foothills. The Proposed Development would lie east of Craigimoddie Windfarm, slightly closer to the edge of the LCT and together would be potentially perceived as one large windfarm. As illustrated by the wirelines from Shalloch on Minnoch (**Figure 5.21 Viewpoint 5 – Shalloch on Minnoch**), the combined effects of the Proposed Development and Craigimoddie Windfarm would extend the influence of large scale wind turbines across a wide proportion of the views from within the northern end of the LCT, becoming a defining part of the views from this part of the LCT. The Proposed Development would appear as part of the same development as Craigimoddie Windfarm, both located within the forested foothills, separate from the LCT and within views that are already characterised by human influences. They would create a partial change to the baseline characteristics in this northern part of the LCT.

LCT: Rugged Uplands, Lochs and Forest (SA 21 and EA21) and Rugged Granite Upland (DG 21)	
<p>Within the wider LCT, visibility would be very limited of both Craiginmoddie and the Proposed Development, limited to the highest ridgelines and summits. The wireline from Merrick (Figure 5.31 Viewpoint 15 – Merrick) illustrates that Craiginmoddie Windfarm would be slightly more noticeable where the Proposed Development is screened by the intervening landform due to its location directly north of the LCT. Both developments would create a small to limited change and the baseline character of these parts of the LCT would not materially change.</p> <p>The scale of combined cumulative effect with Craiginmoddie Windfarm is considered to be High-Medium across a localised (Low) extent within approximately 6km (north of Shalloch of Minnoch) of the proposed wind turbines. Beyond 6km, the scale of cumulative effect would be Low-Negligible across a limited (low-negligible) extent of the LCT. The magnitude of cumulative change would be Medium within 6km reducing to Low-Negligible beyond. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect with Craiginmoddie Windfarm within approximately 6km of the Proposed Development would be Major-Moderate and Significant. Beyond 6km it would be Minor and Not Significant.</p> <p>Knockcronal Windfarm (Scoping) The in-scoping Knockcronal Windfarm and the Proposed Development would appear as one development in views from this LCT. Knockcronal Windfarm would not bring wind turbines closer to the LCT or notably extend the horizontal extent of wind turbines over that of the Proposed Development on its own. Together, they would intensify the presence of wind turbines within a small portion of the available views but it is considered that this would not be a large enough change to alter the level of effects on this LCT as assessed for the Proposed Development on its own, or cumulatively with Craiginmoddie Windfarm.</p> <p>Knockodhar Windfarm (Scoping) Knockodhar Windfarm would lie within the plateau moorlands, just south west of this LCT. It would be just north of the operational Mark Hill Windfarm, and west of the application Clauchrie Windfarm, at a slightly lower elevation. Knockodhar Windfarm will intensify the presence of wind turbines within this plateau moorland area, notably separate to the forested foothills where the Proposed Development is located. Similar to the assessment of Clauchrie Windfarm above, the addition of the Proposed Development to the application baseline scenario with Knockodhar Windfarm would extend the influence of large scale wind turbines from the west to closer to the north of the LCT where successive and sequential cumulative effects would occur on the perceptual qualities of the LCT.</p> <p>It is considered the scale of cumulative effect in addition to Knockodhar Windfarm with an application baseline scenario would be Medium, across a medium to low extent of the LCT. The magnitude of change would be Medium-Low. Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of cumulative effect would be Moderate and Significant.</p>	

Table 5.7: Rugged Uplands, Lochs and Forest LCT Assessment

LCT12: Middle Dale	
Distance and Direction from nearest proposed wind turbine:	5km North West
This LCT lies comprises the middle valley of the Water of Girvan between the villages of Old Dailly and Straiton.	
SAWLCS Baseline Description	
<p>Landscape Context: <i>This valley is strongly contained by adjacent Foothills character types (17b, 17c and 17d), restricting widespread inter-visibility with other landscapes. The landscape increases in scale on upper slopes particularly at the transition with the more sparsely settled Foothills with Forestry and Wind Farm (17d) and Foothills with Forest west of Doon Valley (17b). A number of prominent hills with open, often rugged slopes and defined summits and more settled and farmed hill slopes occur on the edge of the Foothills that contain the Middle Dale.</i></p>	
<p>Scale: <i>A broad valley but with a predominantly rolling landform which combines with an often strongly</i></p>	

LCT12: Middle Dale
<p><i>enclosed field pattern and regularly spaced dispersed small farms, houses and extensive woodland cover to create a small to medium scale landscape. Scale increases on open and less settled upper valley sides, particularly at the transition with the Foothills (17b and 17c).</i></p>
<p>Landform: <i>The narrow flat valley floor gives way to more complex rolling lower side slopes and occasional interlocking knolly landform. Broader terraces and more gentle slopes occur on upper valley sides particularly at the transition with the more plateau-like southern part of the Foothills with Forestry west of Doon Valley (17b).</i></p>
<p>Landscape Pattern: <i>Much of the valley floor and lower hill slopes are covered with small hedged and walled pastures with many mature field and roadside trees. The large number of historic houses and castles, many with associated policies and designed landscapes gives this landscape a richly wooded, parkland character. More extensive mixed plantations and areas of rough grazing occur on upper slopes and semi-natural woodland is found on some of the steepest slopes.</i></p>
<p>Built Environment: <i>The valley is accessed by a network of narrow treelined winding roads. The small villages of Straiton, Dailly and Kirkmichael are sited within the valley floor and there is a rich heritage of archaeological sites, castles and mansion houses. More defined open and rugged hills that lie on the periphery of the Foothills character type comprise an important component of the setting to many designed landscapes and settlements.</i></p>
<p>Perceptual Qualities: <i>Although this landscape does not have any sense of wildness, lush rolling pastures with intact hedgerows, traditional small farms, the rich heritage of castles, mansion houses and their designed landscapes and small attractive villages give a distinctly rural character to this landscape and a strong sense of timelessness.</i></p>
<p>Sensitivity</p> <p>The Middle Dale LCT lies within the Water of Girvan Valley candidate local landscape area and includes three gardens and designed landscapes. It is valued for its parkland character and rich cultural heritage. It is considered it has a High-Medium value.</p> <p>The surrounding foothills contain this LCT and provide the backdrop to the valley such that any development in the adjacent foothills would be visible. Reducing this susceptibility is the extent of tree and woodland cover along the valleys, the commercial forestry and existing operational windfarms at the edges of the foothills and that views are generally focussed along the valley. The susceptibility of this LCT to the Proposed Development is considered Medium. It is considered that the overall sensitivity of the LCT to the Proposed Development is High-Medium.</p>
<p>Assessment</p> <p>The ZTVs illustrate that there would be potential visibility of the Proposed Development across the northern, south facing slopes of the Middle Dale. The foothills that lie between the proposed wind turbines and the LCT would largely screen views from the southern side of the LCT, including the GDLs which lie along the valley floor. Wind turbine blades would potentially become visible along the bottom of the lower south facing slopes with more visibility of the wind turbines possible from the higher parts. This predicted visibility does not take into account woodland, which is extensive across this area and would considerably limit the intervisibility with the proposed wind turbines across the LCT. Viewpoint 7 on the B741 near Dailly (Figure 5.23 Viewpoint 7 – B741, Dailly), Viewpoint 9 at Crosshill (Figure 5.25 Viewpoint 9 – Dalhowan Street Road, Crosshill), and Viewpoint 10 near Blairquhan (Figure 5.26 Viewpoint 10 – Blairquhan, Kirkmichael Road) are located in this LCT and the wirelines illustrate that in addition to the tree cover, the foothills between the Site and the LCT would consistently screen many of the proposed wind turbines in views from this LCT. Viewpoint 6 which lies south of Straiton (Figure 5.22 Viewpoint 6 – Newton Stewart Road, Straiton) just at the edge of this LCT, also demonstrates the screening by landform and forestry.</p> <p>The influence of the Proposed Development on the character of the Middle Dales would relate to where it would be visible from behind and above the periphery foothills to the south. It would lie in an area associated with windfarms, but separation between the operational Dersalloch and Hadyard Hill Windfarms would be retained. The Proposed Development would only influence those areas where views out are possible, where it would be a small change to the overall character of the LCT and would not fundamentally affect the secluded, settled and</p>

LCT12: Middle Dale

treed landscape characteristics. The scale of effect is considered Low to Negligible across a Medium extent of the LCT. The magnitude of change would be Low.

Taking into account the LCT is considered to have a High-Medium sensitivity to the Proposed Development, the significance of effect on the Middle Dale LCT is considered to be **Moderate-Minor and Not Significant**.

Cumulative Effects

The consented Kirk Hill Windfarm would lie on the northern edge of the LCT, north of Dailly, to the north west of the Proposed Development. It would be much closer to the LCT than the Proposed Development and would have less screening by landform, although the forested valley sides and extensive woodland across the LCT would limit its influence. Kirk Hill Windfarm extends the presence of wind turbines to the north of the LCT, and the Proposed Development would continue the pattern of development along the foothills to the south. Given the enclosed characteristics of the LCT, it is considered that there would be no potential for significant cumulative effects with Kirk Hill Windfarm, and the scale of effect would remain the same as assessed for the baseline.

Craiginmoddie Windfarm (Application)

Craiginmoddie Windfarm would lie approximately 3.5km, south of the LCT. It would be closer to the majority of the LCT and less contained by the periphery foothills than the Proposed Development. This is illustrated on the wirelines for Viewpoint 7 near Dailly (**Figure 5.23 Viewpoint 7 – B741, Dailly**) where it would become a notable feature in the backdrop of the valley. The CZTV (**Figure 5.12 Cumulative ZTV – All Application Sites**) also illustrates that Craiginmoddie Windfarm would have potential visibility across the majority of the valley. Within the north eastern parts of the LCT, the Proposed Development would appear at a similar distance to Craiginmoddie Windfarm and as illustrated by Viewpoint 9 at Crosshill (**Figure 5.25 Viewpoint 9 – Dalhowan Street Road, Crosshill**), they may be perceived as the same development, albeit partially screened. It would slightly extend the influence of wind turbines on the LCT but would be generally more recessive than Craiginmoddie Windfarm.

The combined scale of effect Proposed Development with Craiginmoddie Windfarm would be higher than additional cumulative effects, largely due to the greater influence of Craiginmoddie Windfarm in the backdrop to the valley, but also taking into account the extended influence of wind turbines that the two sites in combination would create in views from some areas of the LCT. This scale of combined cumulative effects is considered Medium, across a Medium extent of the LCT. The magnitude of change would be Medium. Taking into account the LCT is considered to have a High-Medium sensitivity, the significance of combined cumulative effect with Craiginmoddie Windfarm on the Middle Dale LCT is considered to be **Moderate and Significant**.

Knockcronal Windfarm (Scoping)

The in-scoping Knockcronal Windfarm and the Proposed Development would appear as one development in views from this LCT. Knockcronal Windfarm would bring wind turbines closer to the eastern extents of the LCT and slightly increase the horizontal extent of the Proposed Development. As Knockcronal's wind turbines sit closer to the outer edge of the foothills they would be potentially more prominent in the views from the LCT, particularly in the east, as illustrated by Viewpoint 10 (**Figure 5.26 Viewpoint 10 Blairquhan, Kirkmichael Road**). However, the treed nature of the LCT combined with the separation provided by the landform reduces the impacts and would not fundamentally affect the secluded, settled and treed landscape characteristics. Whilst Knockcronal Windfarm would be more prominent than the Proposed Development on its own, it is considered that together they would create only a slightly higher level of effect but within the same category of effect as assessed for the Proposed Development on its own, or cumulatively with Craiginmoddie Windfarm.

Table 5-8: Middle Dale LCT Assessment

5.11 Landscape Designations Assessment

5.11.1 Local Landscape Designations – South Ayrshire

156. South Ayrshire Council have identified candidate LLAs that update the Scenic Area which is the local landscape designation that covers the majority of the countryside of South Ayrshire, which is still current until the MPLDP2 is adopted. Whilst the candidate LLAs have not been formally adopted yet they do generally fall within the parts of the Scenic Area that would be affected by the Proposed Development and provide a more useful baseline to assess against as they consider more specific areas and reasons for designation. On this basis, the candidate LLAs are considered in this LVIA rather than any assessment on the Scenic Area as a whole.
157. There are three LLAs that would be potentially affected by the Proposed Development and these are discussed below. They generally fall within the boundaries of the landscape character types set out in the SAWLCS and as such the baseline descriptions and assessment of effect made above in **Section 5.10** are also relevant for these LLAs. The character assessments included consideration of the LLAs value and susceptibility in defining the sensitivity of the LCTs. However, an assessment on the reasons for the proposed LLA designation and identified special qualities is provided below.

5.11.1.1 High Carrick Hills Local Landscape Area (Candidate Area)

158. The Proposed Development Site Boundary lies outside the boundary of the High Carrick Hills LLA, except a small area in the east, near Tallaminnoch. This area of the LLA would include two existing forestry tracks that are proposed to be upgraded to provide access to the proposed wind off the C46W road. The closest proposed wind turbine would be approximately 1km from the LLA. The LLA generally covers the same area as the Rugged Upland, Lochs and Forest LCT which includes the northern end of the Merrick WLA, Galloway Forest Park and Dark Sky Park. The High Carrick Hills are designated as they “comprise a little modified upland area comprising the highest and most rugged hills in South Ayrshire. This landscape is unusual in having a Highland character in a Lowland context due to the craggy landform, the presence of peaty lochs and the qualities of wildness that can be experienced in the area.” A number of other characteristics and special qualities are provided in the LLA description. Those most susceptible to the Proposed Development are those relating to visual or perceptual aspects and include:

- “a particularly strong sense of wildness is associated with the Shalloch on Minnoch area due to the lesser influence of forestry and long walk to the ridge from the public road”; and
- “expansive views to the Merrick range and over the hills and valleys of South Ayrshire to the Firth of Clyde and Ailsa Craig are possible from open hill summits. This upland landscape also forms a dramatic grouping of high hills seen across parts of South Ayrshire, for example near Maybole and from the popular walk to the Hunter-Blair monument near Straiton.”

159. The ZTV (**Figure 5.6 Landscape Designations with Blade Tip ZTV**) illustrates that approximately half of the LLA would have potential intervisibility with the Proposed Development, not taking into account forestry screening. This is largely contained within the Site Boundary and within 6km of the proposed wind turbines to the east, west and south by the intervening landform.
160. Considering the special qualities identified above, the Proposed Development would be visible from the summits of Shalloch on Minnoch (**Figure 5.21 Viewpoint 5 – Shalloch on Minnoch**) and smaller Cornish Hill (**Figure 5.17 Viewpoint 1 – Minor Road near Cornish Hill**), and surrounding hills in the lower northern part of the LLA. From these hills the Proposed Development would be in close proximity and would become a defining feature of the views in this area. Visibility from the hills within the LLA to the south of Shalloch on Minnoch, including Tarfessock Hill would be very limited, between 1-4 wind turbines visible (**Figure 5.2 Blade Tip ZTV - No. of Wind Turbines Visible**) and on highest points only.
161. Whilst the Proposed Development would be a noticeable feature in views from the north facing elevated parts of the Shalloch on Minnoch area, it would be located separately within the lower more gently undulating foothills and

forestry which is distinctly different from the upland landscape character of the LLA. It is considered the 'sense of wildness', identified as a quality of this area, would be largely retained, particularly considering the views to the more secluded and remote parts of the LLA and WLA to the south would not be affected by the Proposed Development.

162. The Proposed Development would be visible in the middle ground in views over South Ayrshire towards the Firth of Clyde from summits within the LLA. It would extend the existing windfarm characteristics in the forested foothills part of the view, and from the more elevated summits would only lie within a small proportion of the overall views available. Views towards the LLA from locations out with it to the north and north west would include the Proposed Development. Those views in close proximity such as the Colonel Hunter Blair Monument (**Figure 5.24 Viewpoint 8 – Colonel Hunter Blair Monument**) would include the Proposed Development but it would lie separately from the uplands to the south and would not affect the 'dramatic grouping of high hills' in the view. Views toward the LLA from further afield such as at Maybole (**Figure 5.29 Viewpoint 13 – A77 near Maybole**) show that the periphery foothills contain much of the proposed wind turbines and they would generally lie below the profile of the rugged uplands of the LLA.
163. The Proposed Development lies in close proximity to the LLA and would alter the visual and perceptual qualities across approximately a third of the LLA. Its influence would be largely limited to the northern lower hills, within approximately 6km of the nearest proposed wind turbine, where the sense of remoteness and wildness is already reduced by proximity to the more settled and active landscapes to the north, including existing windfarms. It would not have significant effects on the wildness of the most secluded and remote parts of the LLA.
164. The scale of effect on the special qualities of the High Carrick LLA is considered to be High-Medium across a localised (Low) extent of the LLA (within approximately 6km). Beyond 6km, the scale of effect would be Low-Negligible across a limited (low-negligible) extent of the LLA, with no effect on the majority of the LLA. The magnitude of effect would be Medium reducing to Low-Negligible. Taking into account the LLA is considered to have a High-Medium sensitivity to the Proposed Development, the significance of effect on its special qualities within approximately 6km of the Proposed Development would be **Major-Moderate and Significant**. Beyond 6km it would be **Minor and Not Significant**.

Cumulative effects with Application Windfarms

165. The cumulative effects on the special qualities of the LLA with the addition of the Proposed Development to application windfarms would largely relate to the application Clauchrie Windfarm and Craiginmoddie Windfarm. Clauchrie Windfarm would lie partially within the western extents of the LLA, separated from the Proposed Development by the intervening foothills. Craiginmoddie Windfarm would be approximately 5km from the north western boundary of the LLA, adjacent to the west of the Proposed Development.
166. The addition of the Proposed Development to Clauchrie Windfarm and Craiginmoddie Windfarm would extend the influence of large scale wind turbines from the west to closer to the north of the LLA where successive and sequential cumulative effects would occur on the special qualities of the LLA relating to the views available from the summits and potentially the sense of wildness, although all three windfarms would be clearly within the adjacent forested lower landscapes.
167. It is considered the scale of cumulative effects of the Proposed Development on the special qualities of the LLA in addition to Craiginmoddie Windfarm and Clauchrie Windfarm would be Medium-Low, across a medium extent of the LLA as a whole. The magnitude of change would be Medium-Low. Taking into account the LLA is considered to have a High-Medium sensitivity, the significance of cumulative effect would be **Moderate and Significant**.

