

## **Technical Appendix 5: Seascape, Landscape and Visual Amenity**

**TA 5.1: Designated and Classified Land**

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## **Technical Appendix 5.1: Designated and Classified Land**



## Technical Appendix 5.1: Designated and Classified Land

### 1.1 Introduction

- 1.1.1 Figure 5.4a (EIAR Volume 3a) illustrates the location and extent of designated and classified landscapes within the 45 km study area. The landscapes are listed in the Table 5.1.1 below. Where landscapes are omitted from this assessment, the reason for this is also noted in this table.
- 1.1.2 Table 5.1.2 of this appendix provides a description of each designated/ classified landscape and an appraisal of the sensitivity. In general, a high sensitivity is ascribed to nationally important landscape designations such as National Scenic Areas and classifications such as Gardens and Designed Landscapes and Wild Land Areas.
- 1.1.3 Regional and local landscape designations are given less weight and protection in assessment terms. Notwithstanding this, determining the sensitivity of such designations requires careful evaluation of their value and susceptibility, relative to the type of development proposed, with reference to the special qualities expressly identified in designation citations.
- 1.1.4 Table 5.1.3 presents the landscape assessment of each designated/ classified landscape and Table 5.1.4 assesses the potential cumulative effects arising on each designated/ classified landscape as a result of the proposed Artfield Forest Wind Farm.

Designation/ Classification	Distance and Direction from Designated/ Classified Landscape to nearest Turbine	Assessed in LVIA	Justification for Omission
<b>National Scenic Areas (NSA)</b>			
Fleet Valley	32 km west south west	No	Theoretical visibility confined to southernmost extent of NSA at Islands of Fleet. Significant effects on the NSA are therefore considered highly unlikely.
<b>Regional Scenic Areas (RSA) – Dumfries and Galloway</b>			
Galloway Hills	12.2 km east north east	Yes	-
Machars Coast	26.1 km south south east	Yes	-
Mochrum Lochs	12.8 km south south east	Yes	-
Rhins Coast	16 km west south west	Yes	-
Solway Coast	37.9 km south east	No	Limited theoretical intervisibility at over 37 km distance from nearest turbine to area of potential visibility.
<b>Scenic Area (SA) – South Ayrshire</b>			
Scenic Area 1	7.8 km north northeast	Yes	-
<b>Sensitive Landscape Areas (SLA) – East Ayrshire</b>			
SLA 1	27.7 km north east	No	Theoretical visibility confined to one highly constrained, and geographically limited area near the summit of Mullwharchar in the Galloway Forest Park at a distance of 28 km. Therefore significant effects on the SLA are considered highly unlikely.

Designation/ Classification	Distance and Direction from Designated/ Classified Landscape to nearest Turbine	Assessed in LVIA	Justification for Omission
<b>Gardens and Designed Landscapes (GDLs)</b>			
Ardwell House	24.0 km south south west	Yes	-
Bargany	32 km north	No	No theoretical visibility.
Blairquhan	37 km north east	No	No theoretical visibility.
Cally	37 km south east	No	No theoretical visibility.
Castle Kennedy	12.5 km south west	No	Highly limited theoretical visibility at two points along the eastern boundary of the GDL.
Craigengillan	39.5 km north east	No	No theoretical visibility.
Culzean Castle	40 km north	No	No theoretical visibility.
Galloway House	33.5 km south east	No	Limited theoretical visibility at over 30 km distance.
Glenapp	18 km north west	No	No theoretical visibility.
Kilkerran	33 km north	No	No theoretical visibility.
Lochnaw Castle	22.5 km west south west	No	Highly constrained and limited theoretical visibility in a well-treed area.
Logan Botanic Gardens	28.74 km south south west	Yes	-
Logan House (Balzieland)	26.74 km south south west	Yes	-
Monreith	26.21 km south east	Yes	-
<b>Wild Land Areas (WLA)</b>			
Merrick	21.6 km north east	Yes This assessment is contained in TA 5.5	-

<b>Table 5.1.2: Landscape Classification Descriptions and Sensitivity</b>			
<b>Designation/ Classification</b>	<b>Distance and Direction<sup>1</sup></b>	<b>Description/ Special Qualities of Designation/ Classification</b>	<b>Sensitivity to Wind Development</b>
<b>Dumfries &amp; Galloway Designations.<sup>2</sup></b>			
Galloway Hills RSA	12.1 km east north east	<p>This is the largest RSA in the DGC area and the designation is important primarily for the strong contrast of the Galloway Hills in juxtaposition to the valley and coastal landscapes which gives rise to "a sweeping and dramatic views of the hills". The Dumfries and Galloway document which sets out the key characteristics of this RSA expresses these in terms of the LCTs<sup>3</sup> contained within the designation.</p> <p>Only the LCTs within the RSA that are closest to the Proposed Development and would experience potential visibility with the Proposed Development are noted below along with key characteristics of the LCT that underpin the designation:</p> <ul style="list-style-type: none"> <li>LCT 4: Narrow wooded valleys</li> </ul> <p>These valleys form part of the setting to the hills and generate the strong contrast that is a feature of this RSA.</p> <ul style="list-style-type: none"> <li>LCT16: Upland Fringe</li> </ul> <p>These areas form a prominent western fringe of the Galloway Hills mass.</p> <ul style="list-style-type: none"> <li>LCT2: Coastal Flats</li> <li>LCT18 and 18a: Foothills and Foothills with Forest</li> </ul> <p>The strongly estuarine character is dramatically juxtaposed against the Galloway Hills behind.</p> <p>These areas contribute to the setting to the Galloway Hills and many have strong upland and forested upland characters in their own right.</p> <ul style="list-style-type: none"> <li>LCT21 and 21a: Rugged granite uplands and Rugged granite uplands with forest</li> </ul> <p>These LCTs are primarily responsible for the dramatic landscape for which this scenic area is designated.</p> <ul style="list-style-type: none"> <li>LCT20: Coastal Granite Uplands</li> </ul> <p>Alongside the rugged granite uplands, these areas are central to the scenic quality of this designation.</p>	<p>Susceptibility of this character type is High given diverse landscape size and scale of the component parts of this area.</p> <p>Both the scenic quality and the rugged granite uplands and the intimate scale of the Narrow Wooded Valley (LCT4) increase the sensitivity of this RSA to the Proposed Development.</p> <p>The value of RSA is High due to the scenic quality of the area which is acknowledged in the regional designation.</p> <p>Sensitivity: High.</p>
Machars Coast RSA	26.2 km south south east	<p>This designation reflects the scenic quality of the varied rocky coastline of the headland. The rocky character of this area, the transitions to the smoother shoreline to the west and the estuarine character of Wigton Bay and Wigton Sands to the north.</p> <p>The RSA relates to LCT1 and 1a: Peninsula and Peninsula with gorse knolls. The designation captures the diversity and rocky coastline character of LCT1 which is less developed than other parts of LCT1.</p>	<p>Susceptibility of this LCT is High given the intricate pattern of the rocky landscape.</p> <p>The value of RSA is High to Medium reflecting the scenic quality of the coastline in these areas and noting the regional designation.</p> <p>Sensitivity: High.</p>
Mochrum Lochs	12.8 km south south east	<p>This RSA centres on the Mochrum Lochs and extends to the coastline to the west. The scenic quality is derived from the combination of the scattered lochs within a gently rolling and rocky uplands landscape character which reaches to the narrow coastal strip. The main road (A747) hugs the coastline within this designation affording long range views along the coast and across to the Mull of Galloway.</p> <p>The unique combination of scattered lochs interspersing the gently undulating plateau (LCT17b) characterises this designation.</p>	<p>Susceptibility of this LCT is High due to the intricate pattern of landscape features within the designated area.</p> <p>The value of RSA is High to Medium being a regional designation.</p> <p>Sensitivity: High</p>
Rhins Coast	24.5 km west south west	<p>This RSA encompasses much of the coastline of the Mull of Galloway, western and southern areas in particular. It also extends into a small area on the mainland across Loch Ryan.</p> <p>The scenic quality relates to the attractive rocky coastlines and panoramic views towards the sea. Steep cliffs are characteristic of this coastline, with raised beaches and rocky foreshores (LCT 1).</p> <p>Notably this RSA contains the consented Larbrax wind farm and the Knocknain Farm turbine, and the North Rhins development situated on Craigenlee Fell overlooks the designation.</p>	<p>Susceptibility of this LCT to wind development is tempered by the Rhins wind development which is immediately adjacent to the RSA, and the Knocknain Farm wind turbine which is within the RSA. Therefore susceptibility is considered to be Medium.</p> <p>The value of the RSA is considered to be High to Medium accounting for the scenic beauty of the steep cliffs and rocky shoreline.</p> <p>Sensitivity: High to Medium.</p>

<sup>1</sup> Distance from closest proposed turbine to nearest part of the designated/classified landscape with theoretical visibility of the proposed development.

<sup>2</sup> NB: this assessment is made in the absence of special qualities citations which would set out the special qualities of the designation, and locations from which these may be experienced from. Without this information the assessment is, by necessity, general and uses the 'key characteristics' noted in the DGC Technical Paper<sup>2</sup>.

<sup>3</sup> LCT references are taken from Part 1 Wind Energy Development: Development Management Considerations Appendix C Dumfries & Galloway Wind Farm Landscape Capacity Study, Supplementary Guidance (February 2020)

<b>Table 5.1.2: Landscape Classification Descriptions and Sensitivity</b>			
<b>Designation/ Classification</b>	<b>Distance and Direction<sup>1</sup></b>	<b>Description/ Special Qualities of Designation/ Classification</b>	<b>Sensitivity to Wind Development</b>
<b>South Ayrshire Council Designations.<sup>4</sup></b>			
South Ayrshire Scenic Area (SA)	7.8 km north northeast	<p>This SA extends over most of the South Ayrshire administrative area that is within the study area. Being such a large area, it includes most the LCTs within the South Ayrshire area that fall within the study area. Therefore, a general description of the northern part of this study area that would be subject to views of the Proposed Development is provided and key locations of highest sensitivity and scenic quality are highlighted.</p> <p>Plateau moorland, much of which is covered in coniferous forestry extends northwards from Dumfries and Galloway. North and east of this the landscape transitions to the Southern Uplands, some of which has large areas of coniferous tree cover. The uplands become higher and more rugged and dramatic in the Carrick Forest area. North and west of the moorland plateau valleys and glens cut into the uplands. Glen App and Glen Tigg are steep-sided with woods and little settlement. These glens have a distinctive character which relates to the narrowness of the landform, lack of settlement and mature riparian woods. They have a sense of 'quietness' and remoteness due to the combination of lack of settlement and apparent lack of human activity. The longer and slightly wider valleys of the River Stinchar and River Duisk have a more settled character with farmland interspersed with blocks of woodland and some riparian woodland. Beyond the Stinchar Valley lie the South Ayrshire foothills which are characterised by large-scale coniferous plantation in the east and wind farm development including Assel Valley and Hadyard Hill wind farms, and the consented Tralorg wind farm which was due to begin construction in 2020 (although this may have been delayed due to the COVID-19 Pandemic). There would be no theoretical views of the Proposed Development north of the South Ayrshire foothills.</p>	<p>Susceptibility of this SA to wind development is considered to be High in the small-scale valleys, and especially so in the less settled and more intimate Glen App and Glen Tigg. However, the uplands and plateau moorland are heavily influenced by existing wind development. Whilst susceptibility to turbine structures would generally be lower, the potential for cumulative effects would need careful consideration. Therefore susceptibility is:</p> <p>High for Valleys and Rugged Uplands (Carrick Forest area);            Medium for plateau moorland, uplands and foothills generally (except the rugged uplands in the Carrick Forest area).</p> <p>Value: Although the area is designated, value is attributed as follows:            High for Valleys and Rugged Uplands (Carrick Forest);            Medium for plateau moorland and uplands.</p> <p>Sensitivity:            High – within Valleys and Rugged Uplands;            Medium – in plateau moorland and South Ayrshire uplands.</p>
<b>Gardens and Designed Landscapes (GDL)</b>			
Ardwell House <sup>5</sup>	24.0 km south south west	<p>This is a mid 19<sup>th</sup> century designed landscape which is notable for the setting it provides for Ardwell House, a category B listed building.</p> <p>The importance of the GDL is due to the high level of interest for both its scenic and architectural value. The woodlands are noted as providing a scenic setting for the listed estate buildings which provide the architectural value to the GDL. Horticulturally, the GDL has some value associated with the range of trees and shrubs in the woodland and gardens. The GDL is also noted as having some nature conservation, historic and artistic value as a work of art in its present form.</p>	Sensitivity: The GDL is ascribed a High sensitivity due to its national importance.
Logan Botanic Gardens <sup>6</sup>	28.74 km south south west	<p>The walled garden, which forms the heart of the GDL, was built before c.1860 and remodelled in the 1920s. It was developed into a Botanic Garden in 1969. It is listed for its outstanding horticultural and artistic interest, and has a high level of historic value (due to the ruins of the Old Castle of Balzieland, and the McDouall family connection), and a high level of architectural value (taking account of the category B listed feature wall).</p>	Sensitivity: The GDL is ascribed a High sensitivity due to its national importance.
Logan House (Balzieland) <sup>7</sup>	26.74 km south south west	<p>This GDL centres on category A listed Logan House for which it provides a setting. The present landscape structure of the GDL was laid out in late 18<sup>th</sup>/ early 19<sup>th</sup> century. This extensive GDL encompasses the Logan Botanic Garden GDL.</p> <p>The GDL is listed for outstanding level of artistic, horticultural and architectural interest. The McDouall family collected plant material of outstanding horticultural value, and the layout design of the policies is considered to be of outstanding artistic value. The architectural importance relates to the A listed Logan House. In addition, there is a high level of historic interest relating to the McDouall family, and scenic interest arising from the contrast the park and woodland provides to the surrounding landscape.</p>	Sensitivity: The GDL is ascribed a High sensitivity due to its national importance.
Monreith <sup>8</sup>	27.21 km south east	<p>The parkland at Monreith was laid out in the late 18<sup>th</sup> century as the setting to Myrton House, B listed, which was built during the same period. The White Loch of Myrton forms a landscape feature with the remains of Myrton Castle, a Scheduled Monument, on its east bank. In recent times extensions of the woodlands and more intensive farming practices have resulted in the loss of parkland. The original walled garden which was associated with Myrton Castle is now used cattle grazing. The remaining extent of parkland is approximately half that of the original</p>	Sensitivity: The GDL is ascribed a High sensitivity due to its national importance.

<sup>4</sup> NB: this assessment is made in the absence of special qualities citations which would set out the special qualities of the designation, and locations from which these may be experienced from. Without this information the assessment is, by necessity, general.

<sup>5</sup> Ardwell House GDL citation online at <http://portal.historicenvironment.scot/designation/GDL00026>

<sup>6</sup> Logan Botanic Gardens GDL citation online at <http://portal.historicenvironment.scot/designation/GDL00267>

<sup>7</sup> Logan House (Balzieland) GDL citation online at <http://portal.historicenvironment.scot/designation/GDL00268>

<sup>8</sup> Monreith GDL citation online at <http://portal.historicenvironment.scot/designation/GDL00287>

Designation/ Classification	Distance and Direction <sup>1</sup>	Description/ Special Qualities of Designation/ Classification	Sensitivity to Wind Development
		<p>parkland. However, woodland clumps remain and these form an important feature of the GDL. The designed landscape of Monreith provides a setting for the A listed building and scheduled monument which is of outstanding interest, and the parkland is considered to be of outstanding horticultural interest.</p> <p>The GDL is listed for outstanding artistic (given the quality of the original design), historical (due to the association with the Maxwell family), horticultural (although much of the valuable historical plant material has been lost or is under threat) and architectural (due to the A listed building for which is provides a setting) level of interest and some scenic interest.</p>	

Designation	Magnitude of Impact	Residual Effects
Galloway Hills RSA	<p>Ranging from None to Slight.</p> <p>The ZTV illustrates that the Proposed Development would potentially be visible from the west-facing slopes on the western side of the RSA at a distance of 13 km at the closest point of potential intervisibility. These slopes are generally covered in mature forestry relating to the Glen Trool and Larg Fell areas, and forestry on the slopes of Cairnsmore of Fleet, reducing actual views from these locations. Beyond these areas visibility becomes more fragmented and increasingly distant.</p> <p>The key characteristics of the RSA with potential to be impacted by the Proposed Development are noted below along with a summary of the potential magnitude of impact on each of these.</p> <ul style="list-style-type: none"> <li>LCT 4: Narrow wooded valleys: these valleys form part of the setting to the hills and generate the strong contrast that is a feature of this RSA.</li> </ul> <p>Potential views of the Proposed Development within this part of the RSA are limited to the upper reaches of the Cree valley. However, this part of the RSA is subject to extensive mature woodland cover from which views of the Proposed Development would be severely restricted. Consequently, impacts on this element of the RSA would be severely restricted the Proposed Development proving to not be discernible and to result in no appreciable change to this element.</p> <ul style="list-style-type: none"> <li>LCT16: Upland Fringe: these areas form a prominent western fringe of the Galloway Hills mass.</li> </ul> <p>Theoretical views of the Proposed Development would be severely restricted by existing woodland and groups of trees. It is possible that there may be glimpsed views of the Proposed Development from parts of the upper slopes. However, this would result in very limited change to the baseline character of this element of the RSA resulting in Negligible magnitude of impact on the landscape character.</p> <ul style="list-style-type: none"> <li>LCT2: Coastal Flats: the strongly estuarine character is dramatically juxtaposed against the Galloway Hills behind.</li> </ul> <p>By definition this element of the RSA is low-lying. The largest area of theoretical visibility is around Creetown from which Viewpoint 7 (EIAR Volume 3b: Figures 5.15a to 5.15f) illustrates the degree to which the Proposed Development would be visible. Magnitude of change is assessed to be Negligible since the would be no perceptible change to the elements of the landscape in this part of the RSA.</p> <ul style="list-style-type: none"> <li>LCT18 and 18a: Foothills and Foothills with Forest: these areas contribute to the setting to the Galloway Hills and many have strong upland and forested upland characteristics in their own right.</li> </ul> <p>The ZTV demonstrates that views of the Proposed Development would be limited to the forested western slopes of Shiel Hill near Glenquicken. Any views from these areas would be filtered and over distances of 24 km. Within the other parts of these Foothills and Foothills with Forest within the RSA there are very limited areas of theoretical visibility at distances of over 30 km. The magnitude of change is considered to be Negligible for the Forests and Foothills (with and without Forest) within the RSA as there would be no perceptible change to the landscape character of these elements.</p> <ul style="list-style-type: none"> <li>LCT21 and 21a: Rugged granite uplands and Rugged granite uplands with forest.</li> </ul> <p>The area around Glentrool (LCT21a) has potential for the greatest clearest views of the Proposed Development as demonstrated by the ZTV. There is potential for views of the Proposed Development at distances of 14 km to 22 km. However, the area is heavily forested effectively screening views with the exception of a views along the valley of Glen Trool. Viewpoint 4 (EIAR Volume 3b: Figures 5.12 a to 5.12h) typifies potential views towards the Proposed Development from locations along this Glen. This also illustrates the relationship of the Proposed Development to the existing baseline group of existing turbines visible from Viewpoint 4. The existing cumulative context of the Proposed Development is addressed in the Setting section below. Intervisibility with this element of the RSA without forest cover is associated with the southwestern slopes of the Merrick and the ridge which extends northwards taking in the summit of Kirriereoch Hill onto Carmaddie Brae, Nick of Carclach, and The Cargaie. These craggy uplands are over 21 km distance (from nearest turbine to closest area of potential visibility) and elevated giving rise to panoramic views. Viewpoint 2 (EIAR Volume 3b: Figures 5.10a to 5.10j) illustrates the view from the summit of Merrick which extends out over the lower land to the sea. This illustrates the current wind developments visible from Merrick within which grouping the Proposed Development would be situated (the baseline cumulative context is addressed in the Setting section below).</p> <p>The magnitude of change on this element of the RSA is assessed to be Slight since the change would be discernible; however this would not alter the dramatic landscape for which the area is designated.</p>	<p>Ranging from Moderate to None, not significant.</p> <p>The Proposed Development is located outwith the RSA and would therefore have no direct physical effects on this designated area.</p> <p>Residual effects on the RSA would range from none (in locations with no visibility of the Proposed Development), to Moderate at Cairnsmore of Fleet and parts of Glentrool and Merrick since the Proposed Development would consolidate the baseline wind development visible to the west.</p>