Cumulative effects with Knockcronal Windfarm

168. Combined cumulative effects with the in-scoping Knockcronal Windfarm would increase the number of wind turbines potentially visible to the north of the LLA, particularly when also considering application Craiginmoddie Windfarm. In combination they would have a slightly greater visual influence but within the same general extents of the LLA assessed above for the Proposed Development. It is considered that the combined cumulative effects on the special qualities would be as assessed above for effects of the Proposed Development on its own, and with the application windfarms.

Cumulative effects with Knockodhar Windfarm

169. The in-scoping Knockodhar Windfarm would lie to the west-north-west of Clauchrie Windfarm and north of Mark Hill Windfarm, just over 1km from the south western boundary of the LLA. The CZTV (**Figure 5.42 Cumulative ZTV – Knockodhar and Proposed Development**) illustrates that combined visibility of the Proposed development and Knockodhar Windfarm would be limited to the western edge of the LLA and the higher summits within the south of the LLA. Knockodhar Windfarm would increase the number of large scale wind turbines surrounding the LLA, reducing the gap between the existing windfarms to the north (Hadyard Hill, Assel Valley and Tralorg) and those to the south (Mark Hill). In combination with the Proposed Development and the application sites of Clauchrie Windfarm and Craiginmoddie Windfarm, taking distance into account, it is considered that the cumulative effect of the addition of Knockodhar and the Proposed Development would be slightly higher but within the same category of effect as assessed above with Clauchrie Windfarm and Craiginmoddie Windfarm.

5.11.1.2 Water of Girvan Valley Local Landscape Area (Candidate Area)

170. The Water of Girvan Valley LLA lies just north of the northern Site Boundary at Tairlaw, approximately 2km from the nearest proposed wind turbine. The LLA covers the Middle Dale LCT and Intimate Pastoral Valley LCT (Water of Girvan unit), also incorporating the edge of the foothills in the south. This LLA is designated as it is "an attractive settled valley, with an outstanding assemblage of historic houses, castles, designed grounds and policy landscapes. Moorland hills with distinctive profiles provide the backdrop to views across and along the valley. Prominent and accessible monuments (Kildoon, and the Hunter-Blair monument near Straiton) provide panoramic elevated views across the area. The Water of Girvan Valley is popular for walking, with local routes promoted and waymarked around Straiton and Daily."
171. The ZTV illustrates that there would be visibility of the Proposed Development intermittently across this LLA. The assessment in **Table 5.6** for the Water of Girvan unit of the Intimate Pastoral Valley LCT identified significant effects would occur from the Proposed Development within a localised area of the valley between Craignfad, Knockskae and Linfairn (3-5km north of the Site), and south of Tairlaw. **Table 5.8** for the Middle Dale LCT identified no significant effects except in combination with Craiginmoddie Windfarm.
172. The Proposed Development would not affect the scenic qualities relating to the "historic houses, castles, designed grounds and policy landscapes" and the promoted walks along the river around Straiton and Daily, as these generally lie within the valley bottom and the intervening foothills and policy woodland screen open views towards the Proposed Development, as illustrated by the viewpoints 6, 7, 9, 10 and 23 (**Figures 5.22, 5.23, 5.25, 5.26 and 5.39**). The Proposed Development would not directly affect the 'distinctive profiles' of the hills that provide the backdrop to the LLA. The proposed wind turbines are not located on these periphery hills and are set back so whilst they may be visible from behind the hills and above the skyline, there would be a degree of separation. Views from elevated positions such as from the Colonel Hunter Blair Monument (**Figure 5.24 Viewpoint 8 – Colonel Hunter Blair Monument**) would include the full extent of the Proposed Development where it would be a prominent feature associated with the foothills and forestry above the valley but retain separation from the views of the rugged High Carrick Hills to the north and to views of Ailsa Craig to the west. The overall containment and scenic character of the LLA would be retained, with only localised effects. As assessed for the Water of Girvan unit of the Intimate Pastoral Valley LCT and shown on **Appendix 5.2 Viewpoint Assessment, Figure 5.2.1 Water of Girvan Illustrative Wirelines**, due to the close proximity and orientation of the valley between Craignfad, Knockskae and Linfairn, the Proposed Development would become a defining feature in this part of the LLA, changing the existing scenic qualities. It is considered that there would be High-Medium scale effect on the special qualities of the LLA over this very limited extent (low-negligible) of the LLA. Elsewhere it is considered the Proposed Development would have a Low-Negligible scale of effect over a medium extent of the wider LLA. The magnitude of change would be Medium-Low for the localised area reducing to Low for the wider LLA. Taking into account the LLA has a High-Medium sensitivity to the Proposed Development, the significance of effect on the special qualities would be **Moderate and Significant** for a localised area between 3-5km north of the Site, reducing to **Moderate-Minor and Not Significant** for the wider LLA.

Cumulative effects with Craiginmoddie Windfarm

173. The combined effects of the application Craiginmoddie Windfarm with the Proposed Development would have a higher effect on the visual qualities relating to the 'distinctive profiles' of hills that form the backdrop to the main lower valley where Craiginmoddie's wind turbines would have a wider influence due to their closer location. Craiginmoddie Windfarm however would not be as visible as the Proposed Development from the upper reaches

of the Water of Girvan. The scale of combined effect on the special qualities of the LLA is considered High-Medium over a medium extent. The magnitude of change would be High-Medium. Taking into account the LLA is considered to have a High-Medium sensitivity, the significance of combined effect with Craiginmoddie Windfarm would be **Major-Moderate and Significant**.

Cumulative effects with Knockcronal Windfarm

174. Combined cumulative effects with the in-scoping Knockcronal Windfarm on the special qualities of this LLA would be most notable within the upper reaches of the Water of Girvan Valley, in particular the *Moorland hills with distinctive profiles provide the backdrop to views across and along the valley*. As assessed for the Water of Girvan LCT and Middle Dale LCT, the Knockcronal Windfarm would increase the visibility of wind turbines within this area, particularly between Craigfad and Tairlaw, and would be closer and more prominent along the outer edge of the LLA with the Proposed Development appearing as an extension but largely beyond the immediate valley sides. In combination, the cumulative scale of effect on the special qualities of the LLA would increase from that of the Proposed Development on its own, creating a High-Medium cumulative scale of effect over a medium extent. The magnitude of change would be High-Medium. Taking into account the LLA is considered to have a High-Medium sensitivity, the significance of combined effect with Knockcronal would be **Major-Moderate and Significant**.

Cumulative effects with Craiginmoddie and Knockcronal Windfarms

175. Considering the combined effects of the Proposed Development with Knockcronal Windfarm and Craiginmoddie Windfarm, the extent of cumulative effects on the special qualities would extend across a wider area of the LLA. This is due to Craiginmoddie Windfarm's location closer to the middle valley of the Water of Girvan and Knockcronal Windfarm's location closer to the upper reaches. The Proposed Development would be least prominent of the three but would create a continuation of wind turbines along the foothills between Knockcronal and Craiginmoddie wind turbines as perceived from the south facing slopes of the Middle Dale and Water of Girvan parts of the LLA. The scale of combined effect on the special qualities of the LLA is considered High-Medium, extending from the valley between Craigfad, Knockskae and Linfairn in the north east, to the south facing slopes west of Straiton to Old Dailly, a medium to high extent of the LLA. The magnitude of change would be High-Medium. Taking into account the LLA is considered to have a High-Medium sensitivity, the significance of combined effect with Knockcronal and Craiginmoddie Windfarms would be **Major-Moderate and Significant**.

5.11.1.3 Stinchar Valley Local Landscape Area (Candidate Area)

176. The Stinchar Valley LLA lies to the south of the Site Boundary, approximately 2km from the nearest proposed wind turbine. The LLA generally follows the same area as the Intimate Pastoral Valleys LCT (Stinchar Valley unit) which continues from the Site to the coast at Ballantrae, and also includes the Duisk Valley to Barrhill in the south, incorporating a slightly wider extent of the valley sides. It is designated as it has *"a hidden, secretive quality being narrow, incised and undisturbed by major communications. Lush valley floor pastures contrast with more complex wooded slopes and a string of well-defined hills located on the northern edges of the valley, including the singular peak of Knockdolian, add to the rich scenic composition and harmony of this landscape. Both the Stinchar and the lower Duisk valleys are enhanced by many cultural heritage features including some notable 19th/early 20th century grand houses and historically interesting villages. Well-used walking routes are present throughout the valley and within Changue Forest."*
177. The ZTV (**Figure 5.6 Landscape Designations with Blade Tip ZTV**) illustrates that the main areas of visibility across the LLA are within the upper reaches of the Stinchar Valley, east of Barr. Between Barr and the A714, visibility would be intermittent, and within the western extents of the LLA there would be no visibility.
178. The Proposed Development would lie at the eastern end of this LLA, separated by the periphery foothills so that the full number of proposed wind turbines would not be visible from within the LLA, with much of the LLA having no visibility at all. Those wind turbines that are visible would be contained within a small proportion of the view, appearing set back within the forestry beyond the immediate valley sides, as illustrated by Viewpoint 3 near South Balloch (**Figure 5.19 Viewpoint 3 – West of South Balloch, Nether Barr**). The visible proposed wind turbines would however become a defining feature in views from this end of the valley, due to proximity and scale of proposed wind turbine, and extending the presence of wind turbines along the valley from Hadyard Hill Windfarm, changing the 'scenic composition' in this area. The Proposed Development would not significantly affect the *'hidden, secretive quality being narrow, incised and undisturbed by major communications'* or have any influence on the *'well defined hills on the northern edges of the valley, including the singular peak of Knockdolian'*.

179. It is considered that the scale of effect on the special qualities of the LLA would be High-Medium for a limited (Low-Negligible) extent between the Site and Milton Bridge (within approximately 5km of the Site), and Low across a localised (Low) extent of the wider LLA. The magnitude of change would be Medium-Low reducing to Low. Taking into account the LLA has a High-Medium sensitivity to the Proposed Development, the significance of effect would be **Moderate and Significant** locally, within 5km of the Site, reducing to **Moderate-Minor** and **Not Significant** elsewhere.

Cumulative effects with Clauchrie Windfarm

180. The application Clauchrie Windfarm would lie, at closest, within approximately 3km south of the Stinchar Valley LLA. The cumulative ZTV (**Figure 5.15 Cumulative ZTV – Clauchrie and Proposed Development**) illustrates that potential visibility of Clauchrie Windfarm from the Stinchar Valley would be largely from the upper valley sides, with no visibility from the floor. The addition of the Proposed Development to Clauchrie Windfarm would extend the influence of windfarms along the outer and upper slopes of the Stinchar Valley LLA, largely perceived sequentially, with only combined visibility potential between Barr and the A714. The scale of cumulative effect is considered to be Medium within the upper slopes of the Stinchar Valley between the eastern extents of the LLA to the A714 in the west (approximately 15km distance), a medium-low extent of the LLA. The magnitude of change would be Medium-Low. Elsewhere, within the western extents of the Stinchar Valley, the scale of cumulative effect would be low to negligible, a limited (low) extent of the LLA. The magnitude of change in this area would be Low. Taking into account the LLA has a High-Medium sensitivity to the Proposed Development, the significance of effect of Clauchrie Windfarm and the Proposed Development on the special qualities would be **Moderate and Significant**, within 15km of the Site, reducing to **Moderate-Minor** and **Not Significant** elsewhere.

Cumulative effects with Craiginmoddie Windfarm

181. The combined effects of Craiginmoddie Windfarm with the Proposed Development would extend along a greater extent of the LLA due to Craiginmoddie Windfarm's location around Daljedburgh Hill which lies above the valley and would have a greater visual influence on the 'scenic composition' qualities of this part of the LLA, as illustrated by Viewpoint 12 near Auchensoul Hill (**Figure 5.28 Viewpoint 12 – B734, Auchensoul Hill**). The potential combined effects would still be contained within less than half of the LLA, generally within 8km of the Proposed Development and in an area already influenced by the existing Hadyard Hill and Assel Valley Windfarms. It is considered within this area that the scale of combined cumulative effect on the special qualities of the LLA would be High across a Medium extent of the LLA. Beyond, the scale of effect would be Low-Negligible over a medium extent. The magnitude of change would be High-Medium within 8km of the Site reducing to Low-Negligible elsewhere. Taking into account the LLA is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect on the special qualities of the LLA is considered **Major-Moderate and Significant** within 8km, reducing to **Moderate-Minor** and **Not Significant** elsewhere.

182. Considering the cumulative effects on the special qualities of this LLA of the Proposed Development in addition to both Craiginmoddie and Clauchrie Windfarms, the extent of effects would increase along a slightly longer length of the upper slopes of the Stinchar Valley, between the Proposed Development in the east to the A714 in the west, an approximate 15km distance. The influence of windfarms would become continuous along the upper slopes although with limited potential to affect the intimate characteristics of the valley floor. The combined scale of effect is considered to be High across a medium extent of the LLA. Beyond the A714 to the west, the scale of effect would be Low-Negligible over a low extent. The magnitude of change would be High-Medium within approximately 15km of the Site reducing to Low-Negligible elsewhere. Taking into account the LLA is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect of the Proposed Development in addition to Clauchrie and Craiginmoddie Windfarms on the special qualities of the Stinchar Valley LLA is considered **Major-Moderate and Significant** within 15km, reducing to **Moderate-Minor** and **Not Significant** elsewhere.

Cumulative effects with Scoping Windfarms

183. Knockcronal Windfarm has minimal intervisibility with the Stinchar Valley and would only slightly increase the level of effect in combination with the Proposed Development on this LLA but still within the same category of effect assessed for the Proposed Development on its own.
184. Knockodhar Windfarm would lie very close to the lower extents of the Stinchar Valley. It is unlikely to be perceived in many combined views from the LLA with the Proposed Development due to location and landform. Taking into

account the application windfarms of Clauchrie Windfarm and Craiginmoddie Windfarm along with the existing Hadyard Hill Windfarm, there is however more potential for sequential cumulative effects along the length of the valley to which the Proposed Development would be visible at the upper end of the valley. Whilst none of the existing, application and in-scoping windfarms would be within the LLA, in combination, they would surround the LLA on either side and become a continuous feature within views out of the LLA, affecting a greater visual influence on the 'scenic composition' qualities of the LLA.

185. The combined scale of effect of Knockodhar Windfarm and the Proposed Development in addition to the application baseline scenario is considered to be Medium-Low across a high extent of the LLA. The magnitude of change would be Medium. Taking into account the LLA is considered to have a High-Medium sensitivity to the Proposed Development, the significance of combined cumulative effect on the special qualities of the Stinchar Valley LLA is considered **Major-Moderate and Significant**.

5.11.2 Local Landscape Designations – East Ayrshire

5.11.2.1 Rugged Uplands with Lochs and Forest Sensitive Landscape Area (East Ayrshire);

186. This SLA lies 6.5km to the east of the Proposed Development and has been included as part of the landscape character assessment of the Rugged Uplands with Lochs and Forestry LCT which also covers South Ayrshire, in **Section 5.10**, and illustrated on **Figure 5.3 Landscape Character Areas** and **Figure 5.4. Landscape Character Areas and Tip ZTV**. However, as the East Ayrshire Sensitive Landscape Review identify specific qualities as a sensitive landscape, the effect on these qualities are considered separately in this section. The qualities are described as: *"The landscape is unique in East Ayrshire terms, due to its remote and little modified nature. Loch Doon, East Ayrshire's largest water body, adds to the diversity and interest of the landscape. The sparsely settled landscape gives a strong sense of seclusion and naturalness. It has a high scenic value and for this reason is also important for recreation and tourism."*
187. The ZTV illustrates that visibility across the SLA is very limited and intermittent. Where it is visible, this would be mostly wind turbine blades except for the highest land such as Mullwharchar where the elevation would allow visibility of all of the wind turbines. The ZTV illustrates that there would be no visibility at Loch Doon except for a small area to the east, closest to the A713 which would be further limited by the commercial forestry in this area. Viewpoint 17 (**Figure 5.33 Viewpoint 17 – A713 East of Loch Doon**) illustrates the view in this area over Loch Doon, where the Proposed Development would appear distant, beyond the foothills to the west with much of the towers screened by the landform, and within a narrow horizontal extent of the views over the Loch. The limited views from the upland parts of the SLA would encompass panoramic views where the Proposed Development would be seen in the context of the forested foothills with operational windfarms, and the more active settled coastal and inland landscapes beyond.
188. It is considered that the Proposed Development would not have an effect on the seclusion and naturalness of the LCT or its recreational or tourism uses and value, with limited visual influence on Loch Doon, and where it is seen, it would be in the context of existing windfarms. The scale of effect on this SLA is considered Low-Negligible, over a limited (negligible) extent. The magnitude of change is Low-Negligible. As a local landscape designation and its secluded and naturalness characteristics, it is considered to have a High-Medium sensitivity to the Proposed Development. The significance of effect would be **Minor-Negligible** and **Not Significant**.

Cumulative effects with Craiginmoddie Windfarm

189. Craiginmoddie Windfarm would be less visible from this SLA than the Proposed Development as illustrated by the CZTV (**Figure 5.12 Cumulative ZTV – All Application Sites**). Where it is visible it would generally be seen behind the Proposed Development to varying degrees. It is considered that the combined effect of both windfarms on the qualities of the SLA would be create a slight increase to the level of effect that has been assessed for the Proposed Development on its own, but still within the same category of effect.

Cumulative effects with Knockcronal Windfarm

190. Knockcronal Windfarm would be perceived as part of the Proposed Development from this SLA, extending the presence of wind turbines slightly further north, reducing the gap between Dersalloch Windfarm and the Proposed Development as perceived from some areas of the SLA. Whilst it would increase the intensity of wind turbines within a small area east of the SLA, it is considered that the cumulative effects on the special qualities of this LLA would

be only slightly higher than assessed for the Proposed Development on its own, and within the same category of effect.