Table 5.1.3: Assessment of Residual Effects on Designated/ Classified Landscapes		
Designation	Magnitude of Impact	Residual Effects
	<ul style="list-style-type: none"> <li>LCT20: Coastal Granite Uplands: alongside the rugged granite uplands, these areas are central to the scenic quality of this designation.</li> </ul> <p>This element of the RSA centres on Cairnsmore of Fleet which is the highest of the Solway Hills and the southernmost Graham in Scotland. The ZTV demonstrates that there is potential intervisibility with western slopes. The landform of Cairnsmore of Fleet, Meikle Multaggart and Millfore Hill screens the peaks to the west and limits the views of the Proposed Development. Viewpoint 5 (EIAR Volume 3b: Figures 5.13a to 5.13j) illustrates view of the Proposed Development which is situated on the lower land in the far distance within the context of a group of existing (baseline) developments which is described more fully in the Setting section below. The magnitude of impact to this element of the RSA would be Slight as the change would be discernible yet the underlying landscape character would remain consistent with the present baseline character.</p> <p><b>Setting of the Galloway Hills RSA and the Existing Wind Farm Context</b></p> <p>Overall the Proposed Development would have the potential to alter the setting of the RSA as perceived from the west within Dumfries and Galloway. The relationship of the RSA with the coastline and mud flats to the south, and to the rugged uplands of South Ayrshire to the north would not be change.</p> <p>The Proposed Development lies over 12 km west of the RSA directly neighbouring several wind developments including: Kilgallioch to the north; Airies to the east, and Artfield Fell and Balmurrie Fell to the west. The Kilgallioch wind turbines extend northwards into the moorland plateau in South Ayrshire, and Artfield Fell turbines along with its neighbouring wind farm, Balmurrie Fell are set behind the Proposed Development as viewed from the RSA.</p> <p>In elevated views from the RSA this group of the wind development forms a component of the surrounding landscape. Westwards, the grouping noted above is substantiated by Arecleoch turbines to the north. Glen App wind farm is visible further west, and the existing Glenchamber, Carscreugh and Barlockhart Moor wind farms extend the influence of wind turbines southwards. Existing groups of wind turbines are interspersed throughout the landscape looking northwest (Assel Valley, Hadyard Hill, Mark Hill and Dersalloch). To the northeast lie Windy Standard, Windy Standard II, Hare Hill and its extension, Sanquhar and Whiteside Hill, and Whether Hill and Blackcraig Hill wind farms are situated to the east of the RSA.</p> <p>These existing wind farms are part of the existing baseline of the wider landscape around the RSA. The Proposed Development would fit within the existing Kilgallioch grouping and would not bring wind turbines geographically closer to the RSA. Therefore, the magnitude of impact of the Proposed Development on the setting of the RSA is considered to be Slight, since the alteration to the baseline would be discernible but would not change the underlying landscape character, and the composition of views from the available from elevated parts of the RSA would also remain broadly consistent with the baseline.</p>	
Machars Coast RSA	<p>Ranging from None to Negligible.</p> <p>There are several small areas of theoretical intervisibility with the Proposed Development and actual intervisibility would be reduced by the groups of trees associated with dwellings and estates within the RSA. The remainder of the RSA would experience no views.</p> <p>The key characteristics of this RSA encompass the rocky headland of much of LCT1 and 1a which are defined by the diverse and rocky coastline with and without gorse covered knolls. There is no intervisibility with the coastline, and any potential views of the Proposed Development would be from higher land of the few hills within the RSA. Any potential intervisibility would be distant and in the opposite direction to the coastline.</p> <p><b>Setting of the Machars Coast RSA and the Existing Wind Farm Context</b></p> <p>The scenic quality of the rocky coastline is the main feature of this RSA. The setting for the coastline is the higher land immediately inland from the coast which is already contained within the RSA. This ensures that there is little visibility of the coastline from further inland. Since the Proposed Development would not be seen from the coastline and any views are from the higher land on the Fell of Barhullion, Hill of Glasserton, Howe Hill of Haggagmalag, Gallow Hill, and elevated area near Jultock Point. These views would be in the opposite direction to the coastline therefore, the Proposed Development would have no effect on the setting of the RSA.</p> <p>Overall, the Proposed Development is assessed to result in a Negligible magnitude of impact from locations where there is intervisibility, and None for most of the RSA from where there are no views of the Proposed Development.</p>	<p>None, not significant.</p> <p>The Proposed Development is located outwith the RSA and would therefore have no direct physical effect on this designated area.</p> <p>No residual indirect effects are predicted on the RSA since there would be no visibility of the Proposed Development from the coast. Any views of the Proposed Development would be from limited elevated locations and distant (over 28 km) and in the opposite direction to the coastline.</p>
Mochrum Lochs RSA	<p>Ranging from Slight to None.</p> <p>The ZTV demonstrates that there are two sustained areas of potential visibility, one of which relates to the elevated moorland around Craiglarie Fell, and the other extends along the southern boundary of the RSA. There is a further, smaller area of theoretical visibility on the high ground of Throne of Gargie situated between Castle Loch and Mochrum Loch. Approximately half of the RSA would experience no intervisibility with the Proposed Development.</p> <p>The key characteristic of this RSA is the interplay between the various lochs scattered within a softly undulating topography (LCT17b). The connection of this landscape to the coastal strip, and the panoramic views available across the Firth are also notable features of this RSA. Viewpoint 9 (EIAR Volume 3b: Figures 5.17a to 5.17h) illustrates the view to the Proposed Development from the minor road just south of Mochrum Loch.</p> <p><b>Setting of the Mochrum Lochs RSA and the Existing Wind Farm Context</b></p> <p>The setting of this RSA is contained by large areas of forestry along the northern boundary and there are further areas of forestry plantation within the designated area including:</p> <ul style="list-style-type: none"> <li>a large swathe of forestry in the northwestern part of the RSA;</li> <li>a smaller area to the south of Mochrum Loch, and</li> <li>a further large area on the eastern boundary, part of which encroaches into the RSA.</li> </ul>	<p>Ranging from Moderate to None, not significant.</p> <p>The Proposed Development is located outwith the RSA and would therefore have no direct physical effects on this designated area.</p> <p>Residual effects on the RSA would range from none (in locations with no visibility of the Proposed Development), to slight along the southern boundary of the RSA and the elevated areas of land associated with Craiglarie Fell and Throne of Gargie.</p>

**Table 5.1.3: Assessment of Residual Effects on Designated/ Classified Landscapes**

Designation	Magnitude of Impact	Residual Effects
	<p>These areas of forestry along with the small hills associated with the drumlins landform to the east form the setting to the low-lying lochs within undulating topography which is one of the key characteristics of the RSA. The setting for the panoramic views is the coast road, Luce Bay and the Rhins peninsula beyond.</p> <p>The Proposed Development is too distant and in the opposite direction to the panoramic views towards the sea to have any impact on the setting of this RSA.</p> <p>Several wind farms are visible looking north from within this RSA as illustrated in Viewpoint 9, including Kilgallioch, Airies, Artfield Fell and Balmurrie Fell. The Proposed Development would always be seen in context of these wind farms from this RSA. It would be a distinct element within the view northwards, relating to the landscape beyond the hills and forestry which provide the setting for the RSA. The panoramic views to the south would not be affected.</p> <p>The magnitude of impact is assessed to be Slight since the Proposed Development, whilst visible on the horizon, would not change the experience of the lochs and rolling landscape of the RSA. Furthermore, the Proposed Development would be situated in a part of the same part of the landscape that has existing wind turbines and this is in the opposite direction from the coast and the panoramic views, so the landscape characteristics of the RSA would remain unaltered.</p>	
Rhins Coast RSA	<p>Ranging from Negligible to None.</p> <p>The ZTV demonstrates that potential intervisibility is limited to the eastern and southern parts of the RSA. The most sustained areas of potential visibility is along the A716 corridor along the eastern coast of the Rhins Peninsula and at the Mull of Galloway. Areas of theoretical visibility also extend over the northern and eastern slopes of Inshanks Fell as well as the elevated areas of Barncorkie Moor and Cairn Fell. There is a band of potential visibility across the northern slopes between Terally Point and Port Logan. There are also further areas of potential visibility within parts of the Logan House estate, around Ardwell, and on Bailie Hill and Cairngarroch Hill on the west coast. There are other more fragmented areas of theoretical visibility along the Peninsula and these diminish leaving the northern half of the RSA free from intervisibility.</p> <p>The key characteristic of this RSA includes the rocky coastline with steep cliffs, raised beaches and rocky foreshores, and the panoramic views towards the sea (LCT1).</p> <p>Viewpoint 11 (EIAR Volume 3b: Figures 5.19a to 5.19f) illustrates the view to the Proposed Development from the Mull of Galloway.</p> <p><b>Setting of the Rhins Coast RSA and the Existing Wind Farm Context</b></p> <p>At over 24 km inland from the RSA, the Proposed Development would have no impact on the setting of the RSA.</p> <p>Existing wind farms would be visible from this RSA from eastern vantage points. Wind farms visible in the distance in one large cluster include: Barlockhart Moor, Carscreugh, Glenchamber, Balmurrie Fell, Airies and Kilgallioch.</p> <p>Arcleuch is visible to the west of this large cluster, and Glen App is barely discernible further west on the horizon. Even further west, on the Rhins peninsula, the tips of the North Rhins are just visible.</p> <p>The magnitude of impact is assessed to be Negligible where there are possible views of the Proposed Development since it would be imperceptible within the cluster of existing wind farms visible on the horizon at a distance of over 24 km. This would not alter the experience of the scenic coastline and panoramic views that are the defining features of this RSA.</p>	<p>Minor to None, not significant.</p> <p>The Proposed Development is located outwith the RSA and would therefore have no direct effects on this designated area.</p> <p>Residual effects on the RSA would range from none (in locations with no visibility of the Proposed Development), to negligible along the south-eastern boundary of the RSA.</p> <p>(NB the sensitivity of the RSA is High to Medium as analysed in the table above).</p>
Scenic Area (South Ayrshire)	<p>Slight overall.</p> <p>Rugged uplands – Slight.</p> <p>The Proposed Development would be seen distantly (at distances of over 24 km) and would occupy a small part of what are generally panoramic views. The Proposed Development would be seen within a substantially developed context next to and indistinguishable from the existing Kilgallioch turbines to the north and Airies Wind Farm to the southeast of the proposed turbines. Within this grouping, the Proposed Development would be indiscernible as a separate development. It would not alter the underlying landscape character as perceived in panoramic views.</p> <p>South Ayrshire foothills – Negligible.</p> <p>The ZTV shows that there would be limited geographical areas of potential visibility within this LCT. Theoretical visibility would occur in small areas of the upper slopes and summits of a several hills within these foothills, namely:</p> <p>Valleys and Glens – None.</p> <p>The few theoretical views possible are from upper slopes and summits of Glen App and Duisk Valley. There would be no views from the valley/ glen floor or from mid/ lower slopes.</p> <p>Plateau moorland – Slight.</p> <p>This part of the designation is heavily influenced by existing wind farms including Arcleuch, Kilgallioch and Mark Hill. Visibility of the Proposed Development would be to the south of the existing Kilgallioch windfarms.</p> <p><b>Setting of the South Ayrshire SA and the Existing Wind Farm Context</b></p> <p>The setting of this SA is not described as it extends over such a large part of the South Ayrshire administrative area and has no citation for reference.</p> <p>The baseline wind farm context is described in the paragraphs above.</p>	<p>Minor, not significant.</p> <p>The most sensitive parts of the SA would have little visibility and/ or are distant and the landscape character of these areas would not be altered as a result of the Proposed Development.</p>
Ardwell House GDL	<p>None.</p> <p>The importance of the GDL is due to the high level of interest for both its scenic (referring to the woodlands and views of this landscape from surrounding areas) and architectural (in terms of the listed buildings) value. These elements of the GDL are inward looking within the boundaries of the designation.</p>	<p>None.</p> <p>The Proposed Development is located over 24 km from the GDL and the areas of highest interest would have no views of the Proposed Development. It would have no effect on the appreciation of the</p>

<b>Designation</b>	<b>Magnitude of Impact</b>	<b>Residual Effects</b>
	The ZTV shows that there is potential for a large proportion of the GDL to experience intervisibility with the Proposed Development. However, the amount of woodland planting, especially around the listed Ardwell House and Ardwell Mains would severely limit views of the Proposed Development from the areas of most interest. There is potential for some views of the Proposed Development from the open areas of farmland, and these would be filtered by a combination of mature trees, buildings and the rolling topography. Any filtered views would be distant, and would not alter the GDL nor have any bearing on the qualities for which the GDL is designated	scenic or architectural elements which contribute to the designation as a GDL. Therefore the residual effects on the GDL would be None.
Logan Botanic Gardens GDL	None. The ZTV shows some potential intervisibility between the GDL and the Proposed Development. However, any potential views would be screened by the extensive mature tree planting and built structures within the GDL. Furthermore, this GDL is situated within the Logan House GDL which is also extensively wooded which further reduces the potential for views towards the Proposed Development. The GDL is listed for its outstanding horticultural and artistic interest and has a high level of historic value. The magnitude of impact on these interests would be None since the Proposed Development would not be visible from the GDL.	None. The Proposed Development is located over 28 km from the GDL and there would be no views of the Proposed Development. There would be no residual effects on the GDL.
Logan House (Balzieland) GDL	None. The ZTV indicates that there are patches of theoretical visibility across the higher ground of the GDL. However, given the large amount of mature policy woodland both within and on the boundary the GDL, it is unlikely that there are any sustained areas of direct intervisibility. Any possible intervisibility would be limited to the open fields and views would be heavily filtered and distant at over 26 km. These would not be altered in any way. The GDL is listed for outstanding level of artistic, horticultural and architectural interest and high level of historic and scenic interest which relates to the contrast between the landscape of the GDL and the surrounding landscape. The magnitude of impact is assessed as None on the outstanding interests since there would be no intervisibility between the listed buildings and within the areas of policy planting. The magnitude of impact on the open fields that experience some heavily filtered views is assessed as Negligible as the Proposed Development would be barely discernible given the distance and filtered nature of potential views.	None. The Proposed Development is located over 26 km from the GDL and there would be no views of the Proposed Development. There would be no residual effects on the outstanding interests of the GDL as the Proposed Development would not influence the artistic, horticultural or architectural interests since any potential views would be screened by the policy planting. Whilst there are potential views in parts of the open fields on the periphery of the GDL, these would not contribute to any change on the appreciation of the elements for which it is listed.
Monreith GDL	None. The GDL is listed for outstanding artistic, historical and horticultural value, as well as for the importance of the grounds as a setting for the A listed building. The ZTV illustrates that the potential for intervisibility is limited to one small area in the northern part of the GDL to the east of White Loch. However, any potential views are likely to be screened or heavily filtered by the mature tree planting on the boundary of the GDL, along the B7021, as well as other intervening field boundary planting. Given the lack of visibility, the magnitude of impact on this GDL is assessed as None since the Proposed Development would have no influence on any of the interests for which the GDL is listed.	None. The Proposed Development is located over 26 km from the GDL and there would be no views of the Proposed Development save from one limited geographical area near the northern boundary which may experience heavily filtered glimpses of the Proposed Development. Since there would be no potential impact on the qualifying interests of the GDL and the character of the GDL would remain wholly intact, there would be no residual effects.

<b>Designation</b>	<b>Magnitude of Impact</b>	<b>Residual Cumulative Effects</b>
Galloway Hills RSA	In-addition: Negligible/ None. In-combination: Substantial. The Proposed Development would be situated centrally within the existing group of operational developments which include Airies, Artfield Fell, Balmurrie Fell, Glenchamber, and Kilgallioch wind farms. The in-planning Kilgallioch extension would link the operational Kilgallioch turbines, and the scale of Kilgallioch extension would match that of the Proposed Development. In the expansive, panoramic views from the RSA, other groups of operational and in-planning wind farms are dotted around the landscape on the lower land removed from the mountainous landscape of RSA. Overall the existing wind development forms a diverse and complex component of the landscape in which the Proposed Development would form a noticeable addition to the existing group of turbines at Artfield Fell. It would effectively consolidate the existing group of turbines and whilst remaining discernible. Of itself, the Proposed Development would not alter the baseline character of the landscape, although it would add to the overall influence of wind development to the west.	In-addition effects: Minor/ None, not significant. In-combination effects: <b>Major</b> , significant. The existing, consented and in-planning pattern of wind energy development is wide-spread and complex. The Proposed Development would be noticeable from elevated parts of the RSA that have potential views westwards. It would add a layer of complexity to the scale of vertical elements in the landscape. The change would be limited to an area already influenced by wind development so the experience of the surrounding landscape from the elevated vantage points within the RSA would remain largely the same.
Machars Coast RSA	In-addition: None. In-combination: None. The Proposed Development would be 26.2 km from this RSA and there are few areas of theoretical visibility on the higher ground. Notably, there would be no potential views from the coastline. The varied, rocky coastline and relatively undeveloped nature of the Peninsula LCT which underpins the key characteristics of the RSA would not be influenced by the Proposed Development. Potential views of the Proposed Development from the few higher altitudes, would be in the opposite direction to the rocky coastline. Therefore, the Proposed Development is found to have a no effect on the key characteristics of the RSA would have no impact on the scenic quality or setting of this RSA. The changes to the cumulative baseline are limited to wind developments north of the A75 and would not be perceptible from this RSA and in the opposite direction to the key views.	In-addition effects: None. In-combination effects: None. The Proposed Development and changes to the existing wind development and further changes to the existing wind energy baseline would have no residual effect on this RSA due to distance and orientation.

Table 5.1.4: Assessment of Residual Cumulative Effects on Classified Landscapes		
Designation	Magnitude of Impact	Residual Cumulative Effects
Mochrum Lochs RSA	<p>In-addition: Negligible. In-combination: Moderate.</p> <p>The Proposed Development would form a minor addition to the overall influence of wind energy development being situated in the same field of view as existing wind farms, in between the operational Glenchamber turbines (to the west) and Airies wind farm (to the east), and in front of the operational Kilgallioch wind farm. The in-planning Kilgallioch turbines, and in-planning (scoping) Airies II would notably substantiate presence of wind turbines in this grouping.</p> <p>The Proposed Development in combination with Kilgallioch Extension (in-planning) and Airies II (in-planning: scoping) would appear to draw wind development marginally closer to the RSA whilst still clearly relating to the area outside the immediate landscape of the RSA.</p>	<p>In-addition effects: Moderate/ Minor, not significant. In-combination effects: <b>Major/ Moderate</b>, significant.</p> <p>The Proposed Development would add 12 turbines to the complex and diverse array of existing, proposed and in scoping wind energy developments on the northern horizon (views permitting).</p>
Rhins Coast RSA	<p>In-addition: Negligible. In-combination: Slight.</p> <p>Where visible, the Proposed Development would be virtually indiscernible within the context of the existing Glenchamber, Carscreugh, Barlockhart Moor, Artfield Fell, Balmurrie Fell, Kilgallioch, and Airies developments, as well as the in-planning Kilgallioch Extension and Aires II (scoping) wind developments. These developments would be visible in restricted views on the horizon looking inland.</p>	<p>In-addition effects: Moderate/ Minor, not significant. In-combination effects: Moderate, not significant.</p> <p>The addition of the Proposed Development would be virtually indiscernible within the group of existing, consented and in-planning wind developments which would be removed from the RSA and visible on the horizon looking northeast inland.</p>
Ardwell House GDL	<p>In-addition: None. In-combination: None.</p> <p>This is an inward-looking GDL with limited visibility of the Proposed Development which would be located over 24 km distance. Where vantage points allow views, the Proposed Development would be virtually indiscernible within the operational consented wind farms including Arecleoch, Chirmorie, Glenchamber, Carscreugh, Barlockhart Moor and Extension, Artfield Fell, Balmurrie Fell, Airies and Kilgallioch. These schemes would be potentially supplemented by Kilgallioch Extension (in-planning), Airies II (in-planning: scoping). Other wind farms visible to the west of this grouping are; Glen App, and North Rhins.</p> <p>Given the inward nature of this GDL and the amount of woodland and planting which would limit potential views from the elements for which the GDL is listed, there would be no cumulative in-addition and in-combination magnitude of impact on the elements for which the GDL is listed.</p>	<p>In-addition effects: None. In-combination effects: None.</p> <p>The Proposed Development would result in virtually no change to the emerging pattern of cumulative wind farms that may be visible from open fields in the north of the GDL. However, these potential views would have no residual effect on the qualities which underpin the listing of this GDL.</p>
Logan Botanic Gardens GDL	<p>In-addition: None. In-combination: None.</p> <p>This GDL is located within the core of the Logan House GDL. Given the extensive mature plants within this GDL and the woodland within the Logan House GDL surrounding it, there would be no views of the Proposed Development or the other existing, consented and in-planning wind developments.</p>	<p>In-addition effects: None. In-combination effects: None.</p> <p>There would be no views of the proposed wind development nor any of the existing, consented or in planning wind developments.</p>
Logan House (Balzieland) GDL	<p>In-addition: None. In-combination: None.</p> <p>Whilst there may be occasional views of the Proposed Development and the cumulative context from open farmland on the periphery of the GDL, the elements for which it is listed would be screened by the mature policy woodland.</p>	<p>In-addition effects: None. In-combination effects: None.</p> <p>Whilst there may be occasional views from the surrounding farmland, visitors' experience of the components of the GDL for which it is listed would remain unchanged.</p>
Monreith GDL	<p>In-addition: None. In-combination: None.</p> <p>There is one small area of theoretical visibility as demonstrated by the ZTV on the small hill, in the vicinity of Mid Myrton Plantation and Nine Acre Plantation which would screen potential views. The existing Artfield Fell, Balmurrie Fell, Aires and Kilgallioch, and the in-planning Kilgallioch Extension and Airies II (in-scoping) developments would also potentially be visible from the small part of the GDL, on the hill within forestry plantations where they would be screened from view.</p>	<p>In-addition effects: None. In-combination effects: None.</p> <p>No views of the Proposed Development nor the emergent cumulative pattern of development would be possible from this GDL.</p>

## **Technical Appendix 5.2: Seascape and Landscape Character Type Descriptions**



## Technical Appendix 5.2: Seascape and Landscape Character Type Descriptions

### 1.1 Introduction

- 1.1.1 This technical appendix comprises both baseline information and the detailed assessment of potential likely significant effects on seascape and landscape character types within the study area.
- 1.1.2 Figure 5.3 (EIAR Volume 3a) illustrates the location and extent of both NatureScot<sup>1</sup> and Wind Capacity Study<sup>2</sup> (for Dumfries and Galloway Council, South Ayrshire and East Ayrshire Council areas) Landscape Character Types (LCTs) and Seascape Character Types (STCs) (from the NatureScot report on the assessment of sensitivity and capacity of the Scottish seascape in relation to windfarms<sup>3</sup>). All the STCs and LCTs which are found within the study area are listed in Table 5.2.1 below. This table also notes the LCTs that are omitted either because they fall entirely outside of the viewshed, or on the basis of distance combined with highly constrained theoretical visibility.
- 1.1.3 Table 5.2.2 of this technical appendix provides a description of each LCT and SCT which is assessed as part of the seascape and landscape character assessment. The descriptions noted refer to the key characteristics presented in the NatureScot Landscape Character Assessments, and sensitivity of each of these SCTs and LCTs is appraised in accordance with criteria presented in current LVIA guidance<sup>4</sup>. Notably the sensitivities allocated in the Wind Capacity Studies have not been used as the purpose of these studies is to provide strategic guidance to planners and developers. The wind capacity study for Dumfries and Galloway is addressed in the Planning Context section of the LVIA.
- 1.1.4 Table 5.2.3 presents the seascape and landscape assessment for each STC and LCT and Table 5.2.4 assesses the potential cumulative effects arising on each STC and LCT as a result of the Proposed Development.