5.11.2.2 Foothills West of Doon Valley Sensitive Landscape Area (East Ayrshire)

191. The Sensitive Landscape Area lies approximately 8km at closest to the north east of the Proposed Development, illustrated on **Figure 5.3 Landscape Character Areas** and **Figure 5.4 Landscape Character Areas and ZTV**. The qualities identified for its designation as a sensitive landscape include: *"The relatively constrained band of upland landscape forms an important role in proving the backdrop and setting for the Doon Valley and the Girvan Valley in South Ayrshire. The landmark hills in the southern part of the landscape form the backdrop to Dalmellington and Craigen Gillan Estate, whilst the gentler northern section contributes positively to the setting of Patna and Waterside as well as the entrance into East Ayrshire on the A713."*
192. The ZTV illustrates potential visibility along the higher, south west edge of the SLA. These parts are largely covered with commercial forestry and would limit intervisibility with the proposed wind turbines. The Proposed Development would not feature directly behind the northern parts of the SLA. Closer to Dalmellington, from the adjacent Upland River Valley LCT, there would be potential for the proposed wind turbines to appear behind the SLA, as illustrated by Viewpoint 16 in Bellsbank (**Figure 5.32 Viewpoint 16 – Riecawr Avenue, Bellsbank**). It would be distant and separated from the SLA by the undulating foothill landform and forestry cover. It would also be seen in the context of the closer Dersalloch Windfarm. Due to the limited visibility and intervening landform, the Proposed Development would not affect the SLA's role of providing the backdrop and setting to Doon Valley and Girvan Valley, as well as setting of Patna and Waterside. It would not be visible in from the A713 and would not influence the gateway to East Ayrshire. It is considered the scale of effect on the qualities of the SLA would be Low-Negligible over a limited (low-negligible) extent. The magnitude of change would be Low-Negligible. As the SLA would have a High-Medium sensitivity, the significance of effect would be **Minor** and **Not Significant**.

Cumulative effects with Craiginmoddie Windfarm

193. Craiginmoddie Windfarm would be slightly further away from this SLA and less visible from within the SLA than the Proposed Development as illustrated by the CZTV (**Figure 5.12 Cumulative ZTV – All Application Sites**). Where it is visible it would generally be seen within a narrow horizontal extent directly adjacent to or partially behind the Proposed Development to varying degrees. It is considered that the combined effect of both windfarms on the qualities of the SLA would be only slightly higher than assessed for the Proposed Development on its own but within the same category of effect.

Cumulative effects with Knockcronal Windfarm

194. Knockcronal Windfarm would lie slightly closer to this SLA than the Proposed Development but would be perceived as part of the same development. Its wind turbines would be more prominent but considering the special qualities of the SLA it is considered that this would not be a large enough change to alter the level of effects on this SLA as assessed for the Proposed Development on its own, or cumulatively with Craiginmoddie Windfarm.

5.11.3 Local Landscape Designations – Dumfries and Galloway

5.11.3.1 Galloway Hills Regional Scenic Area (Dumfries and Galloway)

195. This Regional Scenic Area (RSA) lies 10km to the south and 10km to the east of the nearest wind turbines of the Proposed Development. It comprises an extensive area, centred on the Rugged Granite Uplands and Coastal Granite Uplands, from the boundary with Ayrshire in the north to Wigtown Bay in the south, the A714 to the west and A713 to the east, also including Cairnsmore of Carsphairn to the east. The ZTV illustrates that the vast majority of this RSA would have no visibility of the Proposed Development. Visibility would be limited to the most elevated parts of the RSA which include Merrick, Rhinns of Kells, and Cairnsmore of Carsphairn. Viewpoint 15 from Merrick (**Figure 5.31 Viewpoint 15 – Merrick**) and Viewpoint 24 from Cairnsmore of Carsphairn (**Figure 5.40 Viewpoint 24 – Cairnsmore of Carsphairn**) illustrate the potential views of the Proposed Development from these locations, where a Low and Low-Negligible scale of effect respectively was assessed. The views of the Proposed Development from these elevated locations would be within extensive panoramic views, where it would lie in the context of existing windfarms and within the forested foothills, clearly separate from the rugged uplands that define the majority of this SLA. The Proposed Development would only create a limited change to views out of the RSA and would not fundamentally affect the key qualities of this RSA. There would be a Negligible scale of effect across

a limited (Negligible) extent of the SLA. The magnitude of change would be Negligible. The significance of effect would also be **Negligible** and **Not Significant**.

196. As a Negligible scale of effect was assessed for the Proposed Development on its own, consideration of cumulative effects has not been assessed further.

5.12 Visual Assessment

5.12.1 Introduction

197. The impacts of the Proposed Development on visual amenity within the Study Area are considered in respect of the main visual groups identified in the baseline section, namely:

- residents within settlements;
- users of transport routes including tourist routes;
- recreational users of long distance routes, core paths and hill walks; and
- visitors to attractions.

5.12.1.1 Viewpoint assessment summary

198. **Table 5.9** provides a summary of the viewpoints assessed in **Appendix 5.2 Viewpoint Assessment** providing the scale of effect assessed for each viewpoint and the relevant receptor. **Figures 5.17-5.40** include photo-panoramas and cumulative wirelines for each view, with photomontages produced for a selection of viewpoints.

VP No.	Viewpoint name	Visual Receptors	Landscape Receptors	Distance and Direction to nearest wind turbine (km)	Scale of Effect (Proposed Development +)			
					Baseline	Future Baseline	Future Baseline + Application (including Craiginmoddie)	Future Baseline + Application + Knockcronal Windfarm
1	Minor Road near Cornish Hill	National Byway users Local road users Recreational users of Cornish Hill Trail.	Galloway Dark Sky Park Buffer Zone South Ayrshire Scenic Area High Carrick Hills Local Landscape Area (Candidate) Rugged Uplands, Lochs and Forest LCT	2.87 NNW	High-Medium	High-Medium	High-Medium (Craiginmoddie Windfarm not visible)	High-Medium
2	NCN7 south west of Knockinculloch	Recreational users of NCN7 and core path SA1.	Galloway Dark Sky Park Buffer Zone Foothills with Forest and Wind Farm LCT	1.79 SE	Medium	Medium (windfarms) High-Medium (forestry)	High	High
3	West of South Balloch, Nether Barr	Residents of Nether Barr National Byway users Local road users	Galloway Dark Sky Park Buffer Zone South Ayrshire Scenic Area The Stinchar Valley Local Landscape Area (Candidate) Intimate Pastoral Valley LCT	3.59 NE	High-Medium	High-Medium	High-Medium (No consented or application sites notably visible)	High-Medium (no notable visibility of Knockcronal Windfarm)
4	Minor road between Dailly and Barr	Recreational users of core path SA46 Local road users.	Foothills with Forest and Wind Farms LCT	5.25 ESE	Negligible	Negligible	Negligible	No visibility of Knockcronal
5	Shalloch on Minnoch	Walkers	Galloway Dark Sky Park Buffer Zone South Ayrshire Scenic Area High Carrick Hills Local Landscape Area (Candidate) Rugged Uplands, Lochs and Forest LCT Merrick Wild Land Area	6.98 NNW	Medium-Low	Medium-Low	Medium	Medium

VP No.	Viewpoint name	Visual Receptors	Landscape Receptors	Distance and Direction to nearest wind turbine (km)	Scale of Effect (Proposed Development +)			
					Baseline	Future Baseline	Future Baseline + Application (including Craiginmoddie)	Future Baseline + Application + Knockcronal Windfarm
6	Newton Stewart Road, Straiton	Residents of Straiton National Byway users Local road users Local Paths Network: 110 Bannan Walk	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Intimate Pastoral Valleys LCT	5.41 S	Low-Negligible	Medium-Low (forestry)	No consented or application sites visible	Medium-Low (forestry)
7	B741, Dailly	Residents of Dailly Users of core path SA43 Local road users.	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Middle Dale LCT	8.0 SE	Negligible	Negligible	Negligible	No visibility of Knockcronal Windfarm
8	Colonel Hunter Blair Monument	Recreational users of core path: SA48 Users of Local Paths Network: 118 Monument Walk.	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Foothills with Forest West of Doon Valley LCT	5.26 SW	Medium	Medium	Medium	Medium
9	Dalhowan Street Road, Crosshill	Residents of Crosshill Recreational users of core path: SA1 and NCN 7 Local road users	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Middle Dale LCT	7.49 S	Low	No consented windfarms visible	Medium-Low	No visibility of Knockcronal Windfarm
10	Blairquhan, Kirkmichael Road	Recreational users of Local Paths Network: 106 Hill Wood Walk Local road users.	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Middle Dale LCT	7.42 S	Low-Negligible	Low-Negligible	Low	Low
11	North Threave	Residents Local road users.	Maybole Foothills LCT	11.03 SE	Low	Low	Medium-Low	Medium-Low
12	B734, Auchensoul Hill.	National Byway users	South Ayrshire Scenic Area Stinchar Valley Local Landscape Area (Candidate)	7.84 ENE	Low	No consented windfarms visible	Medium	Medium

VP No.	Viewpoint name	Visual Receptors	Landscape Receptors	Distance and Direction to nearest wind turbine (km)	Scale of Effect (Proposed Development +)			
					Baseline	Future Baseline	Future Baseline + Application (including Craiginmoddie)	Future Baseline + Application + Knockcronal Windfarm
13	A77 near Maybole	Residents of Maybole Recreational users of core path SA32 Road users of A77	Intimate Pastoral Valley LCT Maybole Foothills LCT	11.69 SE	Low	Low	Medium-Low	Medium-Low
14	Craigengillan Dark Sky Observatory	Visitors to the Observatory	East Ayrshire Sensitive Landscape Area: Rugged uplands with lochs and Forestry LCT Craigengillan Garden and Designed Landscape	9.42 WSW	Negligible	Negligible	Negligible (no visibility of Craiginmoddie Windfarm)	No visibility of Knockcronal Windfarm)
15	Merrick	Walkers	Galloway Dark Sky Park Buffer Zone Dumfries and Galloways Galloway Hill Regional Scenic Area Merrick Wild Lands Area Rugged Uplands LCT	12.68 NNW	Low	Low	Medium-Low	No visibility of Knockcronal Windfarm
16	Riecawr Avenue, Bellsbank	Residents of Bellsbank	Upper River Valley LCT	11.30 WSW	Low-Negligible	Low (forestry)	Low	Low
17	A713 east of Loch Doon	Recreational users of Loch Doon Road users of A713	Galloway Hills Scenic Area Upper Dale LCT	13.11 W	Low-Negligible	Low-Negligible	Low-Negligible	Low-Negligible
18	A713 and B742 Road Junction	Road users of A713 and B742	Ayrshire Lowlands LCT	17.52 S	Low-Negligible	Low-Negligible	Low	Low
19	Brown Carrick Hills	Walkers	South Ayrshire Scenic Area Brown Carrick Hills & Coast Local Landscape Area (Candidate) Brown Carrick Hills LCT	17.91 SSE	Low-Negligible	Low-Negligible	Low	Low

VP No.	Viewpoint name	Visual Receptors	Landscape Receptors	Distance and Direction to nearest wind turbine (km)	Scale of Effect (Proposed Development +)			
					Baseline	Future Baseline	Future Baseline + Application (including Craiginmoddie)	Future Baseline + Application + Knockcronal Windfarm
20	Knockdolian summit	Walkers	South Ayrshire Scenic Area The Stinchar Valley Local Landscape Area (Candidate) Coastal Foothills LCT	26.55 ENE	Negligible	Negligible	Negligible	Negligible
21	Chimorie Cairn	Residents of Chirmorie Local road users	Plateau Moorlands with Forestry and Wind Farms LCT	25.55 NE	No Effect	N/A	N/A	N/A
22	Blackcraig Hill	Walkers	Southern Uplands LCT	27.21 W	Negligible	Negligible	Negligible	Negligible
23	Craigencallie, Straiton	National Byway users	South Ayrshire Scenic Area Water of Girvan Valley Local Landscape Area (Candidate) Intimate Pastoral Valley LCT	2.87 SW	Medium	No consented windfarms visible	Medium	High-Medium
24	Cairnsmore of Carsphairn	Walkers	Galloway Hills Regional Scenic Area Southern Upland LCT	20.73 W	Low-Negligible	Low-Negligible	Low-Negligible	Low-Negligible

Table 5.9: Viewpoint Assessment Summary

5.12.1.2 Viewpoint Analysis

199. The viewpoint assessment illustrates the varied scale of effects of the Proposed Development that would occur across the Study Area which is largely a result of the landform that immediately surrounds the Site, the commercial forestry it lies within, and context of the existing operational wind turbines.
200. The foothills that contain the Site combined with the forestry limit the potential for a High scale of effects unless within the Site itself. Close to the Site, particularly from the more elevated edge of the Carrick Hills to the south, the scale of effect would be High-Medium, where the Proposed Development would occupy a wide proportion of the view but appear clearly associated with the forested foothills and separate from the wider view. High-Medium scale of effects were also assessed for locations within 5km where wind turbines of the Proposed Development would be framed within narrow valley views and become focal points.
201. Medium scale of effects would occur within approximately 5km where only a few of the proposed wind turbines would be immediately visible and would not create a fundamental change to the overall view. This would generally be from nearby locations where the periphery foothills occupy the foreground and would screen the majority of the Proposed Development.
202. Medium-Low scale of effects were assessed for Shalloch on Minnoch which lies just under 7km from the Proposed Development. The proposed wind turbines would be immediately noticeable within the forested foothills from this elevated location, but within a small proportion of the overall views available and that are already characterised by windfarms.
203. Low scale of effects were assessed for a number of locations between 7 and 13km from the Site where the proposed wind turbines would be discernible and only slightly change the composition of the overall view. In these views the proposed wind turbines would either be partially obscured by the foothills landform and forestry or lie within a narrow extent of the overall views available.
204. Low-Negligible effects were assessed across a number of locations between 5 and 20km from the Site. Many of these were elevated views within the wider landscape where the Proposed Development would be partially screened, within a narrow proportion of the view and also where closer operational windfarms dominate the view.
205. The viewpoint assessment also considered effects with the future baseline and application windfarms. Generally, it was considered there would be no change to the baseline assessment except for viewpoints where the application Clauchrie Windfarm and Craiginmoddie Windfarm were considerations. For Clauchrie Windfarm, the scale of effect didn't change for the visual receptors but it was acknowledged that the effects would be slightly higher within the same category of effect. The assessment identified that in many views, the Proposed Development and Craiginmoddie Windfarm would appear as one development which increased the scale of effect for several viewpoints. This would be where both windfarms are seen in their full horizontal extent or where one or the other windfarm is close to the viewpoint. A high scale of combined effect was considered at Viewpoint 2 which lies on the road (NCN7) between the two Sites and would effectively be surrounded by wind turbines.
206. An assessment of combined cumulative visual effects of the in-scoping Knockcronal Windfarm and the Proposed Development was undertaken. For most visual receptors, the location of Knockcronal Windfarm directly adjacent to the Proposed Development and within a narrow horizontal extent, limits the scale of effect increasing over that assessed for the Proposed Development on its own. The exception to this is for visual receptors along the Water of Girvan Valley to the north and north east where Knockcronal Windfarm would appear more prominent beyond the interior of the foothills. In these locations, Knockcronal Windfarm would have greater visual effects on its own than the Proposed Development. As such, in combination with the Proposed Development significant effects increase in these areas.
207. The potential for cumulative visual effects with the in-scoping Knockodhar Windfarm was found to be very limited across the Study Area, confined to the south west and the lower Stinchar Valley area due to the distance between the two sites and separation by landform. Sequential visual effects would be therefore more likely than combined cumulative effects in these areas.

5.12.2 Visual Receptor Groups – Settlements, Local Roads and Core Paths

208. The following section considers the effects on local residents, users of local roads and footpaths within areas grouped by distance, landscape character and potential visibility of the Proposed Development. It does not consider effects on residents within individual properties. A RVAA was undertaken for properties within approximately 2km of the Proposed Development. This is presented in **Appendix 5.3 RVAA**.
209. The main potential for significant effects on visual receptor groups generally lie within 5km from the Site, within the upper reaches of the Water of Girvan Valley to the north and north east; the upper reaches of the Stinchar Valley to the south and south west; and those within the Water of Girvan Valley to the north west. Residents within defined settlements are considered in the next section.

Visual Receptor Group: Upper Water of Girvan Valley

Distance and direction from nearest proposed wind turbine: 2.5-5km N and NE

Baseline description

This area includes local residents, walkers and road users within the valley area south of Straiton to Tairlaw. There are a number of individual properties and farms which lie along the main road or parallel road to the west within the valley. Properties in this area tend to face south and southwest over the Water of Girvan pastoral valley towards the foothills. Most properties have some degree of vegetation surrounding them, with open aspects towards the south and southwest. Woodland and trees along the river itself are a feature within the valley.

The Old Road through Straiton Heritage Path core path SA47, pass along the track that heads south west off Newton Stewart Road to the properties of Knockskae and Linfairn. Effects on the users of the heritage paths and core paths are assessed separately in **Tables 5.17 - 5.21**.

Sensitivity

The views experienced from visual receptors in these areas are considered to have a High-Medium value, due to the scenic qualities of the locally valued Water of Girvan Valley landscape, with many properties and roads positioned on the lower slopes orientated to the south and southwest to take in views across the valley to the foothills landscape beyond.

Local residents, as the primary receptors within this area, are considered to have a High susceptibility to wind development as they have potential to experience views for long periods of time. Walkers would generally have a High-Medium susceptibility and road users a Medium-Low susceptibility. Considering the value and susceptibility, Local Residents and Walkers would have a High-Medium sensitivity to the Proposed Development and Road Users a Medium sensitivity.

Assessment

As described for the Water of Girvan unit of the Intimate Pastoral Valleys LCT and shown on the ZTV (**Figure 5.2 Blade Tip ZTV - No. of Wind Turbines Visible**) visibility would vary considerably within this area from no visibility in the areas closest to the Proposed Development in the south (due to the immediate screening of the foothills), to potentially 9-13 wind turbines visible for residents and walkers within the area between Craigfad and Knockskae, approximately 3-5km from the nearest proposed wind turbine. Properties in this area tend to be surrounded by localised areas of woodland but where views are open to the south, including along the local roads, as shown on **Appendix 5.2 Viewpoint Assessment, Figure 5.2.1 Water of Girvan Illustrative Wirelines** the proposed wind turbines would be immediately noticeable and would introduce the presence of wind turbines in close proximity for the receptors in this area.

Road users would experience sequential effects when travelling south along the valley between Straiton and Genoch as the Proposed Development would be directly in front of the line of sight although visibility would constantly change with the varying landform and treed nature of the valley limiting consistent open views.