NS Ref (Capacity Study LCT ref <sup>5</sup> )	Landscape Character Type	Distance and Direction from Proposed Development	Assessed in SLVIA	Justification for Omission
59 (1c)	Raised Beach Coast and Cliffs	20 km north west	No	No theoretical visibility.
62 (4b)	Coastal Headlands	42 km north	No	Theoretical visibility of up to 3 blade tips from a limited geographical extent of the LCT at a distance of over 40 km.
63 (5)	Coastal Valley with Policies	38.5 km north	No	No theoretical visibility.
64 (22)	Coastal Farmland and the Policies	14.5 km north west	No	One very limited area of theoretical visibility at 17 km on the elevated ridgeline on the boundary with Glenapp LCT14 – the Proposed Development would not be able to

NS Ref (Capacity Study LCT ref <sup>5</sup> )	Landscape Character Type	Distance and Direction from Proposed Development	Assessed in SLVIA	Justification for Omission
				influence the key characteristics of this LCT.
69 (10)	Upland River Valleys - Ayrshire	40 km north north east	No	No theoretical visibility.
70 (11)	Lower Dale – Ayrshire	27.5 km north	No	No theoretical visibility.
71 (12)	Middle Dale - Ayrshire	29 km north	No	No theoretical visibility.
72 (13)	Pastoral Valleys - Ayrshire	9 km north	Yes	-
73 (14)	Upland Glens	14 km north west	Yes	-
76 (17e)	Foothills - Ayrshire	19 km north west	Yes	-
77 (17d)	Low Hills - Ayrshire	32 km north	No	No theoretical visibility.
78 (18c)	Plateau Moorland - Ayrshire	6 km north	Yes	-
81 / (20b)	Southern Uplands – Ayrshire	11.5 km north west	Yes	-
82 (20c)	Southern Uplands with Forest - Ayrshire	9 km north west	Yes	-
83 (21)	Rugged Upland – Ayrshire	26.5 km north east	Yes	-
156 (1)	Peninsula	10 km south	Yes	-
157 (1a)	Peninsula with Gorse Knolls	27.5 km south south east	Yes	-
158 (2)	Coastal Flats – Dumfries and Galloway	11 km south west	Yes	-
159 (3)	Shallow Flat Bottomed Valley	3.5 km south west	Yes	-
160 (4)	Narrow Wooded River Valley – Dumfries and Galloway	12.5 km east north east	No	Views of the Proposed Development would be confined to an area of this LCT which is heavily

<sup>1</sup> Nature Scot Landscape Character Assessment in Scotland web page: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions> accessed on 3rd November 2020.

<sup>2</sup> Part 1 Wind Energy Development: Development Management Considerations Appendix C Dumfries & Galloway Wind Farm Landscape Capacity Study, Supplementary Guidance (February 2020) / South Ayrshire Landscape Wind Capacity Study (Updated August 2018) / East Ayrshire Landscape Wind Capacity Study (June 2018).

<sup>3</sup> NatureScot(S005) Commissioned Report No. 103: An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms (ROAME No. F03AA06)

<sup>4</sup> Guidelines for Landscape and Visual Impact Assessment, third edition, Landscape Institute and Institute of Environmental Management & Assessment (2013)

<sup>5</sup> South Ayrshire Wind Capacity Study (SAWCS); East Ayrshire Wind Capacity Study (EAWCS); Dumfries and Galloway Wind Capacity Study (DGWCS)

**Table 5.2.1: Seascape and Landscape Character Types within 45 km Study Area**

NS Ref (Capacity Study LCT ref <sup>5</sup> )	Landscape Character Type	Distance and Direction from Proposed Development	Assessed in SLVIA	Justification for Omission
				forested so any potential intervisibility would be screened.
164 (8)	Flooded Valley	38 km north east	No	No theoretical visibility.
165 (9)	Upper Dale – Dumfries and Galloway	36 km north east	No	No theoretical visibility.
167 (11)	Moss and Forest Lowland	7.5 km south	Yes	-
168 (12)	Drumlin Pasture in Moss and Moor Lowland	4.5 km east	Yes	-
169 (13)	Drumlin Pastures	12 km south east	Yes	-
172 (16)	Upland Fringe – Dumfries and Galloway	5.4 km south west	Yes	-
173 (17)	Plateau Moorland – Dumfries and Galloway	0.2 km south west	Yes	-
174 (17a)	Plateau Moorland with Forest – Dumfries and Galloway	Proposed Development within LCT	Yes	-
175 (18)	Foothills – Dumfries and Galloway	25 km east south east	Yes	-
177 -	Southern Uplands – Dumfries and Galloway	10.4 km north east	Yes	-
176 (18a)	Foothills with Forest – Dumfries and Galloway	16 km east	Yes	-
177 (19)	Southern Upland – Dumfries and Galloway	10.4 km north west	Yes	-
178 (19a)	Southern Upland with Forest – Dumfries and Galloway	39 km north east	No	No theoretical visibility.
179 (20)	Coastal Uplands	24 km east	Yes	-
180 (21)	Rugged Uplands – Dumfries and Galloway	17.5 km north east	Yes	-
181 (21a)	Rugged Uplands with Forest – Dumfries and Galloway	14.5 km east north east	Yes	-
STC 1	Remote High Cliffs	22 km south west	Yes	-
STC 3	Deposition Coastline, Open Views	13 km south west	Yes	-
STC 4	Outer Firth	17 km south east	Yes	-
STC 6	Narrow Coastal Shelf	18 km west north west	No	No theoretical visibility.
STC 9	Sounds, Narrows and Islands	16 km west	No	No theoretical visibility.
STC 10	Outer Firth with Islands	40 km north	No	No theoretical visibility.



Table 5.2.2: Seascape and Landscape Character Type Descriptions and Sensitivity Appraisal				
NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Distance and Direction <sup>6</sup> from Proposed Development	General Description of LCT including Key Characteristics	Sensitivity to the type of development proposed
72 (13)	Pastoral Valleys - Ayrshire	11 km north	<p>There are two units of this LCT within the study area. One unit, the larger of the two, encompasses the Stinchar Valley and the River Stinchar tributaries. The other unit extends to the upper reaches of the Water of Girvan Valley. It has no theoretical views of the Proposed Development so is not described any further.</p> <p>The key characteristics of this LCT are:</p> <ul style="list-style-type: none"> <li>• Steep sided valleys and flat-bottomed valleys;</li> <li>• Narrow and of intimate scale being strongly contained by adjacent uplands;</li> <li>• Landcover is diverse including shelterbelts, riparian and policy woodland which separates out small parcels of pasture;</li> <li>• Network of tree-lined winding roads;</li> <li>• Well settled valley with dispersed smattering of dwellings and farms;</li> <li>• The ridge lines that define the valleys are often dramatic such as Knockdolian Hill which is a prominent landscape feature in views along the western part of the Stinchar Valley;</li> <li>• In general, views are short to medium scale and focussed along the valley following the direction of travel.</li> </ul> <p>These valleys are well settled and intricately patterned landscapes with rural, picturesque character.</p>	<p>Susceptibility is High given the small, intimate scale of the valleys which could be overwhelmed by large scale structures.</p> <p>Value is High to Medium since the area is part a Scenic Landscape Area within the current LDP, and this reinforced by the picturesque quality of the valley.</p> <p>Sensitivity is High.</p>
73 (14)	Upland Glens	15 km north west	<p>Found in two locations within the study area at Glen Tigg and Glen App, the defining feature of this LCT is the narrow, high-sided upland valley landform and the following key characteristics include:</p> <ul style="list-style-type: none"> <li>• Distinctive profile comprising steep, often craggy slopes, with a rounded valley floor;</li> <li>• Complex and prominent ridgelines along tops of steep sided valley sides;</li> <li>• Land cover ranges from pasture on valley floors giving way to rough grassland on lower slopes and heather moorland on higher ground;</li> <li>• A small-scale landscape with steep sides containing views; and</li> <li>• The narrow width of these glens combined with the limited development within them generates a sense of remoteness in the least developed parts of the LCT.</li> </ul>	<p>Susceptibility is High given the small scale of the valleys, the sense of remoteness, and the complexity of landscape form.</p> <p>Value is High to Medium since the area is part a Scenic Landscape Area within the current LDP. In addition, the distinctive profile of the landform combined with the sense of remoteness lends an arresting quality to the views within the Glens.</p> <p>Sensitivity is High.</p>
76 (17e)	Foothills - Ayrshire	19 km north west	<p>The key characteristics of the foothills LCT include:</p> <ul style="list-style-type: none"> <li>• The landform of the foothills largely comprises slightly conical hills and rounded ridges with long shoulder slopes with narrow valleys cutting through;</li> <li>• Landcover is predominantly pasture on the lower slopes of the hills and valleys, with rough grazing on upper slopes and moorland on summits;</li> <li>• Relatively large areas of coniferous forest cover many of the rounded peaks and extend over much of the eastern part of the LCT;</li> <li>• Settlement is limited to a number of villages and farms in the northern part of the LCT and sparse settlement in upland areas to the south and east;</li> <li>• This gently undulating upland landscape is generally large scale and has a simple landcover pattern; and</li> <li>• Operational wind farms form a prominent feature of this LCT with three wind developments grouped in the central part of the LCT.</li> </ul>	<p>Susceptibility is Medium to Low given the medium to large scale of the landscape and the existing wind development which forms a feature within the central part of this LCT.</p> <p>Value is Medium: despite being within the Scenic Landscape Area designation, the landscape condition of the foothills LCT is heavily compromised by coniferous forestry plantations in the eastern portion of the LCT and wind development within the central area.</p> <p>Sensitivity is Medium.</p>
78 (18c)	Plateau Moorland - Ayrshire	6 km north east	<p>This LCT occurs twice within the study area to the north and northwest of the Proposed Development site. It includes the forested moors around Glen App and Barr Hill on the boundary with Dumfries and Galloway. The large scale plateau is relatively flat and has the following key characteristics:</p> <ul style="list-style-type: none"> <li>• Relatively flat and extensive plateau rising to soft contoured ridges;</li> <li>• Landcover is generally blanket bog, heather and grass moorland with extensive mosses and peatland;</li> <li>• Many extensive areas of coniferous forestry;</li> <li>• Largely undeveloped with a sparse network of roads;</li> <li>• Wind farms including Arecleoch and Mark Hill form a feature within the Barrhill unit;</li> </ul>	<p>Susceptibility is Medium to Low given the large scale and simple land cover of the LCT, and the existing large-scale wind development.</p> <p>Value is Medium to Low as the landscape condition of this LCT has been altered by the large-scale wind development and large-scale coniferous plantations.</p> <p>Sensitivity is Medium to Low.</p>

<sup>6</sup> Distance from closest proposed turbine to nearest part of the LCT with theoretical visibility of the proposed development.

**Table 5.2.2: Seascape and Landscape Character Type Descriptions and Sensitivity Appraisal**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Distance and Direction <sup>6</sup> from Proposed Development	General Description of LCT including Key Characteristics	Sensitivity to the type of development proposed
			<ul style="list-style-type: none"> <li>Glen App Wind Farm is a feature of the Glen App unit, and</li> <li>Open and exposed with long range views curtailed in places by undulations and local topography.</li> </ul>	
81 (20b)	Southern Uplands – Ayrshire	13.5 km north west	<p>There are two units of this LCT within the study area: one unit to the north and east of Glen App, the other encompasses the group of hills near Carrick Forest of which Craigenreoch is the highest peak.</p> <p>Key characteristics of this LCT include:</p> <ul style="list-style-type: none"> <li>Steep, smooth slopes rising to rounded summits;</li> <li>Relatively simple ground cover of grassland on exposed summits with occasional areas of coniferous forest/ shelterbelts;</li> <li>Very occasional areas of semi-natural woodland within sheltered glens and gullies, and</li> <li>An expansive and large scale landscape with a sense of remoteness due to the lack of settlements.</li> </ul> <p>The unit of the LCT near Glen App is the smaller of the two and varies from the Carrick Forest LCT in that:</p> <ul style="list-style-type: none"> <li>The upper reaches of the LCT is influenced by the neighbouring Arecleoch Wind Farm, and</li> <li>The overall height of hills is lower by approximately 100 m.</li> </ul>	<p>Susceptibility is Medium: whilst simple, large scale landscape would be conducive to wind development, the steep sloping hills add a layer of complexity.</p> <p>Value is High to Medium since the area is part a Scenic Landscape Area within the current LDP, and Local Landscape Area in the proposed LDP, and complexity of the landform makes for a more dramatic landscape.</p> <p>Sensitivity is High to Medium.</p>
82 (20c)	Southern Uplands with Forestry – Ayrshire	9 km	<p>This LCT occurs in three locations within the study area. The largest of these units of the LCT is by Dalmellington, and two smaller areas at Strawarren Fell southwest of Barrhill, and on the eastern edge of Carrick Forest south of South Balloch.</p> <p>Key characteristics:</p> <ul style="list-style-type: none"> <li>Relatively simple land cover predominately by forestry with areas of grassland;</li> <li>The dominant land use at Strawarren Fell unit of the LCT is energy generation as much of Arecleoch wind farm is sited in this area;</li> <li>Steep, smooth sides of the landform rise to rounded summits;</li> <li>A series of U-shaped, steep-sided valleys cut into the uplands;</li> <li>Infrastructure is relegated to the forestry and wind farm tracks and there is little settlement in these exposed uplands; and</li> <li>There is a sense of enclosure though much of this LCT as forestry foreshortens views.</li> </ul>	<p>Susceptibility is Medium to Low given the simple landscape pattern and large scale of uplands.</p> <p>Value is Medium as this is relatively common landscape type within the area with unremarkable scenic quality.</p> <p>Sensitivity is Medium.</p>
83 (21)	Rugged Upland - Ayrshire	26 km north east	<p>This LCT occurs in one location in the study area, where the dramatic landmark mountain range of Merrick crosses into Ayrshire near Loch Doon.</p> <p>Key Characteristics:</p> <ul style="list-style-type: none"> <li>Large, complex mountain range of dramatic, craggy scenery;</li> <li>Rugged and remote with strong wildness characteristics;</li> <li>Predominant landcover is heather moorland, rough grassland and areas of exposed rock outcrops;</li> <li>Woodland is generally limited to exceptional areas of coniferous forest on lower slopes;</li> <li>Signs of human influence are scarce, being limited to tracks and walkers' footpaths with roads around the fringes;</li> <li>A grand, large scale landscape with a remote and wild character; and</li> <li>Summits afford extensive panoramic views in all directions.</li> </ul>	<p>Susceptibility is High. Although this is a large-scale landscape the LCT has complex landform; a mountainous area that has a wild and remote character with little influence of human activity.</p> <p>Value is High due to the Wild Land allocation associated with the Merrick area.</p> <p>Sensitivity is High.</p>
156 (1)	Peninsula	11 km south	<p>There are two units of this LCT within the study area: the Rhins Peninsula and the Machars Coastal Promontory. They share the following common characteristics although the landscape of the Rhins Peninsula is more rocky and there is a greater extent of moorland in the Machars unit.</p> <p>Key Characteristics:</p> <ul style="list-style-type: none"> <li>Medium scale, gently undulating landscape;</li> <li>Low lying boggy hollows rising to pasture and gorse moorland;</li> <li>The coast is not generally visible beyond 1 km inland and the influence of the sea diminishes rapidly though there are some glimpses to the sea and windswept trees;</li> </ul>	<p>Susceptibility of this character type to change is High given the medium scale of the topography and pastoral fields combined with the complex landscape pattern along the coastline, as well as the open views towards the coastline from other parts of the peninsula.</p> <p>The value of this LCT is Medium to High accounting for the Regional Scenic Area designation which extends over much of the Rhins Peninsula and the Machars coast as well as the presence of cultural heritage associated with various inventory listed designed landscape and castles and hill forts.</p> <p>Sensitivity: High.</p>

Table 5.2.2: Seascape and Landscape Character Type Descriptions and Sensitivity Appraisal				
NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Distance and Direction <sup>6</sup> from Proposed Development	General Description of LCT including Key Characteristics	Sensitivity to the type of development proposed
			<ul style="list-style-type: none"> <li>The coast is often inaccessible with steep cliffs and raised beaches, in particular the western coast;</li> <li>The coastline is articulated by small rocky and sandy bays connected by a narrow stretch of land;</li> <li>Fields are generally medium scale and enclosed by drystone dykes or hedgerows, the exception being the Mull of Galloway which has distinctive shore turf on flat land, no field boundaries and steep cliffs to the sea;</li> <li>There are few small settlements and numerous, evenly spaced farmsteads;</li> <li>Some well-developed policy landscapes associated with the Logan House, and Ardwell House GDLs on the Rhins Peninsula, and Monreith House and Galloway House GDLs on the Machars Peninsula;</li> <li>The western coast of the Rhins Peninsula has a number of old forts and defensive castles; and</li> <li>There is a perceived sense of remoteness, especially on the Rhins Peninsula, due to the narrow roads and dispersed settlement pattern.</li> </ul>	
157 (1a)	Peninsula with Gorsey Knolls	28 km south south east	<p>There are three units of this LCT within the study area: Monreith, Burrowhead and around the Borness Point coastline. The Monreith and Burrowhead units are relatively small very similar character units. The Borness Point unit extends further inland and contains more gorse growing around rocky outcrops. All three units share the following key characteristics:</p> <ul style="list-style-type: none"> <li>Exposed coastal character;</li> <li>Complex rocky landform which is complimented in places by contrasting regular field patterns which are often small in scale;</li> <li>Rough areas of pasture with rocky outcrops and gorse;</li> <li>Stone walls associated with field boundaries for pasture; and</li> <li>Numerous forts, castles and old homesteads on clifftops and headlands.</li> </ul>	<p>Susceptibility of this LCT is High due to the complexity of the landform and small-scale elements in the landscape.</p> <p>The value of this LCT is High given the scenic value (much of the LCT is a designated Regional Scenic Area or National Scenic Area) and the various listed scheduled monuments and inventory listed designed landscapes.</p> <p>Sensitivity is High.</p>
158 (2)	Coastal Flats – Dumfries and Galloway	14 km south south west	<p>There are two units of this LCT within the study area: the Stranraer Basin and Wigtown and Cree, and Fleet Fringe. The landscape is defined by the coastal salt marshes and flat topography and relatively simple pattern of large fields. Key characteristics of this LCT include:</p> <ul style="list-style-type: none"> <li>Extremely low lying and flat topography;</li> <li>The Wigtown and Cree, and Fleet Fringe unit has an exposed aspect with long views over the coastal flats towards the sea and often towards the opposite coastline;</li> <li>The Stranraer Basin unit supports medium to large scale fields of improved pasture with some arable cultivation;</li> <li>Field boundaries defined by hedgerows or post and wire fences interspersed with gorse and hawthorn;</li> <li>Unenclosed salt marsh grazed by sheep;</li> <li>Groups of mature trees and shelter belts around large houses and farmsteads in coastal parkland; and</li> <li>Varied tree cover, generally with small-scale woodland and shelterbelts and occasional coniferous forestry plantation.</li> </ul>	<p>The relatively simple pattern of landcover in combination with flat topography results in Medium susceptibility.</p> <p>The value of this landscape is Medium to High due to the numerous listed scheduled monuments and the presence of listed designed landscapes. Additionally, parts of the Wigtown and Cree, and Fleet Fringe are designated as Regional Scenic Area and the east-most tip of this LCT extends into the Fleet Valley NSA.</p> <p>The overall sensitivity is Medium to High.</p>
159 (3)	Shallow Flat Bottomed Valley	3.8 km west south west	<p>This LCT relates to the Water of Luce valley. A shallow valley with a relatively flat bottom and steep sides. The key characteristics are:</p> <ul style="list-style-type: none"> <li>Shallow, flat-bottomed and steep sided valley;</li> <li>Pastoral valley floor and lower reaches with hedgerow boundaries and with semi improved grassland on higher slopes;</li> <li>Mature riparian vegetation along the sinuous river course with areas of mixed deciduous woodland extending up the parts of the lower slopes often transitioning to coniferous forestry on the higher slopes; and</li> <li>Settlement along the valley is limited to the small town of New Luce and a small number of scattered individual buildings including the remains of Glenluce Abbey near the mouth of the valley.</li> </ul>	<p>Susceptibility is considered to be High given the small and intimate scale of the valley which would be easily overwhelmed by large-scale structures.</p> <p>Value is Medium to High due to historic interest as evidenced by the various listed scheduled monuments within the valley.</p> <p>Sensitivity is High.</p>
167 (11)	Moss and Forest Lowland	7.5 km south	<p>This LCT occurs once within the study area at Machars and Mochrum, extending from Glenluce in the west to Kirkcowan in the east, and south to Culshabbin and Loch Head.</p>	<p>Susceptibility is Medium due primarily to the simple landform and medium to large scale of this LCT.</p>

**Table 5.2.2: Seascape and Landscape Character Type Descriptions and Sensitivity Appraisal**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Distance and Direction <sup>6</sup> from Proposed Development	General Description of LCT including Key Characteristics	Sensitivity to the type of development proposed
			<p>This LCT is defined by the landcover of wet moss and forestry. Key characteristics include:</p> <ul style="list-style-type: none"> <li>• Generally flat topography with the occasional small-scale craggy hills;</li> <li>• Mosaic of coniferous planting, wet moss and dry moorland;</li> <li>• Settlement within the LCT consists of remote dwellings/ farmsteads with few roads connecting these;</li> <li>• An unusual pattern of bright green pasture in domed areas within the muted and rough textured surrounding moorland;</li> <li>• A number of listed scheduled monuments including cairns and hill forts; and</li> <li>• Being largely uninhabited landscape there is a sense of isolation within this LCT, which is compounded by the forestry planting which shortens views and largely screens the wider landscape from view.</li> </ul>	<p>Value is High to Medium as the Mochrum part of the LCT has more complex landscape pattern of lochs within undulating small hills and is designated as a Regional Scenic Area.</p> <p>Sensitivity is High to Medium.</p>
168 (12)	Drumlin Pasture in Moss and Moor Lowland	5 km east	<p>This LCT is characterised by low domed drumlin forms that were created by glacial deposits. The low-lying areas of this LCT generally comprise flat wetlands, moss and flood plain. It is an extension of LCT169: Drumlin Pastures, and differs from it being marginally wetter, the drumlins hills are generally slightly higher and there is less settlement.</p> <p>Key characteristics of this LCT are:</p> <ul style="list-style-type: none"> <li>• Prominent pasture drumlins within flatter moss and moor creating a complex landscape;</li> <li>• Medium sized fields bounded by hedges and drystone walls; and</li> <li>• A sense of remoteness generated by the generally uninhabited nature of the landscape which supports remote dwellings/ farmsteads connected by small roads.</li> </ul>	<p>Susceptibility is Medium to High given the complex nature of this drumlins landscape.</p> <p>Value is Medium to High given the strongly coherent landscape character generated by the drumlins landform.</p> <p>Sensitivity is High to Medium.</p>
169 (13)	Drumlin Pastures	14 km south east	<p>Two units of this LCT occur within the study area. The nearest to the site, the Machars unit, lies approximately 14 km south east, and the Deeside unit which is over 35 km east. The defining characteristic of this landscape type is the distinctive drumlins landforms created by glacial deposits which gives rise to elongated mounds with smooth, convex outlines and resulting in an undulating landscape. Key characteristics include:</p> <ul style="list-style-type: none"> <li>• Drumlin landforms;</li> <li>• Medium scale grazing pasture fields on convex slopes;</li> <li>• Localised rugged knolls with gorse;</li> <li>• Small settlements and scattered farmsteads served by extensive network of minor roads, and</li> <li>• Frequent scattered groups and lines of trees associated with farmland and dwellings.</li> </ul>	<p>Susceptibility is High to Medium given the complex nature of this drumlins landscape.</p> <p>Value is High to Medium given the strongly coherent landscape character generated by the drumlins landform.</p> <p>Sensitivity is High to Medium.</p>
172 (16)	Upland Fringe – Dumfries and Galloway	8 km south west	<p>The landscape character of this LCT is defined by the slopes which transition from lowland valley to upland landscapes. The landform of the 3 units of this LCT within the study area (Camrie; Glentool, and Cairnharrow) is characterised by hill-fringe slopes from lowland to upland. The Carsecreugh wind farm is a feature within the Camrie unit of this LCT, and both the Camrie and Glentool units are influenced by cultural heritage and archaeology including distinct field shapes and occasional remains of pre-medieval buildings.</p> <p>The key characteristics of this LCT are:</p> <ul style="list-style-type: none"> <li>• Elevated rolling pastures;</li> <li>• Combination of improved and unimproved grassland in close proximity;</li> <li>• Hedgerow banks and tree lines along roads in lower-lying parts of the LCT;</li> <li>• Contrast between the wide-open elevated parts of the LCT and more intimate valleys that bisect it;</li> <li>• Panoramic views over valley and coastal lowlands; and</li> <li>• Cultural landscape features include inventory listed scheduled monuments and designed landscapes usually with associated grand houses.</li> </ul>	<p>Susceptibility is High due to the transitional nature of this LCT effectively linking lowland to highlands. The landscape is prominent when viewed from lower neighbouring areas forming the backdrop to views from adjoining landscapes.</p> <p>Value is High to Medium relating to the cultural importance of the landscape. In addition, the Glentool and Cairnharrow units fall within the Regional Scenic Area designation.</p> <p>Sensitivity is High.</p>
173 (17)	Plateau Moorland – Dumfries and Galloway	0.14 km west	<p>This is a large-scale, undulating landscape typified by moorland landcover with areas of large scale coniferous forests. This is largely a simple landscape, although the undulations become more marked and hill-like within the western part of the LCT. Wind farm developments contribute to the baseline characteristics, particularly in the south eastern part of this LCT where cumulative loading is a consideration for the future baseline.</p> <p>Key characteristics include:</p> <ul style="list-style-type: none"> <li>• Flat or gently undulating landform of large scale and extensive nature;</li> </ul>	<p>Susceptibility is Low to Medium given the large scale and simple land cover of the LCT: being Medium in open moorland and Low within areas of large scale coniferous plantations. There is potential for visual confusion as current baseline wind developments are small scale.</p> <p>Value is Medium: whilst this is not a designated landscape, it is used for recreation supporting numerous walks including a section of the Southern Upland Way.</p>

**Table 5.2.2: Seascape and Landscape Character Type Descriptions and Sensitivity Appraisal**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Distance and Direction <sup>6</sup> from Proposed Development	General Description of LCT including Key Characteristics	Sensitivity to the type of development proposed
			<ul style="list-style-type: none"> <li>Simple landcover of grass moorland and occasional improved pastures relating to upland valleys;</li> <li>Rough grazing farmland with pockets of mixed woodland;</li> <li>Sparsely populated with remote farms; marked at times by pockets of mixed woodland;</li> <li>Wind farm developments include: Artfield Fell, Balmurrie Fell and Glenchamber wind farms;</li> <li>Other built infrastructure relating to Pernwhirn Reservoir;</li> <li>Numerous scheduled archaeological sites; and</li> <li>An expansive landscape perceived to be remote.</li> </ul>	Sensitivity is Medium.
174 (17a)	Plateau Moorland with Forest – Dumfries and Galloway (Proposed Development LCT)	Proposed Development within this LCT	<p>This LCT is characterised by a large-scale plateau. The undulating appearance of this plateau is interrupted in places by small fells/ hills, which, in combination with the loch basins present add a degree of diversity to the otherwise very simple landscape. The landcover is also simple with large areas of coniferous forestry which is interspersed with open moorland and the occasional area of farmland. A key characteristic of this sparsely populated landscape is wind farms with the existing Airies and Killgallioch wind farms sited largely within this LCT and a variety of existing wind development in adjacent LCTs.</p> <p>Key characteristics are:</p> <ul style="list-style-type: none"> <li>Elevated flat or gently undulating large-scale landscape;</li> <li>Large-scale commercial plantations;</li> <li>Wind farms relating to areas of commercial forestry form a notable part of the baseline including Airies and Kilgallioch;</li> <li>Rough grassland and moorland in un-forested areas;</li> <li>Dark horizons formed by forest margins;</li> <li>Sparsely populated with remote farmlands and individual dwellings; and</li> <li>Occasional loch basins.</li> </ul>	<p>Susceptibility is Low to Medium: low within coniferous plantations and plateau landform, and medium in areas characterised by lochs and fells. There is potential for visual confusion as current baseline wind developments support various turbine typologies.</p> <p>Value is Medium to Low as there are no landscape designations and wind farms are a feature of the baseline character, however, it is valuable for recreation with several walks including the Southern Upland Way which crosses the LCT.</p> <p>Sensitivity is Medium to Low.</p>
175 (18)	Foothills – Dumfries and Galloway	29 km east	<p>Three units of this LCT are found within the study area, at Muck Burn by Loch Doon, Cairnharrow and Fleet units. The character of this LCT is generally undulating and diverse. Key characteristics are:</p> <ul style="list-style-type: none"> <li>Generally undulating land between 170 m and 250 m with rounded peaks (more elevated and rugged in western parts);</li> <li>Foothills dissected by incised valleys;</li> <li>Medium to large scale pasture fields bounded by stone walls with rough grazing on higher ground;</li> <li>Trees in sheltered pockets and infrequent copses on top of hills; and</li> <li>Many scattered farmsteads and small settlements within a network of minor roads.</li> </ul>	<p>Susceptibility is High as this an exposed and prominent landscape which often forms the backdrop and horizon on views from adjoining landscapes.</p> <p>Value is Medium to High accounting for the scenic quality of the hilly topography that bridges the low coastal areas to the uplands. In addition, parts of the LCT are designated a Regional Scenic Area (eastern part of the Cairnharrow unit of this LCT).</p> <p>Sensitivity is High.</p>
176 (18a)	Foothills with Forest – Dumfries	17 km east	<p>There are three units of this LCT within the study area which are defined by a predominance of forestry land cover over foothills, namely, within the Bargaly Glen, Laurieston Forest and Meikle Cullendoch Moss. The key characteristics are as follows:</p> <ul style="list-style-type: none"> <li>Homogenous forestry cover over undulating foothills, often enclosing hill pastures;</li> <li>Forestry is mixed coniferous interspersed with broadleaf trees, specifically along water courses and in lower lying valleys; and</li> <li>There are areas of more complex, smaller-scale landscapes with occasional lochs and estate policies, distinctive ridges and landmark summits.</li> </ul>	<p>Susceptibility is Medium accounting for the diversity in both the scale of the landscape and the features within it.</p> <p>Value is Medium as there are no designations covering this LCT.</p> <p>Sensitivity is Medium.</p>
177 (19)	Southern Uplands – Dumfries and Galloway	10.4 km north west	<p>This LCT encompasses large domed or conical hills rising to 200 m to 500 m hills. There are two units of this LCT within the study area. A small unit associated with Beneraird and a larger unit at Cairnsmore of Carsphairn.</p> <p>Key characteristics include:</p> <ul style="list-style-type: none"> <li>Large, smooth domed/ conical shaped hills, often dramatically sculpted landforms;</li> <li>Predominant landcover of grass with distinctive dark brown/ purple heather on some higher areas;</li> <li>Open, exposed character incised in places by small, intimate-scale valleys;</li> <li>Pockets of woodland within incised valleys; and</li> </ul>	<p>Susceptibility is Medium; whilst this is a large scale landscape, the dramatic nature of the hills increases susceptibility to wind development.</p> <p>Value is High to Medium whilst these hills are not too rare within the Dumfries and Galloway area, they do form distinctive landmarks and are valued for the dramatic landform.</p> <p>Sensitivity is High to Medium.</p>

<b>NS Ref (Capacity Study LCT ref)</b>	<b>Seascape/ Landscape Character Type</b>	<b>Distance and Direction<sup>6</sup> from Proposed Development</b>	<b>General Description of LCT including Key Characteristics</b>	<b>Sensitivity to the type of development proposed</b>
			<ul style="list-style-type: none"> <li>Wind development is a feature of the local landscape away from the dramatic slopes and skylines of the LCT.</li> </ul>	
179 (20)	Coastal Uplands	25 km east	<p>Cairnsmore Coastal Granite is the only unit of this LCT within the study area. Key characteristics of this unit of the LCT are:</p> <ul style="list-style-type: none"> <li>Granite hills rising steeply from the coast;</li> <li>Rugged landform with rough areas of 'till plain' and some contrasting areas of smoother topography; and</li> <li>Landcover is generally improved pasture with rough grazing.</li> </ul> <p>Granite stone walls and scattered farmsteads with buildings in granite or mainly grey or white colouring.</p> <ul style="list-style-type: none"> <li>Some policy parkland;</li> <li>Forests often used for recreation with waymarked forest trails and picnic areas, and</li> <li>The Regional Scenic Area designation covers this unit of the LCT.</li> </ul>	<p>Susceptibility is Medium to High given the large scale of the landscape combined with the complexity of localised landscape features.</p> <p>Value is Medium to High given the scenic quality of the rugged landform and the Regional Scenic Area designation which extends over most of this unit of the LCT.</p> <p>Sensitivity is High to Medium.</p>
180 (21)	Rugged Uplands – Dumfries and Galloway	18 km north east	<p>This LCT represents the dramatic mountains in the north west of Dumfries and Galloway which are associated with the granite mass which underlies the highest peaks of the Merrick area and the Rhinns of Kells. Key characteristics include:</p> <ul style="list-style-type: none"> <li>Rugged peaks rising steeply with craggy sides;</li> <li>Sparsely populated and exposed 'highland' landscape of granite outcrops on heather covered slopes;</li> <li>Dark cliffs and peripheral ridges;</li> <li>Numerous lochs and small burns; and</li> <li>Forests on lower slopes.</li> </ul>	<p>Susceptibility is High. Although this is a large scale landscape the mountainous topography and wildness characteristics would be susceptible to large scale structures.</p> <p>Value is High due to scenic quality of the dramatic mountains, the Wild Land allocation and Regional Scenic Area designation associated with the Merrick area.</p> <p>Sensitivity is High.</p>
181 (21a)	21a Rugged Granite Uplands with Forest – Dumfries and Galloway	15 km east north east	<p>There are three units of this LCT within the study area. Key characteristics include:</p> <ul style="list-style-type: none"> <li>Predominantly coniferous forests on lower slopes of rugged granite uplands;</li> <li>Views through clearings towards the heather covered upper slopes and granite outcrops; and</li> <li>Visitor facilities such as toilets, picnic areas and signs.</li> </ul>	<p>Susceptibility is High to Medium: High in open areas where there are vantage points across the wider landscape e.g. from summits, and Medium in areas of forestry.</p> <p>Value is High owing to the scenic quality of the rugged topography, and acknowledging the Regional Scenic Area designation, as well as the Wild Land allocation at Merrick.</p> <p>Sensitivity is High.</p>
STC 1	Remote High Cliffs	25 km south south west	<p>This SCT occurs in six locations of the Scottish coastline, although only the "Mull of Galloway and some headlands on the Solway Firth" section would experience potential intervisibility with the Proposed Development.</p> <p>Key characteristics:</p> <ul style="list-style-type: none"> <li>High cliffs, often over 200 m, with occasional sandy or stony bays at their base;</li> <li>Strong contrast between the sharply vertical line of the cliffs with the horizontal expanse of the sea;</li> <li>Access and views of the coastline from the interior of the landmass are restricted by high cliffs engendering a sense of remoteness; and</li> <li>The great height of the cliffs is awe-inspiring and exhilarating.</li> </ul>	<p>Susceptibility of this character type is Medium to Low given the remoteness and relatively large scale of the SCT.</p> <p>The value of this LCT is Medium to High as much of the coastline falls within the Regional Scenic Area designation, and the vertical scale of the cliffs may be compromised by other large-scale vertical elements.</p> <p>Sensitivity: Medium to High.</p>
STC 3	Deposition Coastline, Open Views	15 km south south west	<p>There are three areas of the Scottish coastline allocated to this SCT. The Outer Solway Firth is the section that has potential to be impacted by the Proposed Development.</p> <p>Key characteristics:</p> <ul style="list-style-type: none"> <li>Long, sweeping sandy beach;</li> <li>Softly defined coastline with sand dunes often backing the beach;</li> <li>A horizontal emphasis to the landscape of sky, sea and land;</li> <li>Behind the sand dunes grassland and gorse often give way to farmland; and</li> <li>This SCT is located near to a well settled area with a number of land uses including recreation and farming.</li> </ul>	<p>Susceptibility of this LCT is Medium to High given the complex pattern of landscape features and land uses.</p> <p>The value of this LCT is Medium as there are no designations covering this part of the coastline; it is not a rare character type, yet it has value for local people.</p> <p>Sensitivity is Medium to High.</p>
STC 4	Outer Firth	23 km south south east	<p>This SCT covers the Outer Solway Firth which falls within the study area.</p> <p>Key characteristics:</p> <ul style="list-style-type: none"> <li>A distinctive pattern of narrow inlets interspersed and contained by rocky headlands;</li> </ul>	<p>Susceptibility of this LCT is High to Medium due to the intricate pattern of landscape features along the coastal strip.</p>

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			<ul style="list-style-type: none"> <li>Smaller scale inlets generally contain broad estuarine flats and marsh with small settlement within sheltered inlets;</li> <li>The coastal strip is often backed by sloping land rising to hills;</li> <li>Forestry and policy landscapes form features of the hinterland; and</li> <li>Long views over estuarine sand, mud and salt marsh towards the opposite coast.</li> </ul>	The value of this LCT is High as part of the SCT is within the Fleet Valley NSA, and much of the coastline is designated a Regional Scenic Area. Sensitivity is High.

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
72 (13)	Pastoral Valleys - Ayrshire	<p>Negligible</p> <p>The ZTV indicates that potential intervisibility would be confined to a geographically small area on the upper slopes of the spur near the confluence of Feoch Burn and Lavery Burn, at the southern end of the Stinchar valley unit of this LCT. In this location forestry covers some of the higher slopes further reducing intervisibility. There would be no views to the Proposed Development from the valley floor or the lower slopes and the key characteristics of this LCT which contribute to the intimate scale, intricate patterned landscape and its picturesque character would remain unaffected by the Proposed Development.</p>	High	<p>None.</p> <p>The Proposed Development is outside the LCT and would therefore have no direct physical effect on it.</p> <p>Visibility would be highly constrained within the Stinchar Valley unit and there would be no possible views within the Girvan Valley unit. As potential views would occur where the upper slopes transition to the neighbouring Plateau Moorland LCT.</p>
73 (14)	Upland Glens	<p>None in respect of Glen Tigg unit and Negligible in the Glen App unit of this LCT</p> <p>There would be no views of the Proposed Development from the Glen Tigg unit of this LCT.</p> <p>Theoretical visibility is limited to the peaks of Ponderry Hill, Sanloch Hill and Mickloch Hill on the northern bank of Glen App. Since the overall area of theoretical visibility within this LCT would be small and limited to the hilltops, the Proposed Development would not change the landscape resource and the key characteristics of this LCT, as experienced from within the LCT, would not be altered.</p>	High	<p>None.</p> <p>The Proposed Development is outside the LCT, therefore there would be no direct physical effect on the LCT.</p> <p>There would be no change to Glen Tigg and no change would be experienced from within the valley at Glen App, and the key characteristics of the LCT would remain intact.</p>
76 (17e)	Foothills - Ayrshire	<p>Negligible.</p> <p>The ZTV shows that there would be limited geographical areas of potential visibility within this LCT. Theoretical visibility would occur in small areas of the upper slopes and summits of a several hills within these foothills, namely:</p> <ul style="list-style-type: none"> <li>Breaker Hill – approximately 20.5 km distance within forestry;</li> <li>Knockdaw Hill – approximately 22 km distance;</li> <li>Grey Hill, Fell Hill and Cairn Hill – approximately 24 km distance;</li> <li>Laggan Hill, Toweir Hill, Slaugh Hill, Doune Hill and Tralorg Hill – approximately 26 km distance. These hills host Assel Valley and Tralorg wind developments;</li> <li>Kirkland Hill and Benan Hill at approximately 24 km distance;</li> <li>Auchesoul at approximately 25.7 km distance;</li> <li>Mull of Miljoan at approximately 28 km distance and within forestry, and</li> <li>Wee Lanes (approximately 28 km), Maxwellston Hill (approximately 29.5 km) and Hadyard Hill (approximately 31 km), all of which are situated directly north of Hadyard Hill Wind Farm which would be intervening in views.</li> </ul> <p>There would be very limited alteration to the key characteristics of the LCT since views of the Proposed Development would be limited to the hilltops noted above. It is unlikely that the Proposed Development would be perceptible from these hills as it would be located at the southern extent of the existing Kilgallioch wind farm.</p>	Medium	<p>Minor/ None and not significant.</p> <p>Any potential visibility would be limited and occur on higher ground and the Proposed Development would be imperceptible in views as proposed turbines would be situated south of the existing Kilgallioch Wind Farm. There would be no potential views from the smaller scale valleys within the LCT.</p> <p>The Proposed Development would not alter or diminish the key characteristics of this LCT.</p>

**Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		Therefore, the magnitude of impact would be Negligible. There would be no discernible loss or alteration of the elements within the LCT that underpin the key characteristics.		
78 (18c)	Plateau Moorland	Ranging from Slight in the Barrhill unit to Negligible in the Glen App unit. The ZTV demonstrates that theoretical visibility would occur over parts of the Barrhill unit of the LCT and along the northern edge of the LCT unit near Glen App. These areas of potential visibility largely coincide with forestry in both units which would limit views of the Proposed Development. Some of the visibility within the Barrhill unit also coincides with the location of the Arecleoch and Mark Hill wind farms.	Medium to Low	Moderate/ Minor and not significant. The Barrhill unit of the LCT would be subject to Moderate/ minor effect due to the relative proximity of the Proposed Development which would increase the influence of wind development on the LCT. The LCT unit near Glen App would be subject to Minor/ None effects as the majority of this unit of the LCT would have no views of Proposed Development.
81 (20b)	Southern Uplands – Ayrshire	Ranging from Negligible to None. The ZTV indicates that potential visibility would be limited to the southern slopes of Fell Hill, Cairn Hill and Pinbreck Hill in the Carrick Forest unit of the LCT. The lower slopes of these hills are covered in forestry which would provide a degree of screening of the Proposed Development at these lower elevations. Where visible, the Proposed Development would be seen at distances of over 20 km and being situated south of existing Kilgallioch Wind Farm, it would be indistinguishable from the larger existing development. The unit near Glen App is closer to the Proposed Development at approximately 12 km and this unit too would experience a limited incidence of visibility, which would be confined to locations on the south eastern slopes of Leana Hill, Millcroon and Beneraird. This unit of the LCT neighbours the existing Arecleoch Wind Farm, and the Proposed Development would be seen in this context and set behind the existing Kilgallioch turbines. It is highly unlikely that the Proposed Development would be discernible as a separate wind development from this unit. The remainder of these units of the LCT would experience no views of the Proposed Development.	High to Medium	Minor to None and not significant. The areas from which views to the Proposed Development would be possible are limited in size and are located at between 12 km and 20 km. However, the majority of the LCT would experience no intervisibility with the Proposed Development. The Proposed Development would always be seen in the context of existing wind development of Kilgallioch and Arecleoch and the consented Chirmorie Wind Farm. Since the LCTs are north of the Proposed Development it would always be behind the Arecleoch, Chirmorie and Kilgallioch turbines, and indistinguishable as a separate development. Therefore, there would be very limited if any alteration to the characteristics of this LCT.
82 (20c)	Southern Uplands with Forest - Ayrshire	Ranging from Negligible where there are views within the Strawarren Fell unit and the unit south of South Balloch and None at Dalmellington. The largest unit of this LCT is located near Dalmellington, on the edge of the study area, some 42 km north east of the Proposed Development. The ZTV shows that there would be no possibility of views from this unit. The Strawarren Fell unit of this LCT is closest to the Proposed Development at 9 km from the Proposed Development, and the ZTV demonstrates that much of this unit would potentially experience views of the Proposed Development. However, Arecleoch wind farm extends over virtually all of this unit. In this context, where existing wind energy development is a defining characteristic of the existing LCT unit the Proposed Development would result in a Negligible impact on the characteristics of this landscape. Negligible impacts are also predicted in the unit south of South Balloch which lies to the north northeast of the Proposed Development. The ZTV illustrates that there is potential invisibility with the upper slopes around the eastern and western edges of the LCT. Any views would be over 22 km distant from the Proposed Development and given the forested nature of this unit, likely to be filtered or screened by intervening vegetation.	Medium	Minor and not significant. Whilst relatively close to the Proposed Development the Strawarren Fell is the site of the Arecleoch Wind Farm, and the South Balloch unit is distant and most potential views would be screened. None, at the Dalmellington unit as there is no theoretical visibility.
83 (21)	Rugged Upland - Ayrshire	Ranging from Slight to None. A large proportion of this LCT would be subject to no views of the Proposed Development. However, potential views would be possible from the western ridge of the Merrick hills, and would occur on part of the Range of the Awful Hand, along the southwest facing 'fingers' of landform and including the peaks of Tarfessock, Shalloch of Minnoch and the North Tip which are part of the 'Galloway Ring of Fire' (which includes 30 peaks in total, six of which are within this LCT). The summits and southwestern slopes of Shalloch and Eldrick Hill would also be subject to theoretical visibility. The Proposed Development would be seen distantly (at distances of over 24 km) and would occupy a small part of what are generally panoramic views. The Proposed Development would be seen within a substantially developed context next to and indistinguishable from the existing Kilgallioch turbines to the north and Airies	High	Moderate/ Minor and not significant. The Proposed Development is located outside this LCT and would therefore have no direct physical effects on it. Since the Proposed Development would be indistinguishable from the existing wind developments (Kilgallioch and Airies) it would not alter the key characteristics of the large, complex mountain range, nor would it affect extensive panoramic views as the additional proposed turbines would be contained within the field of view of the existing Kilgallioch and Airies turbines. However, it would marginally add to the influence of wind farm development as perceived within this LCT.



Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types				
NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		Wind Farm to the south. Within this grouping, the Proposed Development would be indiscernible as a separate development. It would not alter the underlying landscape character as perceived in panoramic views.		
156 (1)	Peninsula	<p>Negligible.</p> <p>There are two units of this LCT within the study area which form narrow strips of the coastal landscape on the Rhins Peninsula and Machars headland.</p> <p>The ZTV in Figure 5.3b (EIAR Volume 3a) indicates that visibility of the Proposed Development would occur predominantly along eastern parts of the Rhins Peninsula between Sandhead and Stranraer at distances of over 19 km.</p> <p>Viewpoint 14 (EIAR Volume 3b: Figures 5.22a to 5.22f) illustrates the view from Sandhead at just over 22 km, and Viewpoint 11 (EIAR Volume 3b: Figures 5.19a to 5.19f) shows the view from the Mull of Galloway at the southern end of the Rhins Peninsula, at around 38 km from the Proposed Development.</p> <p>Viewed from these locations the Proposed Development would be seen on the skyline of views to the east and north east and in the context of Killgallioch, Carsceugh, Artfield Fell and Balmurrie Fell developments. As with the existing turbines, the Proposed Development would be partially screened by intervening topography.</p> <p>Views from the Machars Peninsula would be fragmented and intermittent, often restricted by intervening topography and vegetation. Where the Proposed Development is visible, it would be seen distantly to the north and set amidst a highly developed skyline.</p> <p>Given the Proposed Development has limited visibility from this unit, its distance and partially screened position, and context within an already developed skyline, the magnitude of impact on the Rhins and Machars Peninsula would be Negligible.</p>	High	<p>Minor and not significant.</p> <p>The Proposed Development would not significantly affect the scale or characteristic pattern of land use or the sense of remoteness within the LCT, but would add to the existing highly developed context on a distant skyline that form a key characteristic of views from both units.</p>
157 (1a)	Peninsula with Gorsey Knolls	<p>Ranging from Negligible to None.</p> <p>The three units of this LCT, Monreith, Burrowhead, and Borneess Point are situated at a distance of approximately 27 km, 38 km, and 37 km respectively from the Proposed Development.</p> <p>The ZTV indicates that there would be fragmented areas of potential views from the Monreith unit of this LCT and limited theoretical intervisibility with the Burrowhead unit. From the Borneess Point unit views would be constrained and at over 40 km distance.</p> <p>Within the Monreith unit the landscape is typified by areas of mature woodland, either associated with the designed landscape of Monreith or connected to the local farmland. These blocks of mature trees would filter the potential views to the Proposed Development. The limited and distant views would ensure that the Proposed Development has little or no impact on the landscape character, especially as the key characteristics of this LCT pertain to the rocky coastline.</p>	High	<p>Minor to None and not significant.</p> <p>The Proposed Development is outwith this LCT therefore there would be no direct physical effects on it or any of its key constituent elements.</p>
158 (2)	Coastal Flats – Dumfries and Galloway	<p>Ranging from Negligible to Slight.</p> <p>There are two units of this LCT within the study area: the Stranraer Basin and the Wigtown and Cree, and Fleet Fringe units.</p> <p>The ZTV demonstrates that the Stranraer Basin unit would have constrained views from Luce Sands at a distance of approximately 14 km. This area of the coastline is declared a danger zone and therefore discouraged for public use as it is used by the MOD for training and practice. A sustained area of theoretical intervisibility occurs along the western fringe of this unit of the LCT around Stoneykirk to Bridgebank.</p> <p>There is a further area of fragmented and constrained potential visibility around Boreland Wood near Lochans Moor and Little Lochans.</p> <p>The Proposed Development would be at approximately 17 km distance and views would be filtered by intervening tree cover within shelterbelts and along field boundaries. The Proposed Development would be seen within a group of existing wind developments including Carscreugh, Glenchamber Artfield Fell, Balmurrie Fell and Airies. The existing Kilgallioch scheme would also be theoretically visible from many of the same parts of the LCT. The Proposed Development would add to the concentration of wind energy developments, but is unlikely to be readily discernible. Therefore, the magnitude of impact is assessed to be Slight.</p>	High	<p>Minor and not significant.</p> <p>The Proposed Development is outwith this LCT therefore there would be no direct physical effects on it.</p> <p>Residual effects of the Proposed Development would be Minor for parts of the Stranraer Basin. Albeit views would be filtered through local shelterbelts and field boundaries. The Proposed Development would not alter the underlying characteristics of the low-lying topography combined with the tree belts and pastoral fields with hedgerows, nor would it affect the views from the LCT.</p> <p>There would be no residual effects on the landscape character of the Wigtown and Cree, and Fleet Fringe unit of this LCT as the Proposed Development would have an imperceptible effect on the landscape character within this unit being barely visible from the low-lying mud flats and fields. The exposed aspect and long views from this unit would also be unaffected.</p>

**Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		<p>The ZTV illustrates fragmented areas of theoretical visibility on the western shore of Wigtown Bay with greater visibility evident around Creetown and the mud flats at Wigtown Sands. Viewpoint 7 (EIAR Volume 3b: Figures 5.15a to 5.15f) illustrates that the views from the Creetown area are likely to be expansive looking over the mud flats towards higher land in on the horizon.</p> <p>The Proposed Development would be barely perceptible on the low ground, behind intervening yet distant hills. Therefore, the magnitude of impact would be Negligible for the Wigtown and Cree, Fleet Fringe unit of this LCT.</p>		
159 (3)	Shallow Flat Bottomed Valley	<p>Ranging from Slight to None.</p> <p>The Water of Luce Valley is the only unit of this LCT within the study area. Whilst situated relatively close to the Proposed Development (just over 3.5 km) the ZTV in Figure 5.3b (EIAR Volume 3a) illustrates that there would be highly constrained areas of intervisibility. The greatest visibility being from the upper slopes of this LCT on the highest point on Milton Bank on the western bank of the Main Water of Luce, as demonstrated in Viewpoint 15 (EIAR Volume 3b: Figures 5.23a to 5.23h).</p> <p>The Proposed Development would be located within an extensive cluster of wind farms and would be located behind Artfield Fell and Balmurrie Fell wind farms. Moreover, any potential views to the Proposed Development are likely to be filtered by the extensive areas of mature mixed woodland within this LCT.</p> <p>Given its limited visibility from this LCT and its developed context, the magnitude of impact attributable to the Proposed Development would be Slight in the Cross Water of Luce section of the LCT. Elsewhere the impact on this LCT would be Negligible to None.</p>	High	Moderate/ Minor and not significant. The Proposed Development would not significantly affect the characteristic form, scale or landcover of this landscape.
167 (11)	Moss and Forest Lowland	<p>Slight.</p> <p>This LCT occurs around the Knock Fell and Mochrum Loch areas.</p> <p>The ZTV indicates a theoretical viewshed that extends over the areas of coniferous planting in the northern half of the LCT, and Mochrum Loch in the south. The middle ground between these two areas is shown to experience a more intermittent intervisibility. Three viewpoints illustrate visibility from this LCT:</p> <ul style="list-style-type: none"> <li>• Viewpoint 8 which shows the view from locations close to Fell Loch (EIAR Volume 3b: Figures 5.16a to 5.16f);</li> <li>• Viewpoint 9, from the minor road by Mochrum Loch (EIAR Volume 3b: Figures 5.17a to 5.17h), and</li> <li>• Viewpoint 10 at the summit of Knock Fell (EIAR Volume 3b: Figures 5.18a to 5.18j), a small, craggy hill elevated over the lower land in the northern part of the LCT.</li> </ul> <p>The influence of the Proposed Development in the northern part of the LCT would be limited by the intervening forestry (as illustrated in Viewpoint 8).</p> <p>Views of the Proposed Development would, however, be provided from the summits of a number of low hills such as Knock fell from which the Proposed Development would appear set amidst a large cluster of existing wind farm developments including Carscreugh, Airies, Artfield Fell, Balmurrie Fell, Glenchamber and Killgallioch. Thus, the Proposed Development, whilst intensifying the developed character of the neighbouring landscape to the north of this LCT, would not be anomalous. In this context the magnitude of impact attributable to the Proposed Development would be Slight.</p>	High to Medium	Moderate/ Minor and not significant. The Proposed Development would not adversely affect the topographical form, scale or characteristic landcover and remoteness of this LCT.
168 (12)	Drumlin Pasture in Moss and Moor Lowland	<p>Ranging from Slight to None.</p> <p>The ZTV illustrates that the most sustained areas of potential visibility are limited to the north western edge LCT where the landscape transitions to Plateau Moorland with Forestry. There are additional areas of potential visibility from south of Glenluce along the A75, along western areas of Newton Stewart, over parts of Boreland Fell to the southeast of Kirkcowan, and around Wood Fell and Clauchie Moor.</p> <p>Viewpoint 6 (EIAR Volume 3b: Figures 5.14a to 5.14i) is indicative of the nature of views likely from the north western boundary and Viewpoint 12 (EIAR Volume 3b: Figures 5.20a to 5.20h) illustrates the view from Glenluce.</p>	High to Medium	Moderate/ Minor and not significant. The Proposed Development would be outside this LCT at a distance of just over 4 km. The influence of the Proposed Development would be limited to the boundary with the Plateau with Forest – Dumfries and Galloway LCT where it would intensify the existing development baseline context. The geographical area within which wind development is a characteristic element.

Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types				
NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		The Proposed Development would intensify the existing developed character of the landscape overall. However it would not increase the lateral spread of development in the view, nor would it encroach into areas that are currently turbine free. Notably, the Proposed Development would not impact the central part of this LCT within which the drumlin characteristics are strongest. For these reasons the magnitude of impact is assessed to be Slight.		
169 (13)	Drumlin Pastures	<p>Ranging from Slight to None.</p> <p>There are two units of this LCT within the study area: the Machars unit and Castle Douglas.</p> <p>The ZTV demonstrates that there would be no views from the Castle Douglas unit, therefore there would be no magnitude of impact on this unit.</p> <p>Within the Machars unit the ZTV indicates fragmented theoretical visibility across much of the LCT. The greatest visibility would occur on elevated land on the tops of the drumlin landforms, whilst theoretical views from lower-lying positions would be filtered/ screened by intervening mature forestry and policy woodland planting which is a characteristic feature of this landscape. This is evidenced at locations along the northern edge of this unit of the LCT in the vicinity of Doon Hill and Middle Threave, and around Whauphill.</p> <p>Given the intermittent nature of potential visibility, and filtering/ screening by groups of mature trees, it is expected that views of the Proposed Development from within this LCT would be of short-duration.</p> <p>Where visible, the Proposed Development would appear on the horizon amongst the existing baseline developments (including Airies, Kilgallioch, Artfield Fell, and Balmurrie Fell wind farms). Schemes outside of this cluster such as Glenchamber, Carscreugh and Barlockhart Moor would also be visible in potential views. However, the overall extent of the landscape within which wind development is visible would not alter as a result of the Proposed Development. Although there would be a slight intensification of the numbers of turbines potentially visible. The key characteristics of the baseline landscape character would remain intact. Therefore, the magnitude of impact is expected to be Slight.</p>	High to Medium	<p>Moderate/ Minor and not significant.</p> <p>The Proposed Development is outwith this LCT therefore there would be no direct physical effects on it or any of its constituent elements.</p> <p>The Proposed Development would not alter the key characteristics of this LCT as there would be no potential views from the Castle Douglas unit, and the intervisibility with the Machars unit would result in a slight alteration of the baseline wind developments as experienced from this unit at a distance of over 11 km. The underlying landscape character would remain intact.</p>
172 (16)	Upland Fringe – Dumfries and Galloway	<p>Ranging from Slight to Negligible.</p> <p>Three units of this LCT fall within the study area: Camrie, Glentrool and Cairnharrow.</p> <p>The Proposed Development is closest to the Camrie unit which is 5.5 km to the southwest. The ZTV demonstrates the geographically limited and constrained nature of the potential visibility within this LCT. Viewpoint 13 (EIAR Volume 3b: Figures 5.21a to 5.21f) illustrates one of the clearest views of the Proposed Development at locations near Whitecairn Caravan Site which is 7.7 km to the south west of the Proposed Development.</p> <p>The baseline operational wind farm developments of Artfield Fell and Glenchamber are visible to the north in the view, with Carscreugh to the east, and Airies directly to the north east. The Proposed Development would be seen in the background of the view and behind the Glenchamber and Artfield Fell developments. Overall, the Proposed Development would alter the composition of the landscape by slightly intensifying the extent of wind farm development. Whilst the Proposed Development would be noticeable, it would not alter the underlying composition of the landscape character in the Camrie unit of the LCT.</p> <p>The Glentrool and Cairnharrow units are approximately 14 km and 22 km east respectively of the Proposed Development. The ZTV indicates several swathes of theoretical visibility, however, these would generally be in areas of mature forestry. Any view of the Proposed Development would be panoramic and in the context of baseline developments including Airies, Artfield Fell, Balmurrie Fell, Glenchamber and Kilgallioch.</p> <p>The Proposed Development would be situated within these baseline operational wind farm developments. The magnitude of impact would be slight.</p>	High	<p>Moderate to Moderate/ Minor and not significant.</p> <p>The Proposed Development is outwith this LCT and as such would not have direct physical effects on it or any of its characteristic elements.</p> <p>The Proposed Development would not appear anomalous in the context of existing developments. Whilst there would be a discernible change to the existing wind farm composition within the landscape, however, this would not alter to the key characteristics of the LCT.</p>
173 (17)	Plateau Moorland – Dumfries and Galloway	<p>Slight.</p> <p>There is one unit of this LCT within the study area which extends from Artfield Fell above New Luce to Balcer Moor in the south west, and the Upland Fringe.</p>	Medium	Moderate/ Minor and not significant.

**Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		<p>The ZTV shows that there are extensive areas of theoretical visibility over the moorland of Cairnscarow and Cairnerzean at distances of between 4 km and 7 km. In general views north westward of the Proposed Development are screened somewhat by the summits of White Fell, Big Craigentee and Quartern Fell so that within 5 km intermittent visibility would be confined to the upper slopes and peaks of the plateau beyond these three summits. Artfield Fell also constrains visibility westwards over the LCT within approximately 3 km of the Proposed Development.</p> <p>The Proposed Development is situated within 145 m of this LCT and would, therefore, have the potential to exert a notable influence over the character of this LCT. However, this LCT contains the operational Artfield Fell, Balmurrie Fell, Glenchamber, and part of the Kilgallioch development. (Viewpoint 16 – Figures 5.24a to 5.24h (EIAR Volume 3b) – illustrates the clearest views at close proximity of the Proposed Development).</p> <p>The Proposed Development would neighbour Kilgallioch to the south and sit between the Artfield Fell and Balmurrie Fell developments to the west and Airies wind farm to the east. The magnitude of impact is anticipated to be Slight as there would be a slight increase to the numbers of turbines influencing this LCT, but these turbines would be in the same part of the landscape as the baseline wind developments and would not extend further into the skyline than the existing turbines. There would be a discernible change to the existing wind farm feature, but the landscape characteristics of the LCT would remain broadly consistent with the baseline.</p>		The Proposed Development would be contained within the part of the landscape in which the baseline wind farm developments are located, and which form key prominent constituents of the landscape.
174 (17a)	Plateau Moorland with Forest – Dumfries and Galloway (The Proposed Development is located within this LCT)	<p>Localised Substantial, and Moderate to Slight in the wider LCT.</p> <p>There is one unit of this LCT within the study area.</p> <p>The ZTV demonstrates that there would be almost continuous visibility within approximately 3 km of the Proposed Development, and fragmented visibility beyond this until the A714 when the Proposed Development would once again be visible up until the southern reaches of Glentool Forest.</p> <p>The Proposed Development would constitute infill development between Kilgallioch and Airies turbines, and the Artfield Fell and Balmurrie developments and would intensify the developed character in this LCT but also help to consolidate the established pattern of development. It would also ensure that there is no discernible increase to the footprint of wind development within the wider LCT.</p> <p>Viewpoints 1, 3, 18, 19, 20 and 21 illustrate the potential views to the Proposed Development and the Viewpoint Assessment (TA5.3) presents a detailed assessment of effects predicted for these viewpoints within the LCT.</p> <p>Given the substantially developed context in which the Proposed Development would be seen, much of this LCT would be subject to Negligible or Slight impact. However, in locations to the south of the Proposed Development, in locations such as at Tarf Bridge, and around Loch Ronald, the Proposed Development would result in a notable increase in the prominence of wind energy development and would represent a localised Moderate impact.</p>	Medium to Low	Ranging from Major/ Moderate, significant, in a small number of locations immediately neighbouring and in close proximity to the south of the Proposed Development (e.g. Tarf Bridge and Loch Ronald) to Moderate/ Minor, not significant, for the wider LCT.
175 (18)	Foothills – Dumfries and Galloway	<p>There are three units of this LCT within the study area: Muck Burn by Loch Doon, Cairnharrow and Fleet.</p> <p>The ZTV indicates that there would be no visibility from the Muck Burn unit, and only highly constrained visibility from the Fleet unit.</p> <p>The Cairnsharrow unit of the LCT would be subject to views of the Proposed Development from locations across the north western slopes of the hills on the north western edge of the Cairnsharrow unit of the LCT, including Larg Hill, Knockeans Hill, Cambret Hill, Shiel Hill, Pibble Hill and the summit of Meikie Bennan. The ZTV also shows potential visibility from the north western slopes of Cairnharrow, Barroholm Hill and Ciarnholly Hill. The forestry over Shiel Hill would screen views of the Proposed Development. Where the Proposed Development is visible, receptor locations would be on elevated land including the hills noted above which would afford large scale panoramic views, e.g. from Larg Hill, Knockeans Hill, Cambret Hill, Pibble Hill and the summit of Meikie Bennan which are located over 25 km.</p> <p>The Proposed Development would be visible within the baseline context of operational wind developments of Airies, Artfield Fell, Balmurrie Fell and Kilgallioch. The Glenchamber and Carscreugh developments would be visible extending from this group of the wind developments to the south.</p>	High	<p>Minor to None and not significant.</p> <p>The Proposed Development is outwith this LCT and as such would have no direct physical effects on it or its constituent elements.</p> <p>Distant panoramic views from select elevated locations within this LCT would increase the influence of wind farm development slightly. However, the change to the existing cluster of wind developments visible would not be sufficient to alter the experience of the landscape within this LCT.</p>

**Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
		Given the distant nature of views of the Proposed Development, the small proportion of the expansive panoramic views it would occupy, as well as the developed context, the magnitude of impact would be Slight. However, a large proportion of the LCT would be subject to no impact.		
176 (18a)	Foothills with Forest – Dumfries	Ranging from Negligible to None. There are three units of this LCT within the study area at Bargaly Glen, Laurieston Forest and Meikle Cullendoch Moss. The ZTV demonstrates that there would be no potential for views from the Cullendoch Moss unit, and a geographically small area of constrained visibility from the Laurieston Forest unit. Only within the southern part of the Bargaly Glen would receptors experience any theoretical visibility of the Proposed Development. Moreover, such views would be severely restricted by intervening forestry within the glen. Additionally, any glimpsed views towards the Proposed Development would be at a distance of over 16 km and seen in the context of other large scale wind farm developments (Kilgallioch and Arecleoch). Given the restricted nature of views out of this LCT, the distance at which the Proposed Development would be seen and its developed context, the magnitude of impact on this LCT would generally be none, but with localised Negligible impacts.	Medium	Minor/ None to None and not significant. The Proposed Development is situated outside of this LCT and therefore would have no direct effect on it. Indirect effects are limited by the restricted intervisibility.
177 (19)	Southern Uplands – Dumfries and Galloway	Slight. There are two units within the study area: at Beneraird and Cairnsmore of Carsphairn. Whilst no views of the Proposed Development would be obtained from the Cairnsmore of Carsphairn unit, there would be views from the southeast facing slopes and summit of Beneraird. Viewpoint 17 (EIAR Volume 3b: Figures 5.25a to 5.25j) illustrates the potential view from the summit demonstrating that the Proposed Development would appear distantly and beyond the existing Arecleoch and Kilgallioch wind farms. In this context the magnitude of impact would be Slight since the Proposed Development would be introducing turbines into an existing grouping of turbines.	High to Medium	Moderate/ Minor and not significant. The Proposed Development is situated outside of this LCT and therefore would have no direct physical effect on it or its constituent elements. Indirect effects would be limited by the relationship of the Proposed Development to baseline developments of similar size and scale.
179 (20)	Coastal Uplands	Slight. The Cairnsmore Coastal Uplands is the only unit of this LCT within the study area. The ZTV shows potential visibility is limited to west-facing slopes of Cairnsmore of Fleet and Meikle Mulltaggart, and Viewpoint 5 (EIAR Volume 3b: Figures 5.13a to 5.13j) illustrates the view from the summit of Cairnsmore of Fleet. The Proposed Development would add turbines into the existing broad spread of wind farm developments (including Airies, Kilgallioch, Artfield Fell, Balmurrie Fell, Glenchamber, Arecleoch and Carscreugh). Visibility would be elevated and at a distance of over 23.8 km from this LCT. The magnitude of impact would be Slight since the Proposed Development, while clearly discernible within the existing grouping of turbines, would consolidate the existing presence of wind farms.	High to Medium	Moderate and, not significant. The Proposed Development is outwith the LCT so it would not have no direct physical effects on it. The Proposed Development would result in a discernible change within the broader landscape as experienced from areas subject to visibility within the LCT. However, the effect would be limited since the Proposed Development would consolidate turbines within an established wind development cluster which would affect a small portion of a panoramic landscape as experienced from the LCT.
180 (21)	Rugged Uplands – Dumfries and Galloway	Slight. This LCT comprises the dramatic mountains in north west of Dumfries and Galloway of which Merrick is the highest peak. The ZTV illustrates that the viewshed would extend over several southwest facing slopes and summits including Merrick. Viewpoint 2 (EIAR Volume 3b: Figures 5.10a to 5.10j) demonstrates the nature of the potential view. The Proposed Development would add to the extensive cluster of wind energy developments visible from this LCT, infilling a space between the cluster of Airies, Artfield Fell and Balmurrie Fell, and the existing Kilgallioch array. Whilst some differentiation between the perceived scale of the Proposed Developments turbines and existing turbines would be evident, it would be lessened by the distance at which the turbines would be seen and by the existing diverse range of turbines present. Given the distance at which the Proposed Development would be seen and small proportion of what are extensive panoramic views available from this LCT and its highly developed context, the magnitude of impact predicted within this LCT would be Slight.	High	Moderate, not significant. The Proposed Development is located outwith the LCT, therefore it would not have direct physical effects on it or its constituent elements. The Proposed Development would have no significant effect on the remoteness or wild character of this LCT which is already subject to the influence of extensive wind energy development in views to the west.

**Table 5.2.3: Assessment of Effects on Seascape and Landscape Character Types**

NS Ref (Capacity Study LCT ref)	Seascape/ Landscape Character Type	Magnitude of Impact	Sensitivity	Residual Effects
181 (21a)	21a Rugged Granite Uplands with Forest – Dumfries and Galloway	<p>Slight to None.</p> <p>There are three units of this LCT within the study area comprising the forest south of Merrick around Glen Trool; the forestry block adjoining the Merrick and Cairnsmore of Fleet, and the forest block southwest of Loch Doon.</p> <p>The ZTV shows that the Merrick/ Cairnsmore of Fleet and Loch Doon units would experience very few views of the Proposed Development and are situated over 28 km from the Proposed Development.</p> <p>There would be greater potential for views of the Proposed Development from the Glen Trool area. However, field reconnaissance suggests that Glentool forest severely curtails such visibility from all but a small number of open viewpoints. Viewpoint 4 (EIAR Volume 3b: Figures 5.12a to 5.12h) is one such viewpoint.</p> <p>Where views do occur, the context would be the steep sided valley landform with water along the glen floor, opening out into a broad landscape with extensive existing wind farm developments occurring on the skyline in the distance.</p> <p>The Proposed Development would add a new prominent development to the existing developed baseline and would infill the slight gap that currently exists between the Balmurrie Fell and Kilgallioch arrays, thereby consolidating the existing pattern of development.</p> <p>Given the constrained extent of visibility within this LCT, its distance from the Proposed Development and the developed context the magnitude of impact would range from Slight to None.</p>	High	<p>Ranging from Moderate and not significant to None.</p> <p>The Proposed Development is located outwith the LCT, therefore it would not have direct physical effects on it or its constituent elements.</p> <p>The Proposed Development would affect few receptor locations in this largely forested landscape, and when visible would not appear anomalous, but would add to the developed horizon that encloses views to the west.</p>
STC 1	Remote High Cliffs	<p>Ranging from Slight to None.</p> <p>Views of the Proposed Development from locations on the western side of the Rhins Peninsula and Machars Peninsula would be substantially screened by intervening topography. The main visibility would occur on the eastern side of the Rhins Peninsula and across Luce Bay from where up to twelve of its proposed turbines would be seen distantly on the skyline to the north east. The proposed turbines would be partially screened by intervening topography and vegetation and would be seen behind a number of other wind farms including Barlockhart Moor, Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell. This is illustrated at Viewpoints 11 (EIAR Volume 3b: Figures 5.19a to 5.19f) and 14 (EIAR Volume 3b: Figures 5.22a to 22f).</p>	Medium to High	<p>Minor, not significant.</p> <p>The Proposed Development would be indiscernible within the mass of baseline wind farm developments in views from this SCT. The key characteristics of this SCT would not be altered.</p>
STC 3	Deposition Coastline, Open Views	<p>Generally, None, but with localised Slight impacts in the vicinity of Sandhead.</p> <p>Views of the Proposed Development would be confined to locations at the western end of this STC, in the vicinity of Sandhead from where up to twelve of the Proposed Development turbines would be seen distantly on the skyline to the north east. The proposed turbines would be partially screened by intervening topography and vegetation and would be seen behind a number of other wind farms including Barlockhart Moor, Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell. This is illustrated at Viewpoint 14 (EIAR Volume 3b: Figures 5.22a to 5.22f) which is located on the boundary of STC 1 and STC3.</p>	Medium to High	<p>Minor/ None, not significant.</p> <p>The Proposed Development would be indiscernible within the massing of baseline wind developments and visible in very few views from this SCT.</p>
STC 4	Outer Firth	<p>Ranging from Slight to None.</p> <p>Seen from Wigton Bay and the adjoining sections of coast included in this STC the Proposed Development would be seen distantly to the north west amidst a horizon containing extensive existing and consented developments and would be partially obscured by intervening topography.</p> <p>The visualisations for Viewpoint 7 (EIAR Volume 3b: Figures 5.15a to 5.15f) are illustrative of the appearance the Proposed Development from this part of the STC.</p>	High	<p>Moderate/ Minor and not significant.</p> <p>The Proposed Development would not affect the scale of the SCT, nor the distinctive pattern of narrow inlets along the rocky shore. The Proposed Development would be imperceptible within the existing wind farm development visible on the horizon.</p>

**Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types**

LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
72	Pastoral Valleys - Ayrshire	<p>In-addition: Negligible to None.</p> <p>In-combination: Moderate.</p>	High	<p>In-addition effects: Minor/ None, not significant.</p> <p>In-combination effects: <b>Major/ Moderate</b>, significant.</p>

Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types				
LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
		<p>The vast majority of this LCT would have no views of the Proposed Development. Theoretical visibility would be limited to the upper slopes of the valley at the southern extent of the LCT where the operational and consented developments of Mark Hill, Arecleoch, Chirmorie and Kilgallioch would influence the LCT.</p> <p>Other developments which would influence the character of this LCT include:</p> <ul style="list-style-type: none"> <li>• Assel Valley (existing);</li> <li>• Tralorg (consented);</li> <li>• Hadyard Hill (existing), Mark Hill (existing), and</li> <li>• Clauchrie (in planning).</li> </ul>		<p>The Proposed Development would be imperceptible from this LCT given the highly localised area of potential intervisibility, and the intervening wind development.</p>
73 (14)	Upland Glens	<p>In-addition: Negligible to None. In-combination: Moderate.</p> <p>The Proposed Development would be indiscernible within very limited views from the upper slopes and summits on the west of the Glen App unit of this LCT.</p> <p>The wind developments likely to be visible from this LCT include:</p> <ul style="list-style-type: none"> <li>• To the south - Larbrax (consented), North Rhins (operational), Meikle Float Farm, and Knocknain Farm (operational);</li> <li>• To the northeast – Arecleoch existing, Arecleoch Extension (in-planning), Chirmorie (consented), Assel Valley (existing), Tralorg (consented), Hadyard Hill (existing), Mark Hill (existing), Clauchrie (in-planning) Downhill Farm (existing); North Threave (existing), and Kirkhill Wind Farm (in-planning);</li> <li>• Westwards - Glen App and Stranoch 2 (both existing) with the Kilgallioch-centred cluster beyond which includes: Kilgallioch (existing), Kilgallioch Extension (in-planning), Airies (existing), Airies II (in-planning – scoping), Balmurrie Fell (existing), Artfield Fell (existing) and Glenchamber (existing), and</li> <li>• To the southeast – Carsreugh (existing), Barlockhart Moor (existing) and Barlockhart Moor Extension (consented).</li> </ul>	High	<p>In-addition effects: Minor/ None, not significant. In-combination effects: <b>Major/ Moderate</b>, significant.</p> <p>The emerging pattern of cumulative wind development as visible from the Glen App unit of this LCT is widespread and complex. The addition of the Proposed Development would be indiscernible.</p>
76 (17e)	Foothills - Ayrshire	<p>In-addition: Negligible/ None. In-combination: Moderate</p> <p>The central part of this LCT is occupied by the Assel Valley (existing)/ Hadyard Hill (existing)/ Tralorg (consented) wind developments.</p> <p>The immediate cumulative wind farm context of this LCT is:</p> <ul style="list-style-type: none"> <li>• Northwards the existing Downhill Farm and North Threave turbines lie relatively close to the in-planning Kirk Hill Wind Farm;</li> <li>• To the south of the LCT the existing Mark Hill and in-planning Clauchrie wind farms are visible on the other side of the valley, and</li> <li>• The existing Dersalloch scheme lies some 10 km northeastwards</li> </ul> <p>Beyond Mark Hill to the south, the Proposed Development would be indiscernible within the Kilgallioch-centred cluster of existing, consented and in-planning schemes.</p>	Medium	<p>In-addition effects: Minor/ None, not significant. In-combination effects: Moderate, not significant.</p> <p>The influence of wind related development is widespread within and in the areas neighbouring this LCT. The Proposed Development would be further south and would represent a very small addition to this complex pattern of development.</p>
78 (18c)	Plateau Moorland	<p>In-addition: Negligible/ None. In-combination: Substantial.</p> <p>Both units of the LCT within the study area are heavily influenced by wind energy development as they both contain operational wind farms (Glen App Wind Farm within the Glen App unit; and part of the existing Arecleoch and operational Mark Hill schemes, and the in-planning Clauchrie and Arecleoch developments, within the Barrhill unit).</p> <p>The mature forestry within this LCT drastically reduces potential views of the Proposed Development. Where visible the Proposed Development would be barely discernible and read as part of the Kilgallioch-centred group of existing, consented and in-planning schemes.</p> <p>The Proposed Development would form an indiscernible addition to the Kilgallioch-centred cluster which includes:</p> <ul style="list-style-type: none"> <li>• Existing Kilgallioch and Arecleoch wind farms;</li> <li>• Kilgallioch and Arecleoch in-planning Extensions;</li> </ul>	Medium to Low	<p>In-addition effects: Minor/ None, not significant. In-combination effects: <b>Major</b>, significant.</p> <p>The existing, consented and in-planning pattern of wind development is widespread and complex. The Proposed Development would be indiscernible within the Kilgallioch-centred cluster of developments. It would not noticeably extend the influence of wind development.</p>

Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types				
LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
		<ul style="list-style-type: none"> <li>Consented Chirmorie Wind Farm;</li> <li>Stranoch 2 in-planning scheme</li> <li>Airies existing and its extension Airies II (in-planning – scoping),</li> <li>Artfield Fell and Balmurrie Fell existing wind farms; and</li> <li>Glenchamber (existing).</li> </ul>		
81 (20b)	Southern Uplands – Ayrshire	<p>In-addition: Negligible/ None. In-combination: Substantial.</p> <p>The unit of this LCT near Carrick Forest would experience no cumulative impact as there would be very limited visibility due to forestry. Where views are possible, the Proposed Development would be indiscernible, located in the southern part of a cluster of wind development to the southwest of this LCT which includes:</p> <ul style="list-style-type: none"> <li>existing Kilgallioch and Arecleoch wind farms;</li> <li>their in-planning Extensions;</li> <li>consented Chirmorie Wind Farm;</li> <li>Stranoch 2 in-planning scheme;</li> <li>Airies existing and its extension Airies II (in-planning – scoping);</li> <li>Artfield Fell and Balmurrie Fell existing wind farms; and</li> <li>Glenchamber (existing).</li> </ul> <p>To the southwest of this unit, the operational Glen App and North Rhins schemes would be visible, as well as the consented Larbrax Wind Farm. From the unit of the LCT near Glen App, the Proposed Development would form an indiscernible element of the cluster of wind development listed above. Northwards, the operational Assel Valley and Hadyard Hill developments form a smaller cluster with the consented Tralorg and in-planning extension to Hadyard Hill.</p>	High to Medium	<p>In-addition effects: Minor/ None, not significant. In-combination effects: <b>Major/ Moderate</b>, significant.</p> <p>The influence of wind developments is widespread and the Proposed Development would reinforce the emergent pattern of wind development forming an indiscernible part of the Kilgallioch-centred cluster.</p>
82 (20a)	Southern Uplands with Forest - Ayrshire	<p>In-addition: Negligible/ None. In-combination: Moderate.</p> <p>The largest unit of this LCT near Dalmellington would have no views of the Proposed Development.</p> <p>The Strawarren Fell unit is unlikely to afford views of the Proposed Development due to the screening nature of the forestry within the LCT. Any views possible would be from distances of over 22 km and the Proposed Development would be situated at the southern end of the large cluster of turbines Arecleouch (existing), Arecleoch Extension (in-planning), Chirmorie (consented), Stranoch 2 (in-planning), Kilgallioch (existing), Kilgallioch Extension (in-planning), Airies (existing, Airies II (in-planning – scoping), Artfield Fell and Balmurrie Fell (both existing).</p> <p>The closest unit of the LCT, south of South Balloch contains the Arecleoch wind farm and any cumulative magnitude of impact would be tempered by this context.</p>	Medium	<p>In-addition effects: Minor/ None, not significant. In-combination effects: Moderate, not significant</p> <p>The Proposed Development would not influence the cumulative experience of wind development from this LCT in any meaningful way, although it would add further turbines into the landscape thereby marginally increasing the influence of wind energy development. The Proposed Development would be barely discernible within the emerging pattern of wind developments on the plateau.</p>
83 (21)	Rugged Upland - Ayrshire	<p>In-addition: Negligible. In-combination: Moderate.</p> <p>The existing, consented and in-planning wind development pattern forms would be complex and intricate with several clusters of wind development visible to the southwest, northeast and a smaller cluster to the west. Individual wind developments would add to this complexity, the closest of which would be Clauchrie (in-planning).</p> <p>The Proposed Development would form a barely discernible part of the large cluster of development southwest of this LCT which includes: Arecleoch (existing), Arecleoch Extension (in-planning), Chirmorie (consented), Stranoch 2 (in-planning), Kilgallioch (existing), Kilgallioch Extension (in-planning), Airies (existing, Airies II (in-planning – scoping), Artfield Fell and Balmurrie Fell (both existing).</p> <p>The proposed turbines would appear as part of the group of existing and in-planning developments along the plateau on the lower ground. The in-planning developments of Kilgallioch extension and Arecleoch extension would be appear slightly more prominent from this LCT since they would be closer to it. The turbines of the Proposed Development would be similar in scale to those of Kilgallioch extension and would merge into that grouping. Therefore the cumulative magnitude of impact is considered to be Negligible for this LCT.</p>	High	<p>In-addition effects: Moderate/ Minor and not significant. In-combination effects: <b>Major/ Moderate</b> and significant.</p> <p>The Proposed Development would form an indiscernible part of the large cluster of development to the southwest of the LCT.</p>



Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types

LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
156	Peninsula	In-addition: Negligible. In-combination: Slight. The closest views from this LCT are illustrated in Viewpoint 14 from Sandhead and Viewpoint 12 from the A75, near Glenluce (although this is from just north, outside the LCT). These show that the Proposed Development would be a barely discernible addition to the existing, consented and in-planning array of wind developments which are situated north of this LCT.	High	In-addition effects: Moderate/ Minor and not significant. In-combination effects: Moderate and not significant. The emergent cumulative pattern of wind development would have little influence on the character of this LCT. The Proposed Development would form a small addition to this.
157 (1a)	Peninsula with Gorse Knolls	In-addition: Negligible. In-combination: Slight. There is little opportunity for views of the Proposed Development from this LCT, and any views would be distant (24 km or more). The Proposed Development would appear as an indiscernible part of the larger group of existing, consented and in-planning development which relates to the inland plateau landscape on the horizon.	High	In-addition effects: Moderate/ Minor and not significant. In-combination effects: Moderate and not significant. The emergent pattern of wind development would be a distant element on the skyline with a few outlying developments to the south west (where views permit). The Proposed Development would be an indiscernible element within this.
158 (2)	Coastal Flats – Dumfries and Galloway	In-addition: Negligible. In-combination: Slight. This LCT has limited views of the Proposed Development within each of the two units. From the eastern unit (Wigtown and Cree, and Fleet Fringe) the Proposed Development would appear to be in close association with the Airies wind farm (existing) and Airies II (in-planning - scoping), Kilgallioch (existing) and Kilgallioch Extension (in-planning), with Artfield Fell and Balmurrie Fell wind farms behind this group. From the western unit (Stranraer Basin) the Glenchamber and Carscreugh developments would be foremost in the views, appearing as part of the larger group which would include the Proposed Development. Where visible, the Proposed Development would be barely discernible within the existing grouping of wind development. The array of existing, consented and in-planning wind developments would appear to be distant and discernible elements which are often screened by intervening trees. They would not be character-defining.	Medium to High	In-addition effects: Moderate/ Minor and not significant. In-combination effects: Moderate and not significant. The Proposed Development would add little to the influence of wind energy development at this LCT, and the existing, consented and in-planning wind developments, whilst being discernible, would not alter the characteristics of this LCT. The existing, consented and in-planning wind farms would be screened from much of the LCT, but where visible, they would be discernible on the horizon.
159	Shallow Flat Bottomed Valley	In-addition: Negligible. In-combination: Ranging from Moderate to Slight. On the higher valley sides the influence of wind development can be experienced to the northeast, northwest, eastwards and to the southeast. There would be little increase to the influence of wind energy resulting from the Proposed Development since most of it would be screened by Artfield Fell and Balmurrie Fell.	High	In-addition effects: Minor and not significant. In-combination effects: <b>Major/ Moderate</b> and significant. The Proposed Development would represent a barely discernible increase to the influence of wind energy development in this LCT.
167 (11)	Moss and Forest Lowland	In-addition: Ranging from Slight to None. In-combination: Ranging from Substantial to Moderate. The Proposed Development would be situated 6.7 km north northwest of this LCT. Intervisibility would be restricted by the large areas of coniferous plantations which characterise the northern portion of this LCT (Viewpoint 8: Figures 5.16a to 5.16f). The occasional craggy hill which rises from the largely low-lying landscape of this LCT would have clear views northwards to the Proposed Development and the existing array of wind farm developments. The highest and closest to the Proposed Development is Knock Fell, the view from which is illustrated in Viewpoint 10 (Figures 5.18a to 5.18f). The most diverse landscape of small-scale lochs and hills is central to this LCT and changes resulting from the Proposed Development are illustrated in Viewpoint 9 (Figures 5.17a to 5.17d). Where visible from this LCT the Proposed Development would be seen in the context of the wide array of existing, consented and in-planning wind energy development, the closest to the Proposed Development include Airies (existing) and Airies II (in-planning – scoping), and the existing Artfield Fell and Balmurrie Fell, all of which are backdropped by Kilgallioch (existing) and Kilgallioch Extension (in-planning). The existing Glenchamber development also appears to be part of this large grouping in views from the northwestern parts of the LCT.	High to Medium	In-addition effects: Moderate/ Minor and not significant. In-combination effects: <b>Major/ Moderate</b> and significant. The Proposed Development would reinforce the considerable and complex emergent pattern of cumulative development.

Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types

LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
		The Proposed Development, in addition to the wide array of existing, consented and in-planning wind developments to the north of the LCT would contribute to a considerable influence of wind energy development. The impact would be moderate from the craggy hills with clear views northwards, and Slight in low-lying areas reducing to None in low-lying areas of forestry. The Proposed Development would represent a minor increase to the influence of wind within this cluster.		
168 (12)	Drumlin Pasture in Moss and Moor Lowland	In-addition: Slight. In-combination: Substantial on the Fell End, Barfad Fell and Culvennan Fell and northern slopes, Slight in the remaining LCT. Views of the Proposed Development From this LCT, are largely restricted to Fell End, Barfad Fell and Culvennan Fell and their northern slopes. In such views the Proposed Development would be in the context of the existing (Airies, Kilgallioch, Artfield Fell, Balmurrie Fell) and in-planning developments (Airies II (scoping) and Kilgallioch extension), within the neighbouring plateau landscape of which wind development is a characteristic. The Proposed Development would result in additional turbines in the view but the placement of these in relation to the existing group of developments would consolidate wind development in one location rather than expand the influence of wind developments into other parts of the landscape. However, the combined influence of the Proposed Development with the existing, consented and in-planning wind developments is widespread and complex.	High to Medium	In-addition effects: Moderate/ Minor and not significant. In-combination effects: <b>Major</b> and significant on the Fell End, Barfad Fell and Culvennan Fell and northern slopes, Moderate/ Minor and not significant in the remaining areas of the LCT. Sustained cumulative views would be from the northern boundary of this LCT where it transitions to the Plateau Moorland with Forest LCT. The Proposed Development would add complexity to the emergent cumulative pattern but not increase the influence of turbines into areas that do not already contain turbines.
169 (13)	Drumlin Pastures	In-addition: Slight. In-combination: Moderate. There is potential for combined views of the Proposed Development with many of the existing (Airies, Kilgallioch, Artfield Fell, Balmurrie Fell, Glenchamber and Carscreugh) and in-planning schemes (Airies II (scoping) and Kilgallioch Extension) from this LCT. Theoretical visibility at distances of 12 km to 29 km is fragmented and restricted by intervening groups and lines of trees and hedgerows. The in-addition magnitude of impact is generally lower as the Proposed Development would be contained within the field of view which currently contains wind farms. The in-combination magnitude of impact would be greater reflecting the large number of wind developments and their combined influence. However, from this LCT, views of wind development is to the north where wind farms appear on the horizon, and relate to a different landscape beyond the drumlins.	High to Medium	In-addition effects: Moderate/ Minor and not significant. In-combination effects: Moderate and not significant. The Proposed Development would intensify the extensive influence of wind energy on the northern horizon. However, clear and sustained views towards the array of existing, consented and in planning wind farms are limited to one area of the LCT, and even in this area there are many trees and a block of woodland which would restrict views.
172 (16)	Upland Fringe – Dumfries and Galloway	In-addition: Slight. In-combination: Substantial. The Proposed Development would add further turbines into the landscape but would not greatly increase the influence of wind turbines due to the visual relationship with Glenchamber (as illustrated in Viewpoint 13, Figures 5.21a to 5.21f). The wider pattern of wind development, with the existing Carscreugh wind farm in this LCT, existing Glenchamber scheme nearby in the neighbouring LCT, and Artfield Fell and Balmurrie Fell visible from eastern parts of the LCT against the backdrop of Kilgallioch and Airies makes for a widespread influence of wind development across the landscape. The existing and consented Barlockhart Moor and Extension draw the influence of wind energy development south of the A75 towards the coast, and northwards, the in-planning Stranoch 2 and consented Chirmorie wind farm, alongside Arecleoch and Arecleoch Extension would make for a wide spread and complex cumulative pattern of development.	High	In-addition effects: Moderate and not significant. In-combination effects: <b>Major/ Moderate</b> and significant. The Proposed Development would read as part of the existing group of developments visible from within this LCT, as such would have limited in-addition effect. However, in combination with the widespread and complex emergent cumulative pattern, the influence of wind development would be significant.
173 (17)	Plateau Moorland – Dumfries and Galloway	In-addition: Negligible. In-combination: Substantial. The site of the Proposed Development abuts this LCT at Artfield Fell at a distance of 0.14 km. The smaller scale developments of Artfield Fell and Balmurrie Fell are located on their namesakes. These small hills rise to over 100 m above the level of the Proposed Development site. This ensures that views of the Proposed Development from this LCT are curtailed within 10 km as demonstrated by the ZTV, and it results in the	Medium	In-addition effects: Minor and not significant. In-combination effects: <b>Major/ Moderate</b> and significant. The Proposed Development would consolidate the existing grouping of wind developments, and it is consistent with the emerging cumulative pattern. However, the overall pattern of wind development is extensive and complex.

**Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types**

LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
		blade tip extent of the Proposed Development being similar to that of the smaller developments. The Proposed Development would be visible amidst existing, consented and in planning developments to which it would add little additional influence. However, the emerging pattern of development is extensive across the moorland plateau and complex in relation to size and typologies. In general, the developing pattern is one of larger turbines on the plateau, tapering down in size as the LCT transitions to the Upland Fringe LCT within which the operational Carscreugh development is sited.		
174 (17a)	Plateau Moorland with Forest – Dumfries and Galloway (LCT within which the Proposed Development is located)	In-addition: Slight. In-combination: Substantial. The Proposed Development would be located within the area of existing forestry which is on the lower land between Artfield Fell and Eldrig Fell. It would occupy the narrow space between existing developments. Kilgallioch is situated to the north, the smaller scale developments of Artfield Fell and Balmurrie Fell atop the small hills flank the west, and Airies is located to the east. Given this arrangement, the Proposed Development may be considered as infill development. The emergent pattern of development which includes the in-planning schemes of Kigallioch extension and Airies II (scoping), would enclose the Proposed Development so that it would read as part of the larger wind farms. In combination with the emergent pattern of development, the Proposed Development barely expands the land take given over to wind development, and it consolidates the existing wind farm pattern. The Proposed Development would add more turbines into the LCT; however, these would not greatly expand the influence of wind development on the LCT due to the careful siting within the existing groups of turbines, and on the lower land between the small hills. However, in combination with the emergent pattern of development there would be a substantial influence of wind energy development within this LCT.	Medium to Low	In-addition effects: Minor and not significant. In-combination effects: <b>Major/ Moderate</b> and significant. The Proposed Development being central within the emergent pattern of development within this LCT would add little to the overall influence of wind development which is extensive and complex within this LCT.
175 (18)	Foothills – Dumfries and Galloway	In-addition: Negligible/ None. In-combination: Moderate. There is potential for distant (over 25 km), panoramic views from northwest facing slopes of Cambret and Pibble Hill within the Cairnharrow and Fleet unit of this LCT. No other units of the LCT would have theoretical views. The Proposed Development would form a barely discernible addition to the group of existing, consented and in-planning developments including: Airies, Airies II (scoping) Kilgallioch, Kilgallioch Extension, Artfield Fell, Balmurrie Fell, Glenchamber, Carscreugh, Chirmorie, Stranoch 2 and Arecleoch and Arecleoch Extension would also appear to be part of this large grouping of wind development, albeit at a long distance from the LCT.	High	In-addition effects: Moderate/ Minor to Minor where there are views from None from all other areas, and not significant. In-combination effects: <b>Major/ Moderate</b> and not significant. There would be distant, panoramic views from geographically restricted parts of one unit of this LCT which show the extensive spread of existing, consented and in-planning wind development to the northwest. The Proposed Development would be a barely discernible element within this grouping. Whilst the wider existing, consented and in-planning wind farms would also be distant, they would form a complex and diverse range of wind farms visible from parts of this LCT.
176	Foothills with Forest – Dumfries	In-addition: Negligible. In-combination: Moderate. The forested nature of this LCT combined with the limited theoretical visibility would result in restricted views of the Proposed Development which in turn would restrict the influence of wind development on this LCT.	Medium	In-addition effects: Minor and not significant. In-combination effects: Moderate and not significant. Neither the Proposed Development, nor the existing, consented and in-planning schemes would be visible from many locations within this LCT. When visible the Proposed Development would form a barely discernible component of the broad spread pattern of existing, consented and in-planning wind developments.
177 (19)	Southern Uplands – Dumfries and Galloway	In-addition: Negligible. In-combination: Substantial. The Proposed Development would be seen distantly set behind the existing and emergent pattern of development. The unit of this LCT that would have views of the Proposed Development would be most influenced by the extensive operational Arecleoch and in-planning Arecleoch Extension which is situated immediately north and east of this LCT. The consented Chirmorie and in-planning Stranoch 2 wind farms would be immediately east and south, with the operational Kilgallioch and its proposed extension (in-planning) further south. The Proposed Development would be in the distance, beyond Kilgallioch next to Airies operational and Airies II in-planning (scoping). The smaller Artfield Fell and Balmurrie Fell, and Glenchamber developments would also be clearly visible from this LCT.	High to Medium	In-addition effects: Moderate/ Minor and not significant. In-combination effects: <b>Major</b> and significant. The Proposed Development would be barely discernible in the distance to the south. However, it would contribute to the broad spread and complex pattern of wind development as visible from this LCT.

**Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types**

LCT Ref.	Seascape/ Landscape Character Type	Magnitude of Cumulative Impact	Sensitivity	Residual Cumulative Effect
179 (20)	Coastal Uplands	<p>In-addition: Slight. In-combination: Substantial.</p> <p>The Proposed Development would appear to bridge the gap between the existing Airies and Kilgallioch turbines. The in-planning Kilgallioch Extension turbines would sit closer to the LCT, directly in front of the Proposed Development. Airies II (scoping scheme) would flank the Proposed Development to the south. To the north the consented Chirmorie and in-planning Stranoch and Arecleoch Extension schemes would increase the influence of wind development considerably within this cluster.</p> <p>The addition of the Proposed Development would result in a minor addition to the overall influence of wind farm development and it would not extend the geographical area within which there are wind turbines currently.</p> <p>However, there is a considerable influence of wind turbines across the plateau moorland which makes for a complex and extensive feature within the landscape.</p>	High to Medium	<p>In-addition effects: Moderate and not significant. In-combination effects: <b>Major</b> and significant.</p> <p>The Proposed Development would add to the emergent pattern of development which is extensive and complex as visible in elevated views from this LCT.</p>
181 (21)	21a Rugged Granite Uplands with Forest – Dumfries and Galloway	<p>In-addition: Slight. In-combination: Substantial.</p> <p>The Proposed Development would result in a minor addition to the overall influence of wind development as visible from this LCT.</p> <p>The Proposed Development would appear to bridge the gap between the existing Airies and Kilgallioch turbines. The in-planning Kilgallioch turbines would sit closer to the LCT, directly in front of the Proposed Development. Airies II (scoping scheme) would flank the Proposed Development to the south. To the north the in-planning Stranoch and Arecleoch extension schemes would increase the influence of wind development considerably within this cluster.</p> <p>The addition of the Proposed Development would result in a minor addition to the overall influence of wind farm development and it would not extend the geographical area within which there are wind turbines currently. Therefore the magnitude of impact would be Slight.</p>	High	<p>In-addition effects: Moderate and not significant. In-combination effects: <b>Major</b> and significant.</p> <p>The Proposed Development would add a small amount to the existing wind development as experienced in views from this LCT.</p> <p>The existing, consented and in-planning developments, in combination with the Proposed Development amount to a considerable influence of wind development that would be visible from vantage points in parts of this LCT.</p>
STC 1	Remote High Cliffs	<p>In-addition: Negligible/ None. In-combination: Slight.</p> <p>Views of the Proposed Development from locations on the western side of the Rhins Peninsula and Machars Peninsula would be substantially screened by intervening topography. The main visibility would occur on the eastern side of the Rhins Peninsula and across Luce Bay from the proposed turbines would be seen distantly on the skyline to the north east. The proposed turbines would be partially screened by intervening topography and vegetation and would be seen behind a number of other wind farms including Barlockhart Moor, Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell. This is illustrated at Viewpoints 11 (Figures 5.19a to 5.19f) and 14 (Figures 5.22a to 5.22h).</p>	Medium to High	<p>In-addition effects: None. In-combination effects: Moderate not significant</p> <p>The Proposed Development would be imperceptible within the mass of wind farms visible in views from limited locations within this SCT, and would not adversely affect key characteristics such as its high cliffs or low lying sandy or stony bays or the contrast between the sharply vertical line of the cliffs with the horizontal expanse of the sea, or the STCs remoteness.</p> <p>There would also be limited visibility of the existing, consented and in-planning wind farms from this SCT. However, where they are visible they would form a notable and complex collection of wind farms.</p>
STC 3	Deposition Coastline, Open Views	<p>In-addition: Negligible/ None. In-combination: Slight.</p> <p>The Proposed Development is barely perceptible in the few views from around Sandhead.</p> <p>The wider wind development context forms a discernible feature in long distance views from the limited locations around Sandhead where there is visibility.</p> <p>Views of the Proposed Development would be confined to locations at the western end of this SCT, in the vicinity of Sandhead from where the Proposed Development's turbines would be seen distantly on the skyline to the north east. The proposed turbines would be partially screened by intervening topography and vegetation and would be seen behind a number of other wind farms including Barlockhart Moor, Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell. This is illustrated at Viewpoint 14 (Figures 5.22a to 5.22h) which is located on the boundary of SCT.</p>	Medium to High	<p>In-addition effects: None. In-combination Effects: Moderate not significant.</p> <p>The Proposed Development would add an imperceptible amount to the discernible presence of wind development on the horizon where this is potential visibility.</p>
STC 4	Outer Firth	<p>In-addition: Negligible/ None. In-combination: Slight.</p> <p>Seen from Wigton Bay and the adjoining sections of coast included in this SCT the Proposed Development would be seen distantly to the north west amidst a horizon containing extensive existing and consented developments and would be partially obscured by intervening topography.</p>	High	<p>In-addition effects: None. In-combination Effects: Moderate not significant.</p> <p>The Proposed Development would add to the overall presence of wind energy development but there would be restricted views from this SCT.</p> <p>Wind energy development would be discernible in highly restricted views from this SCT. It would not form a defining characteristic of this SCT.</p>

<b>Table 5.2.4: Assessment of Cumulative Effects on Seascape and Landscape Character Types</b>				
<b>LCT Ref.</b>	<b>Seascape/ Landscape Character Type</b>	<b>Magnitude of Cumulative Impact</b>	<b>Sensitivity</b>	<b>Residual Cumulative Effect</b>
		The visualisations for Viewpoint 7 (Figures 5.15a to 5.15f) are illustrative of the appearance the Proposed Development from this part of the STC.		



## Technical Appendix 5.3: Viewpoint Assessment





## Technical Appendix 5.3: Viewpoint Assessment

- 1.1.1 This Technical Appendix sets out the findings of the detailed viewpoint assessment, carried out as part of the SLVIA for the Proposed Development. The findings of the viewpoint assessment are used to inform the overall assessment of effects of the SLVIA and were initially utilised in the design of mitigation measures discussed in Chapter 3: Design Evolution and Alternatives and in the assessment of landscape and visual effects arising from the Proposed Development (See Chapter 5).
- 1.1.2 The viewpoints utilised in the assessment were agreed with Energy Consents Unit (ECU) following consultation with Dumfries and Galloway Council (DGC) and NatureScot (NS) during a pre-scoping, scoping and post-scoping consultation exercise (detailed in Chapter 5: SLVIA, Volume 2). The viewpoints were intended to reflect a range of receptor locations at different distances, directions, and elevations relative to the Site. The selected viewpoints are intended to represent the experience that receptors would have at recognised vantage points, within landscape character types and landscape designations, settlements, important transportation and recreational routes.
- 1.1.3 An assessment of the potential effects on both landscape character and visual amenity arising from the Proposed Development at each of the agreed viewpoints was undertaken and the findings set out in Tables 5.3.1, 5.3.2a and 5.3.2b below. These tables describe:
- the viewpoint reference number and name;
  - the sensitivity of the landscape character and visual receptors at each viewpoint;
  - the existing view from each location;
  - the cumulative context;
  - the predicted operational view of the Proposed Development with other operational and consented developments; and
  - the predicted cumulative view of Proposed Development with operational, consented and in planning developments.
- 1.1.4 Visualisations for each of the viewpoints are illustrated on Figures 5.9a to 5.29f (Volume 3b of the EIA Report). These images have been created in accordance with current NS guidance, and contain details of the location, elevation, bearing and distance of the Proposed Development from the nearest Proposed Development turbine. It should be noted that bearings of views may vary according to whether the view is centred on the site centre (as in the case of the montaged images) or whether the site is offset

to take account of cumulative developments (i.e. in cumulative wireline images). Some limited enhancement of photography and photomontages was undertaken (NS compliant images only). Where this was undertaken enhancements were limited to adjustments that would conventionally occur in a darkroom to improve the clarity of an image, not change its essential character.

- 1.1.5 The visualisations reflect the appearance of the Proposed Development at the time of the completion of construction works at the site and include images showing the Proposed Development on its own set within the baseline view at the time of the photography for the LVIA, as well as in the context of existing, consented and proposed wind farms. In some circumstances, due to meteorological conditions on the day of photography, existing development across the skyline in the view is not immediately discernible in some images. Therefore, the Proposed Development has been presented at a higher contrast so as to not underplay the effects (Viewpoint 4, 9, 10 and 17. EIA Volume 3b Figures 5.12a to 5.12h; Figures 5.17a to 5.17h, Figures 5.18a to 5.18j and Figures 5.25a to 5.25j). While this assists in identifying the Proposed Development in the view, in actual views the Proposed Development would appear similar in colour to those in the baseline photography and would be less prominent in the view. In order to illustrate the cumulative effects, where existing developments are barely visible due to the atmospheric conditions these have also been montaged into the visualisation.
- 1.1.6 In accordance with current guidance, visualisations have been prepared to illustrate the full impact of blades by angling these square on to the viewer. However, this approach appears incongruous in visualisations in which the blades of existing wind developments are oblique (viewpoints 5, 6 and 17. EIA Volume 3b Figures 5.13a to 5.13j, Figures 5.14a to 5.14l, and Figures 5.25a to 5.25j). In these visualisations, the proposed turbine blades are also shown as oblique to match existing developments.
- 1.1.7 The night time visualisations have been included for Viewpoint 2, 3 and 6 (EIA Volume 3b Figures 5.10a to 5.10j, Figures 5.11a to 5.11h and Figures 5.14a to 5.14l). These illustrate the type of lighting proposed in worst case scenario, as explained in the Lighting Assessment in TA5.7.
- 1.1.8 Table 5.3.1, below, summarises the findings of the Viewpoint Assessment whilst Table 5.3.2a contains the detailed assessment of effects on landscape character and visual amenity at viewpoints in the context of existing operational and consented wind farms, and Table 5.3.2b outlines the findings of the assessment of cumulative effects at each viewpoint taking into account existing operational, consented and proposed wind energy developments.