Generally, elsewhere, as demonstrated by Viewpoints 6 (**Figure 5.22 Viewpoint 6 – Newton Stewart Road, Straiton**) and 23 (**Figure 5.39 Viewpoint 23 – Craigenallie, Straiton**), the wind turbines would appear set back

Visual Receptor Group: Upper Water of Girvan Valley	
behind and above the intervening periphery foothills which combined with forestry would screen open clear views of the full Proposed Development.	
It is considered that the scale of effect would be High-Medium over a High-Medium extent of views for visual receptors between 3-5km north of the Site (between Craighfad and Knockskae), reducing to a Medium-Low scale and extent elsewhere. The magnitude of change would be High-Medium to Medium-Low. Taking into account the local residents and walkers in this area would have a High-Medium sensitivity, and road users a Medium sensitivity, the significance of effect for residents and walkers between 3-5km north of the Site would be Major-Moderate and Significant and Moderate and Significant for road users in this area. Elsewhere, the significance of effect would be Moderate and Significant for local residents and walkers, and Moderate-minor and Not Significant for road users.	
Cumulative Assessment	
Craiginnmoddie Windfarm (Application)	
The cumulative ZTV with Craiginnmoddie Windfarm illustrates that there would be potential for combined visibility along the stretch of the valley between Craig and Tairlaw. Only blade tips of Craiginnmoddie Windfarm would be potentially visible from some areas as shown on the wirelines for Viewpoints 6 and 23 (Figure 5.22 Viewpoint 6 – Newton Stewart Road, Straiton and Figure 5.39 Viewpoint 23 – Craigenallie, Straiton). It would introduce visibility of wind turbines albeit likely limited visibility, so that Proposed Development would bring the influence closer, but the magnitude of change and subsequent significance of effect assessed for the baseline would not change.	
Knockcronal Windfarm (Scoping)	
The combined ZTV for Knockcronal Windfarm illustrates that Knockcronal wind turbines would be seen from a greater extent of the Water of Girvan Valley than the Proposed Development due to their closer proximity at the edge of the valley. In combination with the Proposed Development, wind turbines would be a dominant feature within views for receptors within the Craighfad to Knockskae area, creating a High scale of effect over a High extent reducing to a Medium-Low scale and extent elsewhere. The magnitude of change would be High to Medium-Low. Taking into account the local residents and walkers in this area would have a High-Medium sensitivity, and road users a Medium sensitivity, the cumulative significance of effect for residents and walkers between 3-5km north of the Site would be Major-moderate and Significant and Moderate and Significant for road users in this area. Elsewhere, the significance of effect would be Moderate and Significant for local residents and walkers, and Moderate-minor and Not Significant for road users.	

Table 5.10 Upper Water of Girvan Valley Visual Receptor Group Assessment

Visual Receptor Group: Upper Stinchar Valley	
Distance and direction from nearest proposed wind turbine:	3-5km south west
Baseline description	
This area includes local residents, walkers and road users within the area approximately 3km south of the proposed wind turbines and along the Stinchar Valley to the west to Milton Bridge. Properties in this area tend to face north and north east along the River Stinchar Valley and towards the adjoining foothills. Most properties have little surrounding vegetation with open aspects to the north and north east. The Hadyard Hill Windfarm lies to the north west and west of this area and is visible above the valley from much of the area where foreground vegetation and forestry does not screen.	
Sensitivity	
The views experienced from visual receptors in these areas are considered to have a High-Medium value, due to the locally valued Stinchar Valley landscape, with many properties and roads positioned on the lower slopes orientated to the north, north east to take in views across the valley to the foothills landscape beyond.	

Visual Receptor Group: Upper Stinchar Valley	
Local residents, as the primary receptors within this area, are considered to have a High susceptibility to wind development as they have potential to experience views for long periods of time. Walkers would generally have a High-Medium susceptibility and road users a Medium-Low susceptibility. Considering the value and susceptibility, Local Residents and Walkers would have a High-Medium sensitivity to the Proposed Development and Road Users a Medium sensitivity.	
Assessment	
As described for the Stinchar Valley unit of the Intimate Pastoral Valley LCT, the ZTV (Figure 5.2 Blade Tip ZTV - No. of Wind Turbines Visible) illustrates that the potential visibility along this area would vary considerably. There would be no visibility at the eastern end of the Stinchar Valley due to the screening from the immediate foothills. Visibility of between 1 and 8 wind turbines would be possible from west of South Balloch to Milton Bridge when looking or travelling to the east. The visualisation for Viewpoint 3 at West of South Balloch, Nether Barr (Figure 5.19 Viewpoint 3 – West of South Balloch, Nether Barr) illustrates the view looking up the Dalquhairn Burn tributary valley to the north east of the Stinchar River Valley. There would be a limited number of wind turbines visible, set back within the forestry and immediate foothills, but they would be framed by the valley sides and become a focal point at this close distance. This would be a typical view along this stretch of the valley. The Proposed Development would not be seen in the same arc of view as Hadyard Hill Windfarm but would potentially be seen in succession from static viewpoints and sequentially when travelling along the local roads. The Proposed Development would introduce wind turbines into the views to the east from this part of the Stinchar Valley, and although they would not affect the views of the immediate valley landscape they would become a noticeable feature. It is considered that there would be a High-Medium scale of effect across a medium extent of the views from this receptor group. The magnitude of change would be High-Medium. Taking into account the local residents and walkers in this area would have a High-Medium sensitivity, and road users a Medium sensitivity, the significance of effect would be Major-Moderate and Significant for local residents and walkers, and Moderate and Significant for road users.	
Cumulative Assessment	
Craiginnmoddie Windfarm (Application)	
Craiginnmoddie Windfarm would lie directly north of this section of the Stinchar Valley. It would be lie behind Daljedburgh Hill at the edge of the valley and appear with Hadyard Hill wind turbines to the west. The Proposed Development would not be seen in the same portion of the view as the foothills along this valley location separate the two windfarms but would be seen sequentially when travelling along the valley. The Proposed Development and Craiginnmoddie Windfarm would extend the visibility of wind turbines to the east, and views to the north and north east from this area would become characterised by wind turbines. The combined scale of effect would be High-Medium across a wide (high) extent as they would introduce the presence of large-scale wind turbines in close proximity to the length of this section of the valley. The magnitude of effect would be High-Medium. Taking into account the local residents and walkers in this area would have a High-Medium sensitivity, and road users a Medium sensitivity, the significance of combined cumulative effect would be Major-Moderate and Significant for local residents and walkers, and Moderate and Significant for road users.	
Knockcronal Windfarm (Scoping)	
Knockcronal Windfarm would have limited intervisibility with the visual receptors in this area and where visible, the wind turbines would be seen behind the Proposed Development, appearing as part of the same development. The magnitude of change and subsequent significance of effect assessed would be only slightly higher than assessed for the Proposed Development on its own but within the same category of effect.	

Table 5.11 Upper Stinchar Valley Visual Receptor Group Assessment

5.12.3 Settlements

210. A preliminary assessment was undertaken for the settlements at Kirkmichael, Bellsbank, Dalmellington, Dailly, Barr and Crosshill which is presented in **Appendix 5.3 Preliminary Assessment**. It is considered there would be no significant effects on residents within these settlements from the Proposed Development and they are not assessed further. The settlements at Straiton and Maybole are considered further in this section.

211. Analysis of the ZTV, combined with field work, has determined that the main settlements in the area of Dalrymple, Dunure, Girvan, St Johns Town of Dalry, New Cumnock, Cumnock, Auchinleck, Barhill and Dronan would not have any visibility of the Proposed Development due to their built-up nature and also screening by landform and surrounding woodland. Potential visibility beyond 15km-20km would be more intermittent and scattered, largely on the tops of the uplands where there are no large towns or settlements, and few roads located. Whilst potential visibility is shown along the Firth of Clyde coastline, any visibility of the Proposed Development is unlikely to create significant effects due to the intervening settlement and vegetation pattern combined with distance.

Settlement: Straiton	
Distance and direction from nearest proposed wind turbine:	6km north
Baseline description	
Straiton is a small village which lies within the River Girvan Valley. Its main through road is the B741 (Main Street), which passes through the village in a broadly east west direction. The B045 joins it from the north as Dalmellington Road. The village gently rises to the north east from the River Girvan, providing properties along Knockbreck Road, parallel to Main street, a south/south west elevated outlook. Properties along Main Street, closest to the River Girvan are lower down and are slightly more enclosed to the south by the mature vegetation along the river. Fowlers Croft is a slightly outlying row of properties with open views over the remaining village and out to the south east along the River Valley. Hadyard Hill Windfarm is potentially visible from parts of the village but not particularly discernible. Bennan Hill (283m AOD) and Kildoach Hill (354m AOD) frame the view into the upper reaches of the Water of Girvan from Straiton.	
Sensitivity	
The value of views for local residents in Straiton is considered High-Medium as where they are not confined by the buildings within the village, they encompass the local designated scenic area along the Water of Girvan Valley. Local residents, as the primary receptors within this area, are considered to have a High susceptibility to the Proposed Development as they have potential to experience views for long periods of time. Considering the value and susceptibility, local residents would have a High-Medium sensitivity to the Proposed Development.	
Assessment	
The ZTV (Figure 5.2 Blade Tip ZTV - No. of Wind Turbines Visible) no. of wind turbines visible) indicates potential visibility of between one and four wind turbines from the eastern half of the village, and up to eight wind turbines visible from the western extents. In reality, the screening from buildings and vegetation within the village, and more distant forestry would limit visibility of the Proposed Development across much of the village.	
Bennan Hill and foothills to its west, would generally screen views of the Proposed Development from the majority of Straiton. The eastern parts of Straiton which lie north of where the valley opens up to the south, would have visibility of the eastern most wind turbines in the distance on the foothills behind the valley sides and from behind Bennan Hill. The proposed wind turbines would be noticeable, introducing wind turbines within a small proportion of the view from these limited areas of visibility. The scale of effect is considered to be Low over across a localised (low) extent of the village. The magnitude of change would be Low. Taking into account the local residents would have a High-Medium sensitivity the significance of effect would be Moderate-Minor and Not Significant .	
Cumulative Assessment	
<i>Craigimoddie Windfarm (Application)</i>	
Craigimoddie Windfarm would lie approximately 7km to the south west of Straiton. The CZTV illustrates that it would be potentially visible from the same locations within Straiton as the Proposed Development due to the screening by Bennan Hill and adjacent foothills. Where visible it is likely to be only a few of the wind turbines appearing from behind the periphery foothills where forestry does not screen.	
The Proposed Development would lie separately to any visibility of Craigimoddie Windfarm due to the intervening foothills. Craigimoddie Windfarm would be further from the valley landform and would be seen adjacent to any visible Hadyard Hill wind turbines. The Proposed Development and Craigimoddie Windfarm would extend the	

Settlement: Straiton	
influence of wind turbines in views across the foothills from Straiton. The combined magnitude of change and subsequent significance of effect when considering the Proposed Development and Craigimoddie Windfarm together would remain as assessed for the baseline.	
<i>Knockcronal Windfarm (Scoping)</i>	
Knockcronal Windfarm would lie in front of the Proposed Development in views from Straiton, visible above Bennan Hill which screens views of the Proposed Development. The CZTV (Figure 5.41 Cumulative ZTV – Knockcronal and Proposed Development) illustrates that Knockcronal Windfarm would have a similar ZTV to the Proposed Development within Straiton, however, it would bring wind turbines closer to the local residents in Straiton and notably more prominent at the edge of the valley, but still within a relatively narrow extent of the views available. Its horizontal extent would not exceed the Proposed Development's and together would be perceived as one development. The combined cumulative effects of Knockcronal Windfarm with the Proposed Development would be only slightly higher than the Proposed Development on its own, but within the same category of effect as assessed above.	

Table 5.12 Straiton

Settlement: Maybole	
Distance and direction from nearest proposed wind turbine:	11km north west
Baseline description	
The town of Maybole lies to the north west of the Proposed Development in an elevated position on the Maybole Foothills. Maybole is split into two halves by A77 and the Glasgow South Western Railway Line. To the south of the A77 the land falls towards the south with the buildings staggered across the hillside with generally open outlooks to the south east and south. North of the A77 views are more contained by the built form of the town. Operational Dersalloch and Hadyard Hill would be visible on the foothills in the distance.	
Sensitivity	
The value of the views experienced from local residents that live in Maybole is considered Medium, as they are defined by the built form of the town but also includes open long distant views across the settled countryside. Local residents, as the primary receptors within this area, are considered to have a High susceptibility to the Proposed Development as they have potential to experience views for long periods of time. The sensitivity of residents in Maybole to the Proposed Development is considered High-Medium.	
Assessment	
The ZTV illustrates that potentially the whole of Maybole would have visibility of the Proposed Development. This is however based on bare ground and the built form of the town would screen the majority of views to the north of the A77 within the town. Viewpoint 13: A77 near Maybole (Figure 5.29 Viewpoint 13 - A77 near Maybole) represents a typical view from the edge of the town. As assessed in Appendix 5.2 Viewpoint Assessment , the Proposed Development would become a noticeable but distant feature of the view, occupying a relatively small proportion, and retaining separation from the closer and prominent Kildoon Hill and its monument. There would be a notable gap between the Proposed Development and Dersalloch Windfarm to the south east. The scale of effect is considered to be Low across a localised (low) extent of the town. The magnitude of change would be Low. Taking into account residents within Maybole would have a High-Medium sensitivity, the significance of effect would be Moderate-Minor and Not Significant .	
Cumulative Assessment	
The consented Kirk Hill Windfarm would be visible within the foothills, approximately 5km to the south west of Maybole. The addition of the Proposed Development would increase the influence of wind turbines within the wider views from the town, but at a greater distance, separated by the foreground foothills and middle dale	

Settlement: Maybole
landscape. It is considered that the magnitude of change and subsequent significance of effect assessed would not change from that assessed in the baseline.
Craiginmoddie Windfarm (Application) The in-scoping Craiginmoddie Windfarm would lie approximately 10km from Maybole, and visible along the skyline to the west of the Proposed Development, wind turbines partially screened by Kildoon Hill which lies in the middle ground of the view.
The combined Proposed Development and Craiginmoddie Windfarm would appear as one development from Maybole. The Craiginmoddie Windfarm wind turbines would lie behind the monument on Kildoon Hill and the adjacent Knockbrake Hill which lie in the middle ground, so that only blades and a few hubs would be visible, potentially appearing closer as these hills screen views of the foothills beyond. The Proposed Development would be more visible but within a more open part of the view so that a sense of distance and separation is perceived. Overall, together, Craiginmoddie Windfarm and the Proposed Development would be a noticeable addition to the view but not fundamentally change the overall composition of the view. It is considered a Medium-Low scale of combined cumulative effect would occur across a localised (low) extent. The magnitude of change would be Medium-Low. The significance of cumulative effect would be Moderate and Significant .
Knockcronal Windfarm (Scoping) Knockcronal Windfarm would be visible 12km from Maybole, with most of its columns and hubs screened by the surrounding landform. It would slightly extend the horizontal extent of wind turbines visible in addition to the Proposed Development but would be less prominent than the closer Proposed Development's wind turbines due to the distance and landform. It is considered that the addition of Knockcronal to the Proposed Development would not increase the magnitude of change and subsequent significance of effect assessed on its own, or with Craiginmoddie Windfarm.

Table 5.13 Maybole

5.12.4 Transport Routes

212. Those travelling by road, particularly on faster A class roads (A roads), gain transient views and are therefore considered to have Medium susceptibility to change associated with windfarm development. The value of views from road routes through the Study Area is considered to be High for identified tourist routes and routes providing access to specific recreational areas or facilities and to be Medium for all other routes. The overall sensitivity of road users is therefore considered to be High-Medium for those using identified tourist routes or routes to specific recreational resources, Medium for all other roads.
213. There are a number of A roads within the Study Area with potential visibility of the Proposed Development along their routes, although generally these lie within valley floors or enclosed by roadside vegetation which limits actual visibility depending on orientation towards the Site. A preliminary assessment was undertaken, presented in **Appendix 5.3 Preliminary Assessment** which identified that there would be no significant effects upon users of the A77, A713, B741 and A734 due to lack of visibility of the Proposed Development, also taking into account sequential and cumulative effects. The closest roads to the Proposed Development and roads with the potential for significant effects are assessed in **Tables 5.14 to 5.16**. The track to the west of the Site between Crosshill and Glentroll is assessed in **Table 5.18** as the more sensitive National Cycle Route 7 and core path SA1 also runs along this single track road.

Transport Routes – Local Road C46W between Tairlaw and Waterhead on Minnoch, junction of NCN7	
Distance and direction from nearest proposed wind turbine:	1km East
Route description	
This local road (C46W) extends from Newton Stewart Road, south of Straiton into the Carrick Hills, and is from where the Site would be accessed. It is a single lane road from Tairlaw which winds its way through the commercial forestry. As the road passes through the commercial forestry, views vary from short, enclosed views created by flanking conifer plantation to more open views over clear felled compartments, which allow views out over the surrounding hills. At Cornish Hill, the road enters the open area of the rugged uplands and uplands with forest. The surrounding landscape changes to open and exposed moorland of the rugged uplands, with sections of enclosed large swathes of conifer woodland, characteristic to these upland areas and allowing more distant views. The route connects between the Carrick Forest Drive to the east and the NCN7 in the west.	
Sensitivity	
The value of the views available to users of route are considered High-Medium as the route can be considered a scenic route as it connects between the Carrick Forest Drive to the east and the NCN7 in the west. Taking into account road users are considered to have a Medium susceptibility, in accordance with the methodology summarised in Section 5.12.4 , the sensitivity of users of this route would be High-Medium.	
Assessment	
The ZTV indicates visibility along approximately half of the route within the section between Tairlaw and Cornish Hill. Travelling north, there would be opportunities to see the Proposed Development in close proximity from Cornish Hill to Craigencaillie (approximately 8.5km in length). These views are illustrated by Viewpoint 1 (Figure 5.17 Viewpoint 1 – Minor Road near Cornish Hill) where a High-Medium scale of effect was assessed. The adjacent conifer plantations would enclose the road in a number of places along this section of the road, but generally as the Proposed Development is so close, small areas of clearing and larger felled areas would enable the proposed wind turbines to be seen frequently. The landform south of Cornish Hill would limit any visibility of the proposed wind turbines from the rest of the route to where it meets NCN7.	
As this local road would lie along the Site Boundary, as close as 1km from the nearest proposed wind turbines, the Proposed Development would become a defining feature of the foreground views when travelling along this route between Cornish Hill and Tairlaw where forestry does not enclose the road. The scale of effect is considered to be High across a Medium extent of the route. The magnitude of change would be High-Medium. Taking into account users of this road have a High-Medium sensitivity, the significance of effect is considered Major-Moderate and Significant .	
Cumulative Assessment	
There are no consented cumulative sites notably visible from this route that would change the baseline assessment.	

Transport Routes – Local Road C46W between Tairlaw and Waterhead on Minnoch, junction of NCN7	
Craiginmoddie Windfarm (Application)	
<p>The Craiginmoddie Windfarm would be located directly west of the Site and potentially visible from a similar extent to that of the Proposed Development. The Proposed Development would appear as an extension to Craiginmoddie Windfarm bringing wind turbines much closer to the road so that the magnitude of cumulative change and subsequent significance of effect assessed for the combined cumulative scenario would remain as assessed for the Proposed Development on its own.</p>	
Knockcronal Windfarm (Scoping)	
<p>Knockcronal Windfarm would lie to the north of the Proposed Development and from this road would appear as part of the same development. It would extend the horizontal extent of wind turbines visible from the Tairlaw end of the road but would not lie any closer than the Proposed Development. The density of wind turbines would increase as a combined group but given the general close proximity of the road, users would experience a similar magnitude of change and subsequent significance of effect assessed for the Proposed Development on its own, or with Craiginmoddie Windfarm.</p>	

Table 5.14 Local Road C46W Between Tairlaw and Waterhead of Minnoch

Transport Routes – B7023	
Distance and direction from nearest proposed wind turbine:	7km North East
Route description	
<p>The B7023 is located between Maybole and south of Crosshill, generally along a north-west/south east orientation across the Maybole Foothills down to the Water of Girvan Valley. It has a relatively open aspect from much of the route and the elevation allows open views to the more distant foothills and rugged uplands beyond. Local undulations and intermittent areas of woodland and road side vegetation preclude long distant views from some sections.</p>	
Sensitivity	
<p>The value of the views available to users of route are considered Medium as the route is a local but not designated scenic route. Taking into account road users are considered to have a Medium susceptibility, in accordance with the methodology summarised in 5.12.4, the sensitivity of users of this route would be Medium.</p>	
Assessment	
<p>The ZTV illustrates potential visibility of the Proposed Development from much of the B7023's length as travellers head south, except for some local undulations and roadside vegetation which prevent long distance views. As the Proposed Development would lie almost directly south of the road in the direction of travel, the Proposed Development would be visible on the horizon of the foothills. This would be particularly noticeable from the open stretch to the north of Crosshill. Viewpoint 9 within Crosshill (Figure 5.25 Viewpoint 9 – Dalhowan Street Road, Crosshill) illustrates that where seen along this route, the Proposed Development would be a noticeable feature associated with the backdrop of the broad and distant gently undulating foothills. The operational Dersalloch and Hadyard Hill Windfarms would be visible from the same extents of the route, separately from the Proposed Development and in more oblique views. Overall, the Proposed Development would be noticeable along the majority of the route, increasing the influence of wind turbines within the view, but would always be partially obscured by the landform so that it would appear associated with the distant foothills and separate to the immediate views. The scale of effect on road users travelling south along the B7023 would be overall Low across a Medium extent of the route. The magnitude of change would be Medium-Low. Taking into account users of the road have a Medium sensitivity, the significance of effect would be Moderate-Minor and Not Significant.</p>	
Cumulative Assessment	

Transport Routes – B7023	
<p>There would be no notable consented windfarms notably visible from the route. The consented Kirk Hill windfarm would be perceptible, but only when travelling north, in the opposite direction to the Site.</p>	
Craiginmoddie Windfarm (Application)	
<p>Craiginmoddie Windfarm would likely be visible from the same extents of the route, across the foothills to the west of the Proposed Development. The Proposed Development would appear as an extension to Craiginmoddie Windfarm, albeit slightly separated and less visible in extent, but the proposed wind turbines would be seen above the horizon line of the same gently undulating foothills, contained between the foreground landform and Glenalla Fell in the distance. The Proposed Development and Craiginmoddie Windfarm combined would introduce wind turbines across a wide proportion of the distant horizon in views from the majority of the road, particularly to the north of Crosshill. The intervening forestry and landform would obscure much of the wind turbine towers and likely many of the hubs of both windfarms so they would be noticeable but would only slightly change the composition of the view. The scale of combined cumulative effect would be Medium-Low across a Medium extent of the route. The magnitude of change would be Medium-Low. Taking into account users of the road have a Medium sensitivity, the significance of effect would be Moderate-Minor and Not Significant.</p>	
Knockcronal Windfarm (Scoping)	
<p>Knockcronal Windfarm would be visible alongside the Proposed Development, slightly extending the number of wind turbines visible to the north but generally would appear as part of the same development in views from this road. It is considered the magnitude of cumulative change and subsequent significance of effect assessed would only be slightly higher than assessed for the Proposed Development on its own or with Craiginmoddie Windfarm, but within the same category of effect.</p>	

Table 5.15 B7023

Transport Routes – B7045	
Distance and direction from nearest proposed wind turbine:	6km North
Route description	
<p>The B7045 lies between the A77 south of Minishant in the north, through Kirkmichael, and joins the B741 at Straiton. It generally lies in a north west/south east orientation.</p>	
Sensitivity	
<p>The value of the views available to users of the route are considered Medium as the route is a local but not designated scenic route. Taking into account road users are considered to have a Medium susceptibility, in accordance with the methodology summarised in 5.12.4, the sensitivity of users of this route would be Medium.</p>	
Assessment	
<p>The ZTV illustrates that there would be potential visibility along much of the B7045 except for a stretch south of the A77. Travelling south on the road the Proposed Development would be potentially visible in the direction of travel on the distant horizon of the foothills. The route is relatively open to the north of Kirkmichael and then for a section of road north of Straiton. The policy woodland to the south of Kirkmichael and Concaird precludes long distant views in these sections. Viewpoint 10 (Figure 5.26 Viewpoint 10 – Blairquhan, Kirkmichael Road) is located on this road, north of Blairquhan and illustrates a typical open view from the lower section of the route. The wind turbine visibility would be limited to mostly hub and blades, they would be noticeable but would not be viewed as a prominent feature across the full extent of the available view and would not detract from the foreground treed valley landscape. There would be potential views of Dersalloch and Hadyard Hill windfarms from more elevated and open parts of the route but in more oblique views.</p>	
<p>Overall, the Proposed Development would be noticeable along two main sections of the route, with the views of the proposed wind turbines on the part of the road south of Kirkmichael most noticeable but still clearly associated with the foothills, separate to the immediate views from the road. The scale of effect is considered overall Low</p>	

Transport Routes – B7045
over a Medium extent of the route. The magnitude of change would be Medium-Low. Taking into account users of the road have a Medium sensitivity, the significance of effect would be Moderate-Minor and Not Significant .
Cumulative Assessment
There would be no notable consented windfarms notably visible from the route. The consented Kirk Hill windfarm would be perceptible, but only when travelling north, in the opposite direction to the Site.
Craiginmoddie Windfarm (Application)
The full extent of the Application Craiginmoddie Windfarm would potentially be visible along the horizon to the west of the views from the road. The Proposed Development to Craiginmoddie Windfarm would extend the horizontal extent of wind turbines visible from this road but would appear as a separate development due to the contrast in wind turbine spacing and gap between the sites. Craiginmoddie Windfarm would be potentially more noticeable due to the lower intervening landform from the angle of view from the road which would allow more of the wind turbines to be visible in addition to the apparent density of the wind turbine arrangement. The scale of combined cumulative effect would be Medium-Low across a Medium extent of the route. The magnitude of change would be Medium-Low. Taking into account users of the road have a Medium sensitivity, the significance of effect would be Moderate-Minor and Not Significant .
Knockcronal Windfarm (Scoping)
Knockcronal Windfarm in combination with the Proposed Development would bring wind turbines closer to the road users than the Proposed Development on its own. As illustrated by nearby Viewpoint 10 (Figure 5.26 Blairquhan, Kirkmichael Road), Knockcronal Windfarm would be prominent at the edge of the foothills in front of the Proposed Development's wind turbines which appear tucked behind this edge. Overall, the combined visibility would still be within the same two sections of road as identified on the ZTVs. Whilst the addition of Knockcronal Windfarm would increase the visibility of wind turbines, it is considered that this would only be a slight change within the same category of effect as assessed for the Proposed Development on its own or with Craiginmoddie Windfarm.

Table 5.16 B7045

5.12.5 Recreational Routes

214. A preliminary assessment of the many core paths within the Study Area is presented in **Appendix 5.3 Preliminary Assessment**. The assessment focuses on the following routes where there would be potential for significant effects.
215. In accordance with the methodology in **Appendix 5.1 LVIA Methodology** the sensitivity of walkers along recreational routes relates to the value of the views and susceptibility of the walker. Walkers would generally have a High susceptibility on long distance routes, hill walks, or tourist routes. Walkers along core paths or local routes where the nature of the surroundings is not a key factor in the enjoyment of the walk would have a Medium susceptibility. The value of views would be High from national designations and celebrated viewpoints, Medium from locations locally or regionally identified, and Low value from local informal footpaths or walks with little distinctiveness such as within a forestry area.

Recreational Route – Old Road through Straiton Heritage Path, Core Path SA47 and Local Paths Network: 72 (LPN:72)	
Distance and direction from nearest proposed wind turbine:	Within the Site
Route description	

Recreational Route – Old Road through Straiton Heritage Path, Core Path SA47 and Local Paths Network: 72 (LPN:72)
These have been assessed together as they all have similar characteristics as walks within commercial forestry and pass through the Site. They are shown on Figure 5.7 Blade Tip ZTV With Visual Receptors .
The Old Road through Straiton Heritage Path is the longest of these paths at 18.5km in length. It starts along a track 1km north of River Stinchar, just south of Dalquhairn Bridge, near NCN7 and ends along a track running south of Patna. The section between Dalquhairn Bridge and Straiton is also designated as core path SA47 and LPN:72.
Sensitivity
As a locally identified walk, largely for heritage reasons and that lies within a considerable length of commercial forestry, the value is considered Medium, and walkers would have a Medium susceptibility to the Proposed Development. The sensitivity of walkers on this route would be High-Medium.
Assessment
Walking south from Patna to Straiton, there would be no potential visibility until east of Loch Spallander Reservoir, approximately 10km from the Proposed Development, although the views would be substantially limited by the commercial forestry that the route lies within this section. Clear felled areas and open tracks would give glimpsed views of the Proposed Development, where it is likely to be visible appearing above the foothills. Dersalloch Windfarm is closer and more noticeable from this section of the route in views to the South. As the route descends down the hillsides to Straiton, less proposed wind turbines of the Proposed Development would be visible as the periphery foothills become closer and provide more screening.
South of Straiton, the route would follow the west side of the Water of Girvan, with potential visibility of the eastern proposed wind turbines where the immediate forestry and woodland does not preclude views. The visibility would increase as the route climbs through the foothills into the Site. The route would lie within the centre of the Site, with proposed wind turbines either side. The forestry across the Site would contain some views, but generally at this close distance the wind turbines would be the dominant feature and the walk would be within a windfarm. The operational Hadyard Hill windfarms would become noticeable on views to the west as the route leave the Site and joins the NCN7.
Travelling from the NCN7, the proposed wind turbines would be visible above the skyline in oblique views and would be close prominent features. Forestry along the foothills would obscure the lower parts of the visible wind turbines. As the path at this location lies along the mid slopes of the Dalquhairn Burn, foreground landform and the intervening foothills obscure part of the Proposed Development so that its full extent is not seen at any one time.
It is considered the scale of effect for this section of the route would be Low across a limited (low-negligible) extent of the route when walking south. The magnitude of change would be Low-Negligible. As users of this route are considered to have a High sensitivity, the significance of effect would be Moderate-Minor and Not Significant for this section of the route between Patna and Straiton.
The Proposed Development's wind turbines would appear as dominant features across a wide proportion of views along the parts of the routes that go through the Site and in close proximity. Elsewhere along the route to the north, the Proposed Development would only slightly alter the composition of the views. The scale of effect is considered High across a wide (High) extent of the route within and close to the Site, reducing to Low across a limited (low-negligible) extent of the rest of the route. The magnitude of change would be High reducing to Low-Negligible. Taking into account users of this route are considered to have a High-Medium sensitivity, the significance of effect would be Moderate-Major and Significant for the section through the Site between Straiton and NCN7 reducing to Moderate-Minor and Not Significant for this section of the route between Patna and Straiton.
Cumulative Assessment

Recreational Route – Old Road through Straiton Heritage Path, Core Path SA47 and Local Paths Network: 72 (LPN:72)

The consented Kirk Hill windfarm would be visible at distance in a separate portion of the view to the Proposed Development. The addition of the Proposed Development to a baseline with Kirk Hill Windfarm would not alter the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

The application Clauchrie Windfarm would be viewed at a distance, behind the Proposed Development. The majority of these visible wind turbines would also be obscured by landform and vegetation. The addition of the Proposed Development to the consented and application baseline would not alter the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

All other consented and application windfarms would be viewed at such a distance that they would not alter the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

Craiginmoddie Windfarm (Application)

Craiginmoddie Windfarm would lie directly west of the Proposed Development and together would create the perception of walking within a windfarm rather than near a windfarm. The Proposed Development would be slightly more visible from the path within the Water of Girvan valley than Craiginmoddie Windfarm. From the more distant sections of the path between Straiton and Patna, Craiginmoddie Windfarm would be visible within the same extents at the Proposed Development and combined they would increase the horizontal extent of wind turbines across views of the foothills, which in addition to the Dersalloch Windfarm would make wind turbines a defining characteristic of the views to the south.

The scale of combined cumulative effect is considered High across a wide (High) extent of the route within and close to the Site, reducing to Low across a limited (low-negligible) extent of the rest of the route. The magnitude of change would be High reducing to Low-Negligible. Taking into account users of this route are considered to have a High-Medium sensitivity, the significance of effect would be **Moderate-Major** and **Significant** for the section through the Site between Straiton and NCN7 reducing to **Moderate-Minor** and **Not Significant** for this section of the route between Patna and Straiton.

Knockcronal Windfarm (Scoping)

Knockcronal Windfarm in combination with the Proposed Development would extend the length of time walkers on this route are directly beside wind turbines and would be seen first when travelling south, more prominent at the edge of the foothills than the Proposed Development. It would however be perceived as part of the same development. Whilst it would increase the presence of wind turbines close to the route the magnitude of cumulative effect and subsequent significance of cumulative effect is considered to be the same as assessed for the Proposed Development on its own, and with Craiginmoddie Windfarm.

Table 5.17 Recreational Routes Old Road through Straiton Heritage Path, SA47, LPN72

Recreational Route – Core Path SA1/National Cycle Route 7 (NCN7)

Distance and Direction from nearest proposed wind turbine: 1.1km west

Route description

National Cycle Route 7 (NCN7) is an 880km long cycle route between Sunderland, England and Inverness. The section of most relevance to the Proposed Development is the 34.2km section between Glentrool and north of Maybole within the Study Area which is also open to vehicular traffic. Within the section within South Ayrshire, this is also identified as core path SA1.

Sensitivity

The sensitivity of cyclists and walkers on these paths is considered High-Medium as they are on long distance trails where the attractive nature of the countryside is a significant factor in the enjoyment of the cycle or walk, and the landscape they are walking through is locally designated for its scenic value.

Assessment

The ZTV indicates there would be no visibility of the Proposed Development between Glentrool and the southern extent of the Site Boundary, near Nick of the Balloch. Potential visibility would be intermittent between there and Doughty Hill as the route lies within a valley. Travelling south from Maybole to Doughty Hill the ZTV indicates fairly consistent visibility along the route with some areas of no visibility such as more sheltered Water of Girvan Valley.

Travelling north from the edge of the Site, the Proposed Development would become close and prominent features, although the edge of the foothills which lie alongside the route would limit open views to the full extent of the Proposed Development. Viewpoint 2 (**Figure 5.18 Viewpoint 2 – NCN7 South-West of Knockinculloch**) on the NCR7 north of Doughty Hill illustrates the view in close proximity where the foreground forestry and landform would provide some separation but the wind turbines would be a prominent part of the view. Hadyard Hill Windfarm would potentially be visible from some parts of this section of the route.

Travelling south from Maybole, the route is along minor roads which meander around the foothills until it joins the B7023 north of Crosshill. From the elevated and open portions of this part of the route, the foothills form the horizon line and the Proposed Development, particularly the western half of the proposed wind turbines (wind turbines 1-6) would be visible above them, as illustrated by Viewpoint 9 at Crosshill (**Figure 5.25 Viewpoint 9 – Dalhowan Street Road, Crosshill**). Visibility would be much more intermittent than shown on the ZTV due the varying orientation of the route screening from roadside planting and wider woodland. A number of operation windfarms can be seen from these routes, particularly Assel Valley and Hadyard Hill to the west and Dersalloch to the east.

The scale of effect is considered to be High over a Medium extent between the section of the route, approximately 8km in length, that lies along the Site Boundary. The magnitude of change would be High-Medium. For the section of route travelling south from Maybole to the Water of Girvan Valley, the scale of effect is considered Low across a limited (low-negligible) extent. The magnitude of change would be Low-Negligible.

Taking into account users of this route are considered to have a High-Medium sensitivity, the significance of effect would be at **Major-Moderate** and **Significant** adjacent to the Site Boundary and **Minor** and **Not Significant** from Maybole to the Water of Girvan. There would be no effect along the route south of the Site Boundary.

Cumulative Assessment

Kirk Hill Windfarm would be noticeable from the northern sections of the route, approximately 8km at closest, and would be seen sequentially when travelling north from the Site. A number of other consented windfarm schemes would be visible from this route but all would be at a considerable distance and generally associated with existing windfarms. It is considered that the scale of effect assessed for the baseline view would not change with the addition of the Proposed Development to the consented sites.

Similarly, the application sites within the Study Area would not lie in close proximity to the route and would not alter the magnitude of change and subsequent significance of effect assessed for the baseline.

Craiginmoddie Windfarm (Application)

Craiginmoddie Windfarm would lie directly west of the NCN7, west of the Site, with wind turbines within a kilometre of the route. As illustrated by Viewpoint 2 (**Figure 5.18 Viewpoint 2 – NCN7 South-West of Knockinculloch**), they would potentially be more prominent from the route than the Proposed Development due to the slight difference in landform west of the route which provides less screening.

The Proposed Development would appear as an extension to Craiginmoddie Windfarm and would surround the NCN7 between Doughty Hill and west of Glenalla Fell, so that it would become a route within a windfarm and the scale of effect would remain High across a wide (high) extent, giving a High magnitude of change. Within views from the route when travelling south from Maybole, the combination of Craiginmoddie Windfarm and the Proposed Development would increase the horizontal extent of wind turbines visible along the horizon, so that it may appear more noticeable than on its own. It is considered that it would increase the scale of effect to Medium-Low across a localised (low) extent. The magnitude of change would be Medium-Low.

Taking into account users of this route are considered to have a High-Medium sensitivity, the significance of cumulative effect would be **Major-Moderate** and **Significant** adjacent to the Site Boundary and **Moderate** and **Significant** from Maybole to the Water of Girvan. There would be no effect along the route south of the Site Boundary.