Viewpoint No.	Viewpoint Name	Location	Residual Effect on Landscape Character at Viewpoint	Residual Cumulative Effect on Landscape Character at Viewpoint	Residual Effect on Visual Receptor at Viewpoint	Residual Cumulative Effect on Visual Receptor at Viewpoint
1	A714, west of Glentrool	233986, 578564	Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate/ Minor	Moderate to Moderate/ Minor	In-combination: <b>Major to Major/ Moderate</b> (significant) In-addition: Moderate to Moderate/ Minor
2	Merrick	242748, 585554	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate
3	Glenvernock Fell	232708, 574109	Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate/ Minor	Moderate	In-combination: <b>Major</b> (Significant) In-addition: Moderate/ Minor
4	Bruce's Stone, near Marrick car park	241580, 580327	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate
5	Cairnsmore of Fleet	250113, 567048	Moderate	In-combination: <b>Major</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major</b> (Significant) In-addition: Moderate

<b>Viewpoint No.</b>	<b>Viewpoint Name</b>	<b>Location</b>	<b>Residual Effect on Landscape Character at Viewpoint</b>	<b>Residual Cumulative Effect on Landscape Character at Viewpoint</b>	<b>Residual Effect on Visual Receptor at Viewpoint</b>	<b>Residual Cumulative Effect on Visual Receptor at Viewpoint</b>
6	Fell End	230338, 564066	Moderate	In-combination: <b>Major</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major</b> (Significant) In-addition: Moderate
7	A75 Creetown	247169, 558221	Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	Moderate/ Minor to Minor	In-combination: <b>Moderate/ Major</b> (Significant) to Moderate In-addition: Moderate/ Minor to Minor
8	Fell Loch	230591 555297	None (Moderate/ Minor if forestry felled)	None	None (Moderate/ Minor to Minor if forestry felled)	None
9	Minor Road South of Mochrum Loch	230395, 551843	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate/ Minor	Moderate/ Minor	In-combination: Moderate In-addition: Minor
10	Knock Fell	225506, 555792	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate
11	Mull of Galloway	215703, 530518	Moderate/ Minor	In-combination: Moderate In-addition: Moderate/ Minor	Moderate/ Minor	In-combination: Moderate In-addition: Moderate/ Minor
12	A75, Glenluce	220586, 557307	Minor	In-combination: Moderate In-addition: Moderate/ Minor	Moderate/ Minor to Minor	In-combination: Moderate to Moderate/ Minor In-addition: Moderate/ Minor to Minor
13	Whitecairn Caravan Site	221349, 560323	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	Moderate	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate
14	Sandhead	209862, 549928	Minor	In-combination: Moderate In-addition: Moderate/ Minor	Moderate/ Minor	In-combination: Moderate In-addition: Moderate/ Minor
15	Mains of Larg, New Luce	216949, 564150	Moderate/ Minor	In-combination: Moderate In-addition: Minor	Moderate to Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) to Moderate In-addition: Moderate/ Minor to Minor
16	Minor Road, Balmurrie Fell	221612, 564936	Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Minor	Moderate to Moderate/ Minor	In-combination: <b>Major</b> (Significant) In-addition: Minor
17	Beneraird	213550, 578522	Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate/ Minor	Moderate/ Minor	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate/ Minor
18	Southern Upland Way (SUW) North of Balmurrie Fell	221413, 568706	<b>Major/ Moderate</b> (Significant)	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	<b>Major</b> (Significant)	In-combination: <b>Major</b> (Significant) In-addition: <b>Major/ Moderate</b> (Significant)
19	Tarf Bridge	225366, 564658	<b>Major/ Moderate</b> (Significant)	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	<b>Major to Major/ Moderate</b> (Significant)	In-combination: <b>Major/ Moderate</b> (Significant) to Moderate In-addition: Moderate to Moderate/ Minor
20	North of Loch Ronald	226906, 564418	<b>Major</b> (Significant)	In-combination: <b>Major</b> (Significant) In-addition: <b>Major/ Moderate</b> (Significant)	<b>Major</b> (Significant)	In-combination: <b>Major</b> (Significant) In-addition: <b>Major/ Moderate</b> (Significant)
21	Eldrig Fell	225247, 568719	<b>Major/ Moderate</b> (Significant)	In-combination: <b>Major/ Moderate</b> (Significant) In-addition: Moderate	<b>Major</b> (Significant)	In-combination: <b>Major</b> (Significant) In-addition: <b>Major/ Moderate</b> (Significant)

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
1	A714, west of Glentrool	14 km south west	Medium-Low: Plateau Moorland with Forest LCT	High: Tourists. Medium: General road users	<p>The baseline photographs in Figures 5.9a to 5.9d illustrate the existing view from this location.</p> <p>Views towards the Proposed Development extend across a medium scale, roughly grazed moorland landscape, towards gentle, rounded hills in the background. Areas of improved pasture are visible in the middle distance, associated with scattered farmhouses and related outbuildings.</p> <p>Large swathes of commercial forestry form the background to the view. Turbines at the existing Airies, Artfield Fell and Kilgallioch wind farms are visible on the skyline.</p>	<p>The Figures 5.9a, 5.9e and 5.9f illustrate the proposed view from this location.</p> <p>All twelve of the proposed turbines would be visible on the skyline of this view, partially obscured by commercial forestry. Hubs and blades would be visible on the skyline of the view.</p> <p>No site infrastructure would be evident from this viewpoint.</p>	<p>The Proposed Development would be seen distantly on the skyline in the background of the view. It would add to the developed character of the skyline in the view. The Proposed Development would be positioned in front of turbines at Artfield Fell, and between turbines at Airies and Kilgallioch wind farms.</p> <p>The rotor diameter of the proposed turbine would be larger in scale than those which are currently present in the view, with a slower rotor speed. While this difference in scale would be discernible, it would not confuse the perspective of the view, nor appear inconsistent with the existing developed context of the skyline. The Proposed Development would be prominent but effect localised change within a broader, unaltered context.</p> <p>Consequently, the magnitude of impact would be Slight.</p>	<p>The residual effect on the character at this viewpoint would be Moderate/ Minor and not significant.</p> <p>The Proposed Development would not be inconsistent with the scale of the landscape and developed skyline context that forms the background to views from this location.</p>	<p>The residual effect on visual receptors at this viewpoint would be Moderate in respect of Tourists and Moderate/ Minor in respect of general road users which is not significant.</p> <p>The Proposed Development would represent a new element in views from this location but would affect a limited proportion of the view from this location.</p>
2	Merrick	25.2 km south west	High: Rugged Granite Upland LCT Merrick Wild Land Area Galloway Hills RSA	High: Hill walkers	<p>The baseline photographs in Figure 5.10a to Figure 5.10f illustrate the existing view from this location.</p> <p>The elevated and open nature of this viewpoint means that views are large scale and panoramic. However, the context of the landscape, as experienced from this location, varies considerably according to the direction and backdrop of the view.</p> <p>In the direction of the Proposed Development, the foreground comprises the open moorland of the hill summit. Beyond this, the middle-ground is dominated by a mosaic of dense commercial forestry, open moorland and the open waters of small moorland lochs. In the background the coastal landscape comprises a patchwork of agricultural fields bisected by a road network and grid infrastructure.</p> <p>Wind farm development is a key characteristic of the low-lying plateau moorland landscape in the views to the east, north and west from Merrick. In the direction of the Proposed Development, wind energy development stretches from Mark Hill in the north, to Barlockhart Moor Extension in the south, and includes Arecleoch, Glen App, Chirmorie,</p>	<p>Figures 5.10a, 5.10c, 5.10g and 5.10h illustrate the proposed view from this location.</p> <p>These images indicate that all twelve of the Proposed Developments turbines would be visible from this location. They would appear in the middle ground of the view between the existing Airies and Kilgallioch wind farms. The turbines would be backclothed by forestry and farmland the darker colouring of which would contrast with the pale grey of the turbines.</p> <p>Due to distance and screening by forestry and topography, none of the site infrastructure would be discernible in the view from this viewpoint.</p>	<p>While the difference in scale of turbines would be discernible, it would not be immediately apparent or result in discordance in the view.</p> <p>Given the distance at which it would be seen, the limited proportion of this expansive panoramic view it would occupy and the existing context of wind turbines, settlement and infrastructure, the magnitude of impact attributable to the Proposed Development would be Slight.</p>	<p>The residual effect on the character at this viewpoint would be Moderate and not significant.</p> <p>The Proposed Development, whilst resulting in some intensification of development in part of the expansive view from this location, would not be inconsistent with the existing character of views from the Rugged Granite Uplands as experienced at this viewpoint, and would consolidate the emergent and existing pattern of development.</p>	<p>Moderate (not Significant).</p> <p>The Proposed Development would represent a new infrastructural element in views from this location. However, it would affect a limited proportion of the panoramic view from this summit. The Proposed Development would not interrupt key views of the coastline/ Wigtown Bay as well as the most scenic views from within the Merrick WLA.</p>

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
					Larbrax, Kilgallioch, North Rhins, Balmurrie Fell, Artfield Fell, Glenchamber, Airies and Carscreugh. These developments form a characterising cluster of turbines in the view.				
3	Glenvernock Fell	10.3 km south west	Medium-Low: Plateau Moorland with Forest LCT	High: Southern Upland Way users	<p>The baseline photographs in Figures 5.11a to 5.11d illustrate the existing view from this location.</p> <p>The elevated view extends across a plateau moorland landscape which contains large areas of forestry, of mixed age. The view is expansive however is bounded, in the background, by a low, gently undulating horizon. Some vertical elements exist, such as electricity infrastructure, small buildings amongst forestry and woodland and an array of wind turbines at Kilgallioch, Artfield Fell, Glenchamber and Airies across the skyline.</p>	<p>Figures 5.11a, 5.10c, 5.10d, 5.11e, 5.11g and 5.11h illustrate the proposed view from this location.</p> <p>All 12 turbines would be visible from this location but would be partially obscured by intervening topography. They would be positioned in front of turbines at Artfield Fell, and would be viewed across the skyline.</p> <p>The proposed turbines would be located in the background of the view. The Proposed Development would extend to fill a gap between existing development at Airies and Kilgallioch, consolidating the spread of development within the landscape and within the view.</p> <p>The difference in scale and rotor speed of turbine would be discernible however they would not appear inconsistent with the current baseline and would relate visually to turbines at Airies and Kilgallioch.</p> <p>None of the proposed site infrastructure would be discernible in the view from this viewpoint.</p>	Given the limited proportion of the view that would be occupied by the Proposed Development and the existing context of wind farm development within the landscape and the view, the magnitude of impact attributed to the Proposed Development would be Slight.	<p>The effect would be Moderate/ Minor and not significant.</p> <p>The Proposed Development would add to the complexity of vertical elements, built forms and movement on the skyline but would not be inconsistent with the scale and existing character of the Plateau Moorland with Forest landscape in views from this location.</p>	<p>A Moderate effect in respect of users of the Southern Upland Way (and therefore not significant).</p> <p>The Proposed Development would add to the influence and complexity of turbines across on the skyline in the view.</p>
4	Bruce's Stone, near Merrick car park	21 km south west	High: Rugged Granite Upland with Forest LCT Galloway Hills RSA	High: National Cycle Network Route 7 users; walkers	<p>The baseline photographs in Figures 5.12a to 5.12d illustrate the existing view from this location.</p> <p>The view extends south west along Glen Trool to the plateau moorland landscape which forms the background to the viewpoint.</p> <p>Loch Trool forms the key focal point within the view and draws the eye along the glen. Areas of native woodland are present in the fore and middle ground, with larger swathes of plantation forestry creating a mosaic landscape in the background.</p> <p>Turbines at Airies, Artfield Fell and Balmurrie Fell and Kilgallioch Wind Farms are visible across the full skyline in the background of the view. These turbines are not spread evenly across the view, with tightly clustered turbines apparent to the south west, and more spread out, balanced development to the north west.</p>	<p>Figures 5.12a, 5.12c, 5.12e and 5.12f, 5.12g and 5.12h illustrate the proposed view from this location.</p> <p>Please note: Due to meteorological conditions on the day of photography, existing development across the skyline in the view is not immediately discernible. Therefore, the Proposed Development has been presented at a higher contrast so as to not underplay the effects. In reality, the Proposed Development would appear similar in colour to those in the baseline photography and would be less prominent in the view.</p> <p>All twelve of the proposed turbines would be visible across the skyline at the end of the glen. Topography screens a high proportion of the turbine towers,</p>	Despite the distance at which it would be seen, the Proposed Development would occupy a prominent skyline position. The alignment of the landscape in the foreground draws the eye to this part of the view.	<p>The effect would be Moderate in respect of the landscape character at this viewpoint. This is not considered significant.</p> <p>The Proposed Development would not be anomalous in the context of established development on the skyline but would add to the complexity of vertical elements and built forms on the skyline which forms a key characteristic in the view across Loch Trool from this location.</p>	<p>The Proposed Development would represent a Moderate effect in respect of users of the National Cycle Route 7, walkers and people parking at the car park.</p> <p>The Proposed Development would add to the complexity of vertical elements and built forms on the skyline, thereby constituting.</p>

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
						<p>so hubs and blades would be the key parts of the wind farm visible from this location. The Proposed Development would be viewed in the context of turbines at Kilgallioch and Airies, with turbines at Artfield Fell and Balmurrie Fell visible in the distance.</p> <p>None of the proposed site infrastructure would be discernible in the view from this viewpoint.</p>	<p>The Proposed Development would result in a discernible alteration to a key characteristic of the view however would not introduce new or unfamiliar elements within the view. The underlying view composition would be broadly consistent with the baseline.</p> <p>Consequently, the magnitude of impact attributable to the Proposed Development would be Slight.</p>		
5	Cairnsmore of Fleet	25.3 km west north west	High: Coastal Granite Uplands LCT Galloway Hills RSA	High: Hill walkers	<p>The baseline photographs in Figures 5.13a to 5.13f illustrate the existing view from this location.</p> <p>Views from this elevated and open summit are large scale, and panoramic. The character of views across the landscape varies considerably according to the direction of the view.</p> <p>In the direction of the Proposed Development, the foreground comprises the open moorland of the hill summit. Beyond this, the middle-ground is dominated by a mosaic of commercial forestry, open moorland and areas of concentrated settlement. Wigtown Bay is visible to the south south west.</p> <p>A broad spread of wind farm development is a key element in the view from Cairnsmore of Fleet, stretching from Arecleoch in the north, to Barlockhart Moor in the south, and including Kilgallioch, Airies, Artfield Fell and Balmurrie Fell, Carscreugh and Glenchamber wind farms. These developments form a characterising cluster of turbines in the middle ground of the view.</p>	<p>Figures 5.13a, 5.13c, 5.13g to 5.13j illustrate the proposed view from this location.</p> <p>These images show all twelve of the proposed turbines would be visible from this location. They would appear in the middle ground of the view behind the existing turbines at Airies Wind Farm and adjacent to those at Kilgallioch. The rotor diameter of the proposed turbines would be of a larger scale than those that surround them, which would be discernible in the view. Due to increased distance, the speed of rotation is unlikely to be notable. The Proposed Development would be backclothed by a combination of forestry and grasslands which would contrast with the pale grey of the turbines.</p> <p>None of the proposed site infrastructure would be discernible in the view from this location.</p>	<p>The Proposed Development would reinforce the presence of wind turbines across the plateau moorland landscape in views from Cairnsmore of Fleet. The Proposed Development would be positioned behind turbines at Airies and would not laterally extend the presence of turbines. While the Proposed Development would add further complexity to the background of views from this location, it would align within the current pattern of development, where larger turbines are present within the interior of the existing cluster of developments north of the A75 carriageway.</p> <p>Given the distance at which the Proposed Development would be seen, the limited proportion of this expansive panorama it would occupy and the existing context of wind turbines, settlement and infrastructure, the magnitude of impact attributable to the Proposed Development would be Slight.</p>	<p>The residual effect on the character at this viewpoint would be Moderate and not significant.</p> <p>While the Proposed Development would introduce new turbines to the view from this location, it would not be inconsistent with the existing baseline context and would be of insufficient prominence to detract from the character of the landscape at the viewpoint.</p>	<p>The Proposed Development would represent a Moderate effect which is not significant.</p> <p>The Proposed Development would represent a new infrastructural element in views from this location. However, it would affect a limited proportion of the panoramic view from this summit, would reflect the current pattern of development emerging across the plateau moorland landscape and would sit comfortably within an existing cluster of wind turbines.</p>
6	Fell End	6.5 km west	High - Medium: Drumlin Pasture in Moss and Moor Lowland LCT	High: Hill walkers	<p>The baseline photographs in Figures 5.14a to 5.14f illustrate the existing view from this location.</p> <p>Views from this location are large scale, extending across an area of plateau moorland which is characterised by large plots of commercial forestry interspersed with fields of improved pasture and farm steadings. Linear features include stone walls and shelter belts.</p> <p>Existing wind energy development exerts a strong influence on the view. Turbines at Airies and Kilgallioch wind farms are key elements, breaking the skyline, while developments at Artfield Fell, Balmurrie Fell, Glenchamber and</p>	<p>Figures 5.14a, 5.14c, and 5.14g to 5.14j illustrate the proposed view from this location.</p> <p>All twelve turbines would be visible from this location in the middle ground of the view, with little screening afforded by intervening landscape or vegetation.</p> <p>Proposed turbines would be located in front of turbines at Kilgallioch, and Artfield Fell wind farms, and adjacent to turbines at Airies Wind Farm.</p> <p>None of the proposed site infrastructure would be discernible in the view from this viewpoint.</p>	<p>The Proposed Development would intensify the level of wind turbine development in the view from this position.</p> <p>Whilst the Proposed Developments turbines would be of a larger scale to those which currently are present in the landscape this difference would not be immediately obvious, especially in the context of the closer turbines of Arecleoch. However, the arrangement of the proposed turbines would contrast with that of surrounding developments, thereby adding further complexity to the view.</p>	<p>The residual effect on the character at this viewpoint would be Moderate and not significant.</p> <p>Whilst the Proposed Development would introduce new turbines to the view from this location, it would affect a limited proportion of the landscape from this viewpoint. The Proposed Development would not be inconsistent with the character of the existing landscape context of the view and would contribute to the existing influence of turbines on the landscape</p>	<p>The Proposed Development would represent a Moderate effect which is not significant.</p> <p>The Proposed Development would represent additional turbines in views are already strongly influenced by an existing cluster of wind turbines.</p>

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
					Arcleoch are visible at longer distances and provide further context.		The increase in the number of turbines in the view would be discernible however the baseline character of the view would be largely unaltered.  The Proposed Development would represent a minor addition to the influence of existing wind energy development on the composition of the view and would occupy a relatively small proportion of view. Consequently, the magnitude of impact attributed to the Proposed Development would be Slight.	character of the plateau moorland.	
7	A75 Creetown	24.2 km west	High: Coastal Flats LCT Galloway Hills RSA	High: Residential Receptors Medium: General road users	The baseline photographs in Figures 5.15a to 5.15d illustrate the existing view from this location.  The view from this location is large scale and contains substantial contrast. To the west, the open tidal marshes and horizontal landscape of the Wigtown Coastal Flats and their simplicity and openness emphasises the undulating skyline in the background of the view. This distant horizon is marked by extensive forest cover, above which the summits of Artfield Fell and Balmurrie Fell, whilst forming a focal point, are set within a highly developed context of existing wind farms.  In contrast, inland views to the north, east and south comprises a more settled aspect with scattered properties and larger farm complexes visible, interspersed amongst areas of improved pasture, large areas of commercial forestry and distant hills.	Figures 5.15a, 5.15e and 5.15f illustrate the proposed view from this location.  Blade tips of up to eleven turbines would be theoretically visible from this location across the skyline of the view. In actuality visibility would be limited by intervening forestry and would be barely discernible.	The Proposed Development would be seen distantly (at a distance of over 24 km) and would be barely discernible and as such would have a Negligible impact.	The residual effect on the character at this viewpoint would be Moderate/ Minor and not significant.  This is due to the substantially restricted visibility of the Proposed Development and its developed context.	Given the substantially restricted visibility of the Proposed Development and its developed context the residual effect on the character at this viewpoint the Proposed Development would therefore represent a Moderate/ Minor effect on residential receptors and a Minor effect on general road users, which is not significant.
8	Fell Loch	13 km north north west	High: Moss and Forest Lowlands LCT Mochrum Lochs RSA	High: Walkers Medium: General road users	The baseline photographs in Figures 5.16a to 5.16d illustrate the existing view from this location.  The view is across an area of moorland, used for rough grazing. Commercial forestry is present across the background and skyline of the view to the north west in the direction of the Site. Areas of broadleaved woodland align water features and surround properties.  Evidence of human activity in the view includes features such as electricity distribution poles, stone walls, a minor road and commercial forestry.  Long