Knockcronal Windfarm (Scoping)

Knockcronal Windfarm would be generally visible from the same extents of the route as the Proposed Development and would lie further from the route than the closest Proposed wind turbines as illustrated by Viewpoint 2 (**Figure 5.18 Viewpoint 2 - NCN7 South-West of Knockinculloch**) Knockcronal Windfarm would increase the presence of wind turbines in close proximity to the route but within the same general extents. As such, it is considered that the magnitude of change and subsequent significance of effect would only be slightly higher than assessed for the Proposed Development on its own or with Craiginmoddie Windfarm but within the same category of effect.

Table 5.18 Recreational Route NCN7 SA1

Recreational Route – Core Path SA49 and Core Path SA56	
Distance and direction from nearest proposed wind turbine:	Paths pass through the Site
Route description	
Core path SA49 is approximately 9.3km long and starts at the National Cycle Route 7 just south of the Nick of the Balloch and heads broadly north east to Loch Braden.	
Core path SA56 is approximately 6.4km long and starts west of Stinchar Bridge and heads east to Ballochbeatties and then heads north to the west bank of Loch Braden where it meets core path SA49.	
These have been assessed together as they all have similar characteristics as walks within commercial forestry with open clear-felled areas.	
Sensitivity	
The value of views to walkers on these routes is considered Medium-Low as they generally are within forestry or cleared forestry areas but with some area of distinctiveness relating to features such as isolated foothills and lochs. The susceptibility of walkers along these paths to the Proposed Development would be Medium as the surroundings are not a significant factor to the enjoyment of the walk. The sensitivity of walkers on these routes would be Medium-Low.	
Assessment	
The ZTV illustrates that the majority of both these paths have potential visibility of the Proposed Development. There are a few small sections along the far western extent of SA49 and two sections of SA56 that do not fall within in the ZTV, this is due to the intervening landform obscuring the Proposed Development.	
In reality, the majority of views would be obscured by dense conifer plantation, with the exception of sections of path that pass-through areas of clear felling, which are subject to change as per forest management. These areas	

Recreational Route – Core Path SA49 and Core Path SA56

of clear felling would constantly change and as a new area of forestry is cleared another section of new forestry planting may obscure current views of the proposed wind turbines.

In areas of clear fell, views of the proposed wind turbines would be open, and the proposed wind turbines would appear as close and dominant features within the view over the River Stinchar Valley. The operational Dersalloch would be visible in the background but at a distance of approximately 7km. Fore and middle ground landform and forestry would provide some degree of separation from the more distant extents of the paths, but the large-scale wind turbines would become the focal point of a large proportion of the view. The scale of effect is considered to be overall High from a Medium-Low extent of the route, noting the constantly changing forestry cover. The magnitude of change would be High-Medium. The users of the routes are considered to have Medium-Low sensitivity, the significance of effects would be **Moderate** and **Significant**.

Cumulative Assessment

A number of consented and application windfarm schemes may be visible along these routes in views to the east and north east, although all would be viewed at a distance. The addition of the Proposed Development to a baseline with these consented and application sites would not change the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

Craiginmoddie Windfarm (Application)

The full extent of the in-scoping Craiginmoddie Windfarm would be visible from the areas of clear fell and would appear behind the Proposed Development and as an extension of approximately half the horizontal extent of that of the Proposed Development. As much closer and within a wider horizontal extent of the view, the Proposed Development combined with Craiginmoddie Windfarm would not increase the magnitude of change and subsequent significance of effect assessed for it on its own.

Knockcronal Windfarm (Scoping)

In most of the views from this route, Knockcronal Windfarm would lie behind the Proposed Development, appearing as part of the same development. Whilst it would increase the density of wind turbines within the view, it is considered that the magnitude of change and subsequent significance of effect would not increase over that assessed for the Proposed Development on its own or with Craiginmoddie Windfarm.

Table 5.19 Recreational Routes SA49 and SA56

Recreational Route – Core Path SA52, SA54 and SA55 (part of the Barr Trails)	
Distance and direction from nearest proposed wind turbine:	3.4km south
Route description	
These core paths generally fall between Barr and North Balloch Bridge, promoted as part of the Barr Trails. These have been assessed together as they all have similar characteristics as walks within commercial forestry on the sides of the Stinchar Valley.	
Sensitivity	
The value of views to walkers on these routes is considered Medium-Low as they generally are within forestry or cleared forestry areas but with some area of distinctiveness relating to the landform. The susceptibility of walkers along these paths to the Proposed Development would be Medium as the surroundings are not a significant factor to the enjoyment of the walk. The sensitivity of walkers on these routes would be Medium-Low.	
Assessment	

Recreational Route – Core Path SA52, SA54 and SA55 (part of the Barr Trails)	
<p>The ZTV illustrates that these paths have potential visibility of the Proposed Development from their eastern extents. The majority of views would be obscured by dense conifer plantation, with the exception of sections of path that pass-through areas of clear felling, which are subject to change as per forest management. These areas of clear felling would constantly change and as a new area of forestry is cleared another section of new forestry planting may obscure current views of the proposed wind turbines.</p> <p>In areas of clear fell, views of the proposed wind turbines would be open, and the proposed wind turbines would appear prominent and straddle Craig of Dalwhine and to the east of the operational Hadyard Hill. Only the blade tips of three to four wind turbines of Hadyard Hill are perceptible from this location due to intervening landform obscuring the rest. Craig of Dalwhine would obscure the western most proposed wind turbines from this area, leaving the remaining 11 wind turbines visible to varying degrees. The visible proposed wind turbines would appear set into the forestry behind the foothills at the centre of the view so that while they would be prominent, there would be a degree of separation from the contained valley below and Hadyard Hill to the west. The Proposed Development would extend the influence of wind turbines in close proximity within the views across the Stinchar valley from these core paths. The scale of effect is considered High-Medium over localised (Low) extent of the routes. The magnitude of change would be Medium. Taking into account the users of the routes are considered to have Medium-Low sensitivity, the significance of effect would be Moderate-Minor and Not Significant.</p>	
Cumulative Assessment	
There would be no notably visible consented windfarms from these paths.	
Craiginmoddie Windfarm (Application)	
<p>Craiginmoddie Windfarm would lie directly north of these core paths on the other side of the valley between the Proposed Development and Hadyard Hill Windfarm. The Proposed Development would extend the presence of wind turbines that appear within the backdrop to the views of the valley to the north east but would be slightly less prominent than Craiginmoddie's wind turbines due to the slightly further distance and screening by the intervening foothills. The combined effect of Craiginmoddie Windfarm and the Proposed Development would appear as one development, surrounding the north and north east of the valley but with some separation provided by the elevation of the foothills and forestry cover. It is considered that the cumulative magnitude of effect would be slightly greater but within the same category of effect as assessed for the Proposed Development on its own.</p> <p>Knockcronal Windfarm (Scoping) In most of the views from this route, where visible, Knockcronal Windfarm would lie behind the Proposed Development, appearing as part of the same development. Whilst it would increase the density of wind turbines within the view, it is considered that the magnitude of change and subsequent significance of effect would not increase over that assessed for the Proposed Development on its own or with Craiginmoddie Windfarm.</p>	

Table 5.20 Recreational Route SA53, SA54 and SA55

Recreational Route – Cornish Hill Trail	
Distance and direction from nearest proposed wind turbine:	1.4km south
Route description	

Recreational Route – Cornish Hill Trail	
<p>This circular walk climbs up out of the forest within the edge of the rugged uplands around Cornish Hill, which gives open panoramic long distant views of the surrounding landscape. From the elevated and open sections of this trail, 360-degree views are available. To the north and north west, the view is across the undulating uplands of Carrick Forest Hills and towards the Linnern and Braden Loch and northern part of the Galloway Forest Park and Ayrshire Foothills. Dersalloch Windfarm lie in the background. To the east and south east, the view is across a moorland grass and forestry, towards the undulating and partly forested uplands encompassing many lochs, notably Loch Riecaur and Loch Doon. The summit of Craiglee (523m AOD) lies in front of Loch Doon. To the south, looking over rising moorland grass towards the summit of Shalloch on Minnoch in the background. To the west, Hadyard Hill windfarm is just perceptible above the horizon line, with moorland grass foreground, and moorland plateau and foothills middle ground.</p>	
Sensitivity	
The value of views to walkers on these routes is considered Medium as it lies within a locally defined trail with scenic qualities, with some sections within commercial forestry. The susceptibility of walkers along these paths to the Proposed Development would be High-Medium as the panoramic views from the higher parts are a key part of the trail. The sensitivity of walkers on these routes would be High-Medium.	
Assessment	
<p>The ZTV illustrates that there are potential views of the Proposed Development from all except a small 500m stretch of this path adjacent to Cornish Loch. Forestry would screen any views within the lower, norther section of the route. Viewpoint 1 in Figure 5.17 Viewpoint 1 – Minor Road near Cornish Hill illustrates the view from the road nearby the route.</p> <p>From the elevated sections, the Proposed Development would appear as a prominent feature within the forested foothills in the middle ground of the north western part of this elevated view. They would appear grounded within the forestry and plateau-like area of the foothills, which is clearly separate from the foreground. The eastern wind turbines would be largely backclothed by the periphery foothills. The broad and open landscape with few immediately noticeable scale indicators reduces the perception of the large scale of the proposed wind turbines. They would appear notably larger than Hadyard Hill and Dersalloch wind turbines but, as these are located in separate parts of the view, they would be perceived as more distant and a direct comparison is not easily made. Other operational windfarms to the north east and east would be visible although beyond 10-15km and associated with the separate foothills and uplands in this direction.</p> <p>The proposed visible wind turbines would be within a relatively wide extent of the views available to the north from this route which is characterised by commercial forestry and wind turbines. It would bring wind turbines closer to the route than currently exists but would be set back from the immediate upland foreground. The Proposed Development would only be within a small proportion of the overall 360-degree views, not affecting the views of the more wild and remote land to the east and south. The scale of effect is considered High-Medium, across a Medium extent of the route. The magnitude of change would be High-Medium. The users of the trail are considered to have High-Medium sensitivity, the significance of effects would be Major-Moderate and Significant.</p>	
Cumulative Assessment	
A number of consented and application windfarm schemes may be visible along this route in views to the east and north east, although all would be viewed at a distance. The addition of the Proposed Development to a baseline with these consented and application sites would not change the magnitude of change and subsequent significance of effect assessed for the existing baseline view.	
Craiginmoddie Windfarm (Application)	
<p>The Proposed Development would appear as an extension to the Craiginmoddie Windfarm, bringing wind turbines closer to the route. The addition of the Proposed Development would create a continuous extent of wind turbines across the view from the west to the north (including Dersalloch) so that wind turbines would become a defining</p>	

Recreational Route – Cornish Hill Trail
feature of this portion of the view. As much closer and within a wider horizontal extent of the view, the Proposed Development in addition to or combined with Craiginmoddie Windfarm would not increase the magnitude of change and subsequent significance of effect assessed for it on its own..
Knockcronal Windfarm (Scoping)
In most of the views from this route Knockcronal Windfarm would lie behind the Proposed Development, appearing as part of the same development. Whilst it would increase the density of wind turbines within the view, it is considered that the magnitude of change and subsequent significance of effect assessed would not increase over that assessed for the Proposed Development on its own or with Craiginmoddie Windfarm.

Table 5-21 Cornish Hill Trail

5.12.6 Recreational Destinations and Visitor Attractions

216. A preliminary assessment was undertaken on recreational destinations and visitor attractions that lie within the ZTV within approximately 15km, which identified that there would be no significant effects upon visitors to Loch Doon, Loch Braden, Bargany GDL, Kilkerran GDL, Blairquhan GDL, Dalquharran Castle and Craigengillan and Dark Sky Observatory. This is presented in **Appendix 5.3 Preliminary Assessment and Cumulative Context**. Recreational destinations, including specific viewpoints, and visitor attractions with the potential for significant effects are the summit of Merrick, Colonel Hunter Blair Monument and the Galloway Forest Park and Galloway Dark Sky Park. These are assessed below.

Recreational Destination/Visitor Attraction - Galloway Forest Park
Distance and direction from nearest proposed wind turbine: Site lies within the Forest Park
Baseline description
The Galloway Forest Park (Forest Park) is Britain's largest forest park designated for its recreational value. The Forest Park is operated by FLS and is principally covered in coniferous plantation but also includes the open moorland rugged uplands around Merrick, and includes the Merrick WLA. The Forest Park occupies an extensive area that includes the foothills and uplands that lie between the Carrick Hills in the north to the hills south of New Galloway, north of Wigtown Bay, beyond the Study Area.
The Forest Park includes many opportunities for hiking, horse riding and mountain biking with the National Cycle Route 7 and many other mountain bike trails. Facilities including café, toilets, parking, and bike hire are provided in several locations across the Forest Park.
Depending on the location with the Forest Park, although generally these areas are limited to the open moorland covered summits of the Range of the Awful Hand (ridge between Merrick and Shalloch on Minnoch), all operation windfarms within the Study Area can be seen to varying degrees. Dersalloch, Hadyard Hill and Assel Valley are the three closest operational windfarms to the Site and the north western edge of the Park.
Sensitivity
The Forest Park is primarily designated for its recreational value rather than specifically scenic qualities or attractive features. The value of views within the Forest Park for visitors is considered Medium-Low as there are some recognised views such as from the summits of the open uplands but generally views are informal and within forestry. The susceptibility to the Proposed Development of visitors to the Forest Park is considered Medium as they are occupied in their particular recreational pursuit where the nature of the surroundings is not the only factor in the enjoyment of the activity. The sensitivity would be Medium.
Assessment

Recreational Destination/Visitor Attraction - Galloway Forest Park
The ZTV indicates that the vast majority of the Forest Park would have no visibility of the Proposed Development. As the Site lies within the northern extents of the Forest Park, the main areas of potential visibility are limited to the Site and within an approximately 6km radius. This includes Changue plantation to the west of the Site and the north east facing slopes of the rugged upland to the south east and east as far as Shalloch on Minnoch and Craiglee. Generally, users of the recreation routes and informal footpaths through the Forest Park and within the ZTV would have varying outlooks depending on the enclosure by the forestry and landform, which as an active commercial operation is constantly changing. The recreation routes also tend to be largely located within blocks of forestry, such that expansive views are not a particularly permanent occurrence. Due to the close proximity, the operational Dersalloch, Hadyard Hill, and Assel Valley wind turbines would be a noticeable feature in the periodic open views from the paths. Views of the Proposed Development from the surrounding recreational routes through the Forest Park would be constantly changing from no visibility as a result of close intervening forestry to open views towards the proposed wind turbines.
The Proposed Development would lie within the Forest Park and within approximately 6km it would occupy a large proportion of the available open views from within the Forest Park for those using the many core paths, NCN7, as well as undefined routes to the hills including Shalloch on Minnoch. Forestry and the foothills landform would still preclude some visibility in this area. The Proposed Development would be an immediately visible change to the Forest Park within the northern parts but would not fundamentally change its characteristics and reasons for designation. It is considered the Proposed Development would have a Medium scale of effect across a Medium extent of this northern end of the Forest Park. The magnitude of change would be Medium.
Beyond 6km, the visibility of the Proposed Development within the Forest Park becomes much more intermittent and generally limited to the higher summits and ridgelines where the northern rugged uplands don't screen views. This includes Merrick, Coran of Portmark, Meaul and Rhinnes of Kells. Effects on the Merrick WLA are assessed separately within Appendix 5.5 Wild Land Assessment . As distance increases from the Site, the proportion of the available view occupied by the Proposed Development and their prominence would reduce proportionally. From the more open, elevated locations along the Range of the Awful Hand, approximately 11km at closest, views would be of a more consistent nature as the degree of visibility would not be as closely influenced by the ever-changing commercial forestry felling programme. Figure 5.21 Viewpoint 5 – Shalloch on Minnoch and Figure 5.31 Viewpoint 15 – Merrick are typical of these more elevated and open views of the Proposed Development. From these open and elevated locations, the Proposed Development would be within a small proportion of the overall 360-degree views and not affect the views of the more wild and remote land to the south. It would not fundamentally change the composition of the overall panoramic view which includes a number of operational windfarms to the west, north east and east of the Forest Park. Beyond 6km from the Site, the scale of effect on the Forest Park is considered to be Low-Negligible over a limited (low-negligible) extent. The magnitude of change would be Low-Negligible.
Visitors to the Forest Park are considered to have a Medium sensitivity. The significance of effects would range from Moderate and Significant within approximately 6km of the proposed wind turbines and Minor and Not Significant from elsewhere.
Cumulative Assessment
The consented windfarms within the Study Area generally lie within the same clusters as the operational windfarms to the west, south west, north east and east of the Forest Park. It is considered they would not affect the magnitude of change and subsequent significance of effect assessed above for the baseline.
Clauchrrie Windfarm (Application)
The application Clauchrrie Windfarm would lie within the Forest Park, in its north western extents, 8.6km from the Proposed Development. The intervening foothills would limit the potential for the Proposed Development to be seen with Clauchrrie Windfarm from the areas surrounding the Site, but from the higher summits including and south of Shalloch on Minnoch, they would be seen in succession across the panoramic views. The addition of the Proposed Development to Clauchrrie Windfarm and the adjacent operational windfarms of Mark Hill, Assel Valley, Hadyard Hill and Dersalloch would result in an increased visual influence of wind turbines from the west

Recreational Destination/Visitor Attraction - Galloway Forest Park

to the north. Clauchrie Windfarm and the Proposed Development would both lie within the Forest Park and would introduce large scale wind turbines as a feature within the north and north western section of the Park, although not isolated from the existing influence of windfarms such as Hadyard Hill and Mark Hill which lie at the edge of the Park. It is considered the addition of the Proposed Development to a baseline with Clauchrie Windfarm would be an immediately visible change to the Forest Park experienced sequentially within views from the northern and western parts but would not fundamentally change the Forest Park's characteristics and reasons for designation. It is considered the Proposed Development in addition to Clauchrie Windfarm would have a Medium scale of effect across a Medium extent of this north and western part of the Forest Park. The magnitude of change would be Medium. Taking into account visitors to the Forest Park have a Medium sensitivity, the significance of effects would be **Moderate** and **Significant** for visitors to the north and western extents of the Park.

Craiginmoddie Windfarm (Application)

Craiginmoddie Windfarm would lie to the west of the Proposed Development, just outside of the Forest Park boundary. From most views within the Park, the Proposed Development and Craiginmoddie Windfarm together would appear as one development, extending the influence of windfarms within the northern part of the Park. Craiginmoddie Windfarm would lie within the gap between the Proposed Development and Hadyard Hill Windfarm, and in addition to Clauchrie Windfarm and operational windfarms, there would be an almost continuous influence of wind turbines from west to north, increasing the perception of windfarms as a defining characteristic of views from this part of the Forest Park. The foothills above the River of Stinchar Valley that lie between Clauchrie Windfarm and Hadyard Hill Windfarm however break a completely continuous extent and screen parts of the more distant operational windfarms in this direction. Whilst the combined windfarms would occupy much of the view, they would not fundamentally change the Forest Park's characteristics and reasons for designation.

It is considered the Proposed Development combined with Craiginmoddie Windfarm and in addition to Clauchrie Windfarm would have a Medium scale of effect across a Medium extent of the north and western parts of the Forest Park. The magnitude of change would be High-Medium. Taking into account visitors to the Forest Park are considered to have a Medium sensitivity, the significance of effects would be **Moderate** and **Significant** for visitors to the north and western extents of the Park.

Knockcronal Windfarm (Scoping)

Knockcronal Windfarm lies just outside the northern extents of the Galloway Forest Park boundary, adjacent to the Proposed Development. It would be perceived as part of the Proposed Development, increasing the density of wind turbines visible within a very localised area of the views available from the Forest Park. It is considered that it would only create a slightly higher level of effect than assessed for the Proposed Development on its own or with other cumulative sites, but within the same category of effect.

Table 5.22 Galloway Forest Park

Recreational Destination: Specific Viewpoint – Colonel Hunter Blair Monument (Viewpoint 8)

Distance and direction from nearest proposed wind turbine: 5.26km south west

Baseline description

Recreational Destination: Specific Viewpoint – Colonel Hunter Blair Monument (Viewpoint 8)

This elevated viewpoint is located at the Colonel Hunter Blair Monument on Kildoach Hill. **Figure 5.24 Viewpoint 8 – Colonel Hunter Blair Monument** provides the baseline panorama. This area falls within the Foothills with Forest West of Doon Valley LCT and there are long distant, 360-degree views available, as illustrated by the photo-panoramas. To the north the immediate foreground falls away sharply allowing elevated and open views over the pastoral Water of Girvan Valley. The village of Straiton sits in the central foreground and large swathes of conifer and broadleaf woodland stretch into the background and form a leading feature within the view. The background is formed by an undulating band of low hills with a diverse and settled landcover. The town of Maybole is visible along with the distinctive summit of Mochrum (270m AOD). To the east and south, the view is short and dominated by the hillock landform of Craigenhower Hill (331m AOD). Close views of the wind turbine blades of the operation Dersalloch Windfarm are visible above the horizon line. To the west, the hillock moorland grass foreground falls way, allowing elevated views down into the pastoral valley of the Water of Girvan. The middle ground consists of a mix of pastoral fields along the Water of Girvan Valley floor and the rough grass and forestry covered lower slopes of the rounded foothills on the opposite side of the valley. The scattered residential properties of Balbeg, Dalmorton and Linfairn can be seen in amongst mature vegetation along the middle ground. Large areas of coniferous plantation and clear fell areas cover the rounded slopes in the background of the view. Glenalla Fell (425m AOD) is located to the south west in the middle ground and the moorland covered rounded summit of Genoch Inner Hill (333m AOD) sits to the south in the middle ground. The summits of Craig of Dalwhine (481m AOD), Craigenreoch (565m AOD) and Carrick Forest Hills can be seen in the far distance of the view. The blade tips of the operation Assel and Hadyard Hill windfarms are barely discernible above and between the forestry along the horizon to the right of Glenalla Fell.

Sensitivity

The value of views from this viewpoint is considered Medium as it a locally defined viewpoint with scenic qualities relating to adjacent locally designated landscapes. The susceptibility of visitors to the viewpoint would be Medium as the panoramic views are a key factor in visiting the viewpoint. The sensitivity of walkers on these routes would be High-Medium.

Assessment

As illustrated on **Figure 5.24 Viewpoint 8 – Colonel Hunter Blair Monument**, the Proposed Development would appear as a prominent feature beyond Genoch Inner Hill and contained to some degree by Glenalla Fell in the north. It would occupy approximately 40 degrees of the overall 360 degree views, and lie within the broad, open scale of the forested foothills in the middle upper ground, set back from the immediate open foreground valley sides. It would appear separate to the views of the Carrick Hills to the south and the settled landscape to the north and north west. The Proposed Development in addition to Dersalloch Windfarm would extend the influence of wind turbines in close proximity and become a characteristic of the forested landscape to the south west of the view. The scale of effect is considered Medium across a Medium to Low extent of the view. The magnitude of change would be Medium-Low. Taking into account visitors to this viewpoint are considered to have a High-Medium sensitivity, the significance of effects would be **Moderate** and **Significant**.

Cumulative Assessment

The wireline indicates that the consented Kirk Hill windfarm would be visible at distance of 12.5km. Kirk Hill would be viewed in a separate portion of the view to the Proposed Development. Due to their separation and distance from the viewpoint, the addition of the Proposed Development to a baseline with Kirk Hill Windfarm would not alter the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

Clauchrie Windfarm (Application)

The application Clauchrie Windfarm would be viewed at a distance of 15.5km, behind the Proposed Development and only 5 of the 16 application wind turbines would be perceptible, and blade only. The majority of these visible wind turbines would also be obscured by landform and vegetation. The addition of the Proposed Development to the consented and application baseline would not alter the magnitude of change and subsequent significance of effect assessed for the existing baseline view.

Recreational Destination: Specific Viewpoint – Colonel Hunter Blair Monument (Viewpoint 8)
<p>Craiginmoddie Windfarm (Application) The in-scoping Craiginmoddie Windfarm would be 7.5km to the west of this viewpoint and across approximately 8 degrees of the view beyond the forested foothills as illustrated on the cumulative wireline for Figure 5.24 Viewpoint 8 – Colonel Hunter Blair Monument. It would lie partially behind Glenalla Fell and would appear in a dense arrangement of wind turbines, with many overlapping at this angle of view. The forestry on the north side of Glenalla Fell would potentially reduce visibility of several of its wind turbines. It would be notable but not a prominent part of the view.</p> <p>The Proposed Development and Craiginmoddie Windfarm combined would increase the presence of large scale wind turbines to the south and west of the viewpoint, associated with the forested foothills landscape. The greater effect would arise from the closer and wider horizontal extent of the Proposed Development. It is considered, given the overall 360 degree views available, the scale of combined cumulative effect would be Medium across a Medium extent of the view. The magnitude of change would be Medium. Taking into account visitors to this viewpoint are considered to have a High-Medium sensitivity, the significance of effects would be Major-Moderate and Significant.</p> <p>Knockcronal Windfarm (Scoping) Knockcronal Windfarm would lie 4.2km to the south west of this viewpoint, directly in front of the closest Proposed Development wind turbines. The wind turbines would appear as part of the Proposed Development, although sitting within the open moorland adjacent to the forested foothills such that the full height (from base to wind turbine tip) of the wind turbines would be visible. In combination with the Proposed Development, the density of wind turbines would increase within the same portion of view. The perceived separation of wind turbines from the view provided by the distinctive line of open moorland and forestry would be lost with the addition of Knockcronal Windfarm, with its wind turbines appearing noticeably closer. It is considered that the combined cumulative effects would be higher than the Proposed Development and Craiginmoddie Windfarm together, but still within the same category of effect taking into account the panoramic view and location of the wind turbines.</p>

Table 5.24 Colonel Hunter Blair Monument Viewpoint

Recreational Destination/Visitor Attraction – Merrick
<p>Distance and direction from nearest proposed wind turbine: 12.68km north north west</p>
<p>Baseline description This viewpoint is located on the summit of Merrick. This area is located within the Rugged Uplands LCT and there are long distant, 360-degree views available as illustrated by the photo-panoramas in Figure 5.31 Viewpoint 15 – Merrick. To the north, the view is across the undulating uplands of Carrick Forest Hills which includes Kirriereoch Hill in the foreground and Shalloch on Minnoch beyond. These hills split the distant views to the north. To the north east side, Dersalloch Windfarm is visible beyond Loch Braden and the commercial forestry which surrounds it. The coastline and settlement can be seen in the distance, which on a clear day would extend to the edge of Glasgow. To the north west, the forested foothills above the Stinchar Valley are notable, with Hadyard Hill and Assel Valley Windfarms visible beyond. The Firth of Clyde and Isle of Arran are visible on the horizon, and further west, Ailsa Craig. To the west and south west, the view takes in the forested plateau to the coast, with several operational windfarms including Mark Hill, Arecleoch and Kilgallioch visible. To the east, the view is across a moorland grass foreground towards the undulating and partly forested uplands encompassing many Loch's, particularly Loch Riecawr and Loch Doon. The summits of Craiglee (523m AOD), Cairnsmore of Carsphairn (797m AOD) and the forested southern uplands are visible in the distance in this direction. Windy Standard 1 and 2 windfarms are discernible, against the uplands in this direction. To the south, the view is short, looking over rising rocky moorland grass towards a triangulation pillar.</p>
<p>Sensitivity</p>

Recreational Destination/Visitor Attraction – Merrick
<p>The value of views from this viewpoint are considered High as a nationally known viewpoint visited as the highest point within the south of Scotland. The susceptibility of visitors to the viewpoint would be High as the panoramic views are a key factor in visiting the viewpoint. The sensitivity of walkers on these routes would be High.</p>
<p>Assessment Walkers on the main route from Glen Trool to the summit of Merrick would not have any visibility of the Proposed Development until the summit. At the summit, the Proposed Development would be viewed as four wind turbines located within forestry in the background of a very small proportion of the open and extensive view available from Merrick. The full extent of the Proposed Development cannot be seen from this viewpoint and only three wind turbines would be viewed in their entirety with the base of wind turbine 2 obscured by landform and only the blade tip of wind turbine 6 visible. The wind turbines would be viewed to the west of the upland mass of Shalloch on Minnoch which dominates the view to the north. The visible proposed wind turbines would be within the broad undulating foothills and separate to Hadyard Hill Windfarm limiting any perceived contrast of scale. Whilst the wind turbines would be closer than any existing operational windfarms, they would lie within a narrow extent of the overall view, clearly separate from the rugged uplands, and would not fundamentally change the composition of the overall panoramic view. The scale of effect is considered to be Low over a limited (low-negligible) extent of the view. The magnitude of change would be Low-Negligible. Taking into account visitors to this viewpoint are considered to have a High sensitivity, the significance of effect would be Minor and Not Significant.</p>
<p>Cumulative Assessment The wireline indicates that the consented Kirk Hill Windfarm would be visible within the portion of view between Shalloch on Minnoch and Ailsa Craig. Kirk Hill Windfarm would be 25km from the viewpoint, within the more distant Maybole Foothills, partially screened by the intervening foothills. It is considered that it would not be particularly discernible. Consented windfarms to the north east would lie within or close to the existing clusters of windfarms, increasing the intensity of windfarms within these locations, but would be distant and beyond the immediate rugged uplands. To the west, the consented Chirmorie Windfarm would also lie within an existing area of windfarms and would create a continuous area of wind turbines between Kilgallioch and Arecleoch windfarms. It is considered as all the consented windfarms lie within existing windfarm clusters and are distant to the viewpoint and the Proposed Development, the magnitude of change would not alter from the baseline assessment.</p> <p>Application Windfarms The majority of the application windfarms follow a similar pattern to the operational and consented windfarms. Most are distant and it is considered would not have a bearing on cumulative effects with the addition of the Proposed Development, with the exception of Clauchrie and Craiginmoddie Windfarms. These are considered separately below.</p> <p>Clauchrie Windfarm would be viewed 10.4km from the north west of the viewpoint and would lie in front and between the operational windfarms of Mark Hill and Assel Valley. Clauchrie Windfarm would be slightly closer to the viewpoint than the Proposed Development and seen in its entirety within the forested plateau landscape. The Proposed Development in addition to Clauchrie Windfarm would bring wind turbines closer to the viewpoint but both would be within very small horizontal extents of the overall view, separately and associated within the lower lying forested landscapes. The scale of effect with the addition of the Proposed Development to the consented and application baseline would be Low across a localised (low) extent of the view. The magnitude of change would be Low. Taking into account visitors to this viewpoint are considered to have a High sensitivity, the significance of effect would be Moderate and Significant.</p>

Recreational Destination/Visitor Attraction – Merrick

Craiginmoddie Windfarm would lie directly to the east of Hadyard Hill Windfarm, with all fourteen of its wind turbines visible across the forested foothills. It would appear notably larger than the adjacent Hadyard Hill wind turbines and would be prominent in this portion of the view.

The Proposed Development and Craiginmoddie Windfarm together would appear as one development, extending the presence of windfarms eastwards from Hadyard Hill to Shalloch on Minnoch. They would be prominent within their portion of the view, and along with the application Clauchrie Windfarm to the west would create a continuous view of wind turbines from west to north and introduce wind turbines closer to Merrick than currently, becoming a defining characteristic of the view in these directions. However, the foothills above the River of Stinchar Valley that lie between Clauchrie Windfarm and Hadyard Hill Windfarm, break up this continuous extent. They would however be situated within the forested foothills, clearly separate from the upland landscape and in a portion of the view already characterised by windfarms. It is considered that the combined cumulative scale of effect of the Proposed Development, Craiginmoddie Windfarm and Clauchrie Windfarm would be Medium-Low across a localised (low) extent of the view. The magnitude of change would be Medium-Low. Taking into account visitors to the viewpoint are considered to have a High sensitivity, the significance of effect would be **Moderate and Significant**.

Knockodhar Windfarm (Scoping)

The in-scoping Knockodhar Windfarm would lie 16.2km from the viewpoint, sitting behind Clauchrie Windfarm and on lower topography, which along with distance, reduces its prominence in the view. It is considered it would not change the magnitude of change and subsequent significance of effect assessed for the application windfarms and the Proposed Development.

Knockcronal Windfarm (Scoping)

Knockcronal Windfarm would not be visible from this viewpoint due to the screening by the Shalloch of Minnoch.

Table 5.25 Merrick Viewpoint

5.13 Summary of Residual Effects

Receptor	Distance to Nearest Wind Turbine	Receptor Sensitivity	Operational Baseline		Future Baseline		Cumulative – Future Baseline + Application Sites (including Craiginmoddie and Clauchrie Windfarms*)		Cumulative – Future Baseline + Application Sites + Scoping Sites (Knockcronal and Knockodhar Windfarms**)	
			Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Landscape character										
Foothills with Forest and Windfarms LCT (17c)	Host LCT	Medium-Low	High-Medium within 5km; Medium-Low elsewhere.	Moderate within 5km , Moderate-Minor elsewhere.	No change	No change	High	Moderate	High	Moderate
Intimate Pastoral Valleys (13) – Water of Girvan Valley	1.5km	High-Medium	Medium within 3-5km north of the Site and south of Tairlaw. Medium-Low elsewhere	Major-Moderate within 3-5km north of the Site and south of Tairlaw. Moderate-Minor elsewhere.	N/A	N/A	N/A	N/A	+Knockcronal: High-Medium within 3-5km north of the Site. Medium-Low elsewhere.	+Knockcronal: Major-Moderate within 3-5km north of the Site. Moderate-Minor elsewhere.
Intimate Pastoral Valleys (13) – Stinchar Valley	1km	High-Medium	Medium-Low within 5km; Low elsewhere.	Moderate within 5km , Moderate-Minor elsewhere.	N/A	N/A	High-Medium within 15km, Low-Negligible elsewhere.	Major-Moderate within 15km , Moderate-Minor elsewhere.	+Knockodhar: Medium	+Knockodhar: Major-Moderate
Rugged Uplands, Lochs and Forest LCT (21)	1km	High-Medium	Medium within 6km; Low-Negligible elsewhere.	Major-Moderate within 6km , Minor elsewhere.	No change	No change	Medium within 6km; Low-Negligible elsewhere.	Major-Moderate within 6km , Minor elsewhere.	Medium-Low	Moderate
Middle Dale (12)	5km	High-Medium	Low	Moderate-Minor	No change	No change	Medium	Moderate	Medium	Moderate
Landscape designations										
Carrick Hills Candidate LLA	1km	High-Medium	Medium within 6km; Low-Negligible elsewhere.	Major-Moderate within 6km , Minor elsewhere.	Medium within 6km; Low-Negligible elsewhere.	Major-Moderate within 6km , Minor elsewhere.	Medium-Low (entire LLA)	Moderate (entire LLA)	Medium-Low (entire LLA)	Moderate (entire LLA)
Water of Girvan Candidate LLA	2km	High-Medium	Medium-Low between 3-5km north of the Site. Low elsewhere.	Moderate between 3-5km north of the Site. Moderate-Minor elsewhere.	N/A	N/A	High-Medium (entire LLA)	Major-Moderate (entire LLA)	High-Medium (entire LLA)	Major-Moderate (entire LLA)
Stinchar Valley Candidate LLA	2km	High-Medium	Medium-Low within 5km. Low Elsewhere.	Moderate within 5km. Moderate-Minor elsewhere.	N/A	N/A	High-Medium within 15km, Low-Negligible elsewhere.	Major-Moderate within 15km , Moderate-Minor elsewhere.	High-Medium (entire LLA)	Major-Moderate (entire LLA)
Rugged Uplands with Lochs and Forest Sensitive Landscape Area (East Ayrshire)	6.5km	High-Medium	Low-Negligible	Minor-Negligible	Low-Negligible	Minor-Negligible	Low-Negligible	Minor-Negligible	Low-Negligible	Minor-Negligible

Receptor	Distance to Nearest Wind Turbine	Receptor Sensitivity	Operational Baseline		Future Baseline		Cumulative – Future Baseline + Application Sites (including Craiginmoddie and Clauchrie Windfarms*)		Cumulative – Future Baseline + Application Sites + Scoping Sites (Knockcronal and Knockodhar Windfarms**)	
			Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Foothills West of Doon Valley Sensitive Landscape Area (East Ayrshire)	8km	High-Medium	Low-Negligible	Minor	Low-Negligible	Minor	Low-Negligible	Minor	Low-Negligible	Minor
Galloway Hills Regional Scenic Area (Dumfries and Galloway)	10km	High-Medium	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible
Visual receptor groups										
Upper Water of Girvan Valley Visual Receptors	2.5km	High-Medium (residents, walkers), Medium (road users).	High-Medium within 3-5km north of the Site. Medium-Low elsewhere.	Major-Moderate (residents, walkers), Moderate (road users) within 3-5km north of the Site. Moderate (residents, walkers) and Moderate-Minor (road users) elsewhere.	N/A	N/A	High-Medium within 3-5km north of the Site. Medium-Low elsewhere.	Major-Moderate (residents, walkers), Moderate (road users) within 3-5km north of the Site. Moderate (residents, walkers) and Moderate-Minor (road users) elsewhere.	High within 3-5km north of the Site. Medium-Low elsewhere.	Major-Moderate (residents, walkers), Moderate (road users) within 3-5km north of the Site. Moderate (residents, walkers) and Moderate-Minor (road users) elsewhere.
Upper Stinchar Valley Visual Receptors	3km	High-Medium (residents, walkers), Medium (road users).	High-Medium	Major-Moderate (residents, walkers) Moderate (road users).	N/A	N/A	N/A	N/A	High-Medium	Major-Moderate (residents, walkers), Moderate (road users).
Straiton	6km	High-Medium	Low	Moderate-Minor	N/A	N/A	Low	Moderate-Minor	Low	Moderate-Minor
Maybole	11km	High-Medium	Low	Moderate-Minor	Low	Moderate-Minor	Medium-Low	Moderate	Medium-Low	Moderate
Key routes										
Local Road C46W between Tairlaw and Waterhead on Minnoch	1km	High-Medium	High-Medium	Major-Moderate	N/A	N/A	High-Medium	Major-Moderate	High-Medium	Major-Moderate
B7023	7km	Medium	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor
B7045	6km	Medium	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor	Medium-Low	Moderate-Minor
Recreational Routes										
Old Road through Straiton Heritage Path,	Within the Site Day	High-Medium	Patna-Straiton: Low-Negligible	Patna-Straiton: Moderate-Minor	Patna-Straiton: Low-Negligible	Patna-Straiton: Moderate-Minor	Patna-Straiton: Low-Negligible	Patna-Straiton: Moderate-Minor	Patna-Straiton: Low-Negligible	Patna-Straiton: Moderate-Minor

Receptor	Distance to Nearest Wind Turbine	Receptor Sensitivity	Operational Baseline		Future Baseline		Cumulative – Future Baseline + Application Sites (including Craiginmoddie and Clauchrie Windfarms*)		Cumulative – Future Baseline + Application Sites + Scoping Sites (Knockcronal and Knockodhar Windfarms**)	
			Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect	Magnitude of Change	Significance of Effect
Core path SA47 and Local Paths Network: 72 (LPN:72)			South of Straiton: High	South of Straiton: Major-Moderate	South of Straiton: High	South of Straiton: Major-Moderate	South of Straiton: High	South of Straiton: Major-Moderate	South of Straiton: High	South of Straiton: Major-Moderate
NCN7 and Core path SA1	1.1km	High-Medium	Along Site Boundary: High-Medium Maybole to Girvan: Low-Negligible South of Site: no effect	Along Site Boundary: Major-Moderate Maybole to Girvan: - Minor South of Site: no effect	Along Site Boundary: High-Medium Maybole to Girvan: Low-Negligible South of Site: no effect	Along Site Boundary: Major-Moderate Maybole to Girvan: -Minor South of Site: no effect	Along Site Boundary: High-Medium Maybole to Girvan: Medium-Low South of Site: no effect	Along Site Boundary: Major-Moderate Maybole to Girvan: Moderate South of Site: no effect	Along Site Boundary: High-Medium Maybole to Girvan: Medium-Low South of Site: no effect	Along Site Boundary: Major-Moderate Maybole to Girvan: Moderate South of Site: no effect
Core path SA49 and SA56	Within the Site, south of wind turbines	Medium-Low	High-Medium	Moderate	High-Medium	Moderate	High-Medium	Moderate	High-Medium	Moderate
Core paths SA52, SA54 and SA55	3.4km	Medium-Low	Medium	Moderate-Minor	Medium	Moderate-Minor	Medium	Moderate-Minor	Medium	Moderate-Minor
Cornish Hill Trail	1.4km	High-Medium	High-Medium	Major-Moderate	High-Medium	Major-Moderate	High-Medium	Major-Moderate	High-Medium	Major-Moderate
Recreational Destinations and Visitor Attractions										
Galloway Forest Park	0km	Medium	Medium within 6km of the Site. Low-Negligible elsewhere.	Moderate within 6km. Minor elsewhere.	Medium within 6km of the Site. Low-Negligible elsewhere.	Moderate within 6km. Minor elsewhere.	Medium (within north and west parts of the Park)	Moderate (within north and west parts of the Park)	Medium (within north and west parts of the Park)	Moderate (within north and west parts of the Park)
Colonel Hunter Blair Monument Viewpoint	5.6km	High-Medium	Medium-Low	Moderate	Medium-Low	Moderate	Medium	Major-Moderate	Medium	Major-Moderate
Merrick Summit	12.7km	High	Low-Negligible	Minor	Low-Negligible	Minor	Medium-Low	Moderate	Medium-Low	Moderate

Table 5.26: Summary of Residual Effects

*Cumulative effects of the Proposed Development in addition to consented sites and application sites - specifically Craiginmoddie Windfarm and/or Clauchrie Windfarm. Where different effects or no effects for Craiginmoddie or Clauchrie Windfarms were assessed in the main text, the highest value has been recorded in the table.

**Cumulative effects of the Proposed Development in addition to consented sites, application sites and in-scoping sites Knockcronal Windfarm and/or Knockodhar Windfarm. Where different effects or no effects for Knockcronal or Knockodhar Windfarms were assessed for the same receptor, the highest value has been recorded in the table.

5.14 Summary

5.14.1 Summary of Effects

222. The LVIA has assessed the potential for significant landscape and visual effects across an initial area of 45km radius, focussing on a detailed assessment Study Area of 30km radius from the Proposed Development. **Table 5.26** provides an overview of the assessment.
223. The Proposed Development is located within the Foothills with Forest and Windfarm LCT, a landscape character type which has a large scale, broad undulating plateau-like landform and uniform forestry landcover which are all attributes that are considered suitable for windfarm development, in addition to the presence of existing operational windfarms as a defining characteristic.
224. There would be no significant construction effects on the landscape fabric, landscape character or visual amenity due to the short-term duration and that it would be contained within the active commercial forestry.
225. The physical effects on the landscape would be limited to areas of forestry removal for the wind turbine hardstandings and new access tracks, of which the construction of would require areas of cut and fill. Use of existing infrastructure from the forestry operations would minimise additional areas of felling. It is considered that effects on the physical elements of the landscape would not be significant.

5.14.2 Landscape Character Effects

226. The LVIA has assessed significant effects for landscape character types that the proposed wind turbines lie within and those that are immediately surrounding the Site within 6km of the proposed wind turbines. The addition of the Proposed Development would increase the presence of wind turbines within the Foothills with Forest and Windfarms LCT, introducing large scale wind turbines into a generally large scale landscape. The periphery foothills which separate the Site from the Water of Girvan Valley and the Stinchar Valley provide a degree of containment to the Proposed Development and limit the full influence of the proposed wind turbines on the wider landscape.
227. The Rugged Upland, Forest and Lochs LCT which wraps around the Site to the south and east, limits the influence of the Proposed Development on the wider rugged uplands to the south and south east, beyond approximately 6km from the proposed wind turbines. Beyond this distance, only the highest summits and ridgelines would have visibility of the Proposed Development where its influence would be generally perceived within the wider context of the forested foothills and operational windfarms, separate to the rugged uplands.
228. The upper reaches of the Water of Girvan Valley unit of the Intimate Pastoral Valley LCT lie to the north east of the Site, within 5km of the proposed wind turbines. The valley sides and periphery foothills screen any influence on the southern side of the valley and limit the full extent of the Proposed Development perceived from the rest of the LCT. Due to the close proximity and orientation of the valley between 3-5km north of the Site, the proposed wind turbines would be notable above and between the foothills, introducing wind turbines as a characteristic of views from the LCT.
229. The Stinchar Valley unit of the Intimate Pastoral Valley LCT lies immediately to the south and south west of the proposed wind turbines. The foothills to the south of the wind turbines and either side of the upper reaches of the valley prevent any influence on the valley bottom immediately south of the proposed wind turbines, and generally limit the influence of the full extent of the Proposed Development on the wider LCT. The main influence would be further west along the valley, within approximately 5km of the nearest proposed wind turbine where again, only a limited number of the proposed wind turbines would become a part of views from the LCT.
230. Effects on LCTs beyond approximately 6km were assessed as not significant as a result of limited visual influence, separation from the periphery hills around the Site and characteristics such as extensive woodland, hedgerows and trees, as well as enclosure by the landform.

5.14.3 Landscape Designations

231. Landscape Designations within the Study Area generally mirror the extent and characteristics of the corresponding LCTs. Significant effects were assessed on some special qualities of the South Ayrshire Candidate LLAs of Carrick Hills, Stinchar Valley and Water of Girvan Valley within approximately 5-6km of the proposed wind turbines.

5.14.4 Visual Effects

232. The assessment of visual effects was informed by the scale of effect assessed at 24 viewpoints that were selected to represent visibility from a range of receptors and distances throughout the Study Area. This informed the assessment of significant effects on visual receptor groups within the upper Water of Girvan Valley and upper Stinchar Valley within approximately 5-6km of the proposed wind turbines. The Proposed Development would introduce visibility of wind turbines in close proximity to local residents, walkers and road users within these areas, although the full extent of the Proposed Development would be screened by the periphery foothills, as well as extensive woodland and mature trees along the valley bottoms.
233. Significant effects were assessed on the several short recreational routes within and in close proximity to the Site where the Proposed Development would change the character of the routes to one which is within or next to a windfarm. This includes Old Road through Straiton Heritage Path, core path SA47 and LPN72, SA49, SA52, SA54, SA55, SA56 (parts of Barr Trails), and Cornish Hill Trail. It also includes walkers to the Colonel Hunter Blair Monument viewpoint which overlooks the Site from the north east. The National Cycle Route 7 (also SA1) lies directly west of the Site but visibility of the proposed wind turbines would only be for a short stretch alongside the Site extents and from limited parts between Maybole and the Site. There would be no visibility along NCN7 south of the Site.
234. Significant effects were assessed on visitors within the northern elevated and open parts of the Galloway Forest Park within 6km of the proposed wind turbines, where the Proposed Development would be an immediately noticeable part of a wider proportion of views.

5.14.5 Residential Visual Amenity Assessment (RVAA)

235. A RVAA of properties within approximately 2km of the proposed wind turbines is presented in **Appendix 5.4 RVAA**. It found that there would be no potential for the Proposed Development on its own or cumulatively with Craiginmoddie and Knockcronal Windfarms to cause the Residential Amenity Threshold to be reached for residents at any of the properties assessed.

5.14.6 Cumulative Effects

236. The LVIA has been based on the assessment of effects of the Proposed Development in addition to the operational windfarms within the Study Area. An assessment on the cumulative effects with consented and application windfarms was also undertaken. This found that the potential for significant effects related to in-combination and sequential cumulative effects exists with the application Clauchrie Windfarm and Craiginmoddie Windfarm. An assessment of cumulative effects was also considered with the in-scoping Knockcronal Windfarm given its close proximity to the Proposed Development. Cumulative effects with the in-scoping Knockodhar Windfarm, which lies close to the application Clauchrie Windfarm, was also assessed where relevant.
237. The application Clauchrie Windfarm would lie 8.6km to the south west of the Proposed Development. The assessment found that significant cumulative sequential visual effects would occur in locations within the northern elevated parts of the Rugged Uplands where Clauchrie Windfarm and the Proposed Development would introduce large scale wind turbines in closer proximity than the existing wider context of operational and consented windfarms, increasing windfarms as a defining characteristic in views of these areas.
238. The application Craiginmoddie Windfarm would lie directly west of the Site and the assessment considered the combined cumulative effects with the Proposed Development on all receptors. Together they would increase the extent of wind turbines within the Foothills with Forest and Windfarm LCT so that windfarms would become the defining characteristic across the full east-west extent of the LCT. The key difference in areas of visibility between the Craiginmoddie Windfarm and the Proposed Development relate to the upper reaches of the Water of Girvan Valley to the east, and other receptors to the east, where largely only the Proposed Development would be seen, and the Middle Dale LCT and western parts of the Foothills with Forest and Lochs LCT where Craiginmoddie Windfarm would have greater visibility and more prominence.

239. Combined cumulative effects on landscape character creating significant effects where the Proposed Development on its own would not, include the Middle Dale LCT, and a wider extent of the Stinchar Valley unit of the Intimate Pastoral Valley LCT. On visual receptors, significant combined cumulative effects where the Proposed Development on its own would not, include residents at Maybole, longer extents of core paths SA47, SA1 and NCN7, and Old Road through Straiton Heritage Path, and from the summit of Merrick.
240. The in-scoping Knockcronal Windfarm's location directly adjacent to the northern wind turbines of the Proposed Development, and within a relatively tight cluster would result in it appearing as part of the Proposed Development, increasing the density of wind turbines within the views and slightly increasing the horizontal extent of wind turbines to the north. This limits the creation of combined cumulative effects that are considerably greater than the Proposed Development on its own with the exception of effects on the landscape character, designations and visual receptors which lie to the north and north east, particularly within the Upper Water of Girvan Valley. The Knockcronal Windfarm site encroaches on the edge of the Water of Girvan Valley sides, it's wind turbines notably more prominent than the Proposed Development's wind turbines which would sit behind it and tucked behind the outer foothills. In addition, the open moorland of the Knockcronal Windfarm site creates a closer relationship with the valley in contrast to the separate forested foothills where the Proposed Development would lie.
241. The in-scoping Knockodhar Windfarm will intensify the number of wind turbines within the same general area as the application Clauchrie Windfarm, but slightly more distant from the most sensitive receptors in the Study Area, except the Stinchar Valley. Significant sequential cumulative effects were assessed with the Proposed Development on the Stinchar Valley LCT and LLA.

5.14.7 Merrick WLA

242. An assessment on the Merrick WLA was undertaken and presented in **Appendix 5.4 WLA**. It identified that the Proposed Development would have significant effects on the naturalness and remoteness attributes within 3km of the northern boundary, which is the least sensitive part of the WLA due to existing influences of human artefacts and activity in closer proximity than elsewhere within the WLA. The Proposed Development would have no effects on the secluded and remote interior areas of the WLA. The assessment found there would be no significant effects on the qualities and attributes of the WLA overall.
243. Significant cumulative effects with the proposed Craiginmoddie Windfarm and in-scoping Knockcronal Windfarm would be limited to the same areas as the Proposed Development on its own, increasing the extent of large scale wind turbines in close proximity to the WLA, reducing the sense of sanctuary within the northern aspects. The addition of the Proposed Development (and Craiginmoddie Windfarm) to the application Clauchrie Windfarm would extend the presence of large scale wind turbines in close proximity to the north of the WLA from the west, so that there would be sequential and successive cumulative effects on the sense of sanctuary within the north and western aspects of the WLA. They all would sit separately to the rugged uplands, associated with the forestry plateau and foothills, with no impact on the secluded interior of the WLA.

5.14.8 Statement of Significance

244. The LVIA has identified that significant effects on landscape character and visual amenity would be localised, contained within approximately 5-6km from the proposed wind turbines. This is not extensive considering the nature and scale of proposals. This distance relates to the containment by the foothills surrounding the Site, and the rugged uplands to the south and south east which screen views further in these directions. Notably, within the main areas of potential visibility, the full extent of the Proposed Development would not be frequently seen from the lower settled areas including the Stinchar and Water of Girvan Valleys due to the landform screening. Significant cumulative effects would occur with the proposed Craiginmoddie Windfarm on a slightly wider area, particularly to the north west and west, relating to Craiginmoddie Windfarm's position west of the Site. Significant cumulative effects with the application Clauchrie Windfarm would also occur in some limited areas of the rugged uplands. Significant cumulative effects with the in-scoping Knockcronal Windfarm would occur in the same areas as the Proposed Development on its own, with increased effects along the Water of Girvan Valley to the north and north east within 5km. Significant sequential cumulative effects on the Stinchar Valley with the in-scoping Knockodhar Windfarm would also occur.

5.15 References

Carys Swanwick Department of Landscape University of Sheffield and Land Use Consultants. (2002). Landscape Character Assessment Guidance for England and Scotland. The Countryside Agency and Scottish Natural Heritage. England and Scotland.

Dumfries and Galloway Council (2019). Dumfries and Galloway Local Development Plan 2. Dumfries and Galloway Council, Dumfries.

Dumfries and Galloway Council (2018). Regional Scenic Areas Technical Paper. Dumfries and Galloway Council, Dumfries.

Dumfries and Galloway Council (2020). Supplementary Guidance - Wind Energy Development: Development Management Considerations. Dumfries and Galloway Council, Dumfries.

Dumfries and Galloway Council (2020). Supplementary Guidance - Wind Energy Development: Development Management Considerations 'C' Dumfries & Galloway Wind Farm Landscape Capacity Study. Dumfries and Galloway Council, Dumfries.

East Ayrshire Council (2017). East Ayrshire Local Development Plan.

East Ayrshire Council (2018). Landscape Wind Farm Capacity Study.

East Ayrshire Council (2015). East Ayrshire Local Development Plan Background Paper: Sensitive Landscape Areas.

Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, 3rd Edition, Routledge. New York, USA.

Landscape Institute, London. Landscape Institute (2019). Residential Visual Amenity Assessment Technical Guidance Note 2/19. Landscape Institute, London.

NatureScot (2020). Assessing Impacts on Wild Land Areas, NatureScot, Scotland.

NatureScot (2020). General Pre-application and Scoping Advice for Onshore Wind Farms Guidance.

Scottish Government Scottish Planning Policy (SPP) (2014).

Scottish Natural Heritage (2017). Visual Representation of Windfarm Guidance, Version 2.2. Scottish Natural Heritage, Scotland.

Scottish Natural Heritage (2012). Assessing the Cumulative Impact of Onshore Wind Energy Developments. Scottish Natural Heritage, Scotland.

Scottish Natural Heritage (2017). Siting and Designing Wind Farms in the Landscape, Version 3a. Scottish Natural Heritage, Scotland.

Scottish Natural Heritage (2019). Scottish Landscape Character Types Map and Descriptions Available online at: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>.

South Ayrshire Council (2014). South Ayrshire Local Development Plan.

South Ayrshire Council (2020). South Ayrshire Modified Proposed Local Development Plan.

South Ayrshire Council (2016). Supplementary Guidance: Dark Sky Lighting.

South Ayrshire Council (2018). South Ayrshire Landscape Wind Farm Capacity Study.

South Ayrshire (2018). South Ayrshire Local Landscape Designations Review, Carol Anderson Landscape Associates – Final Report.

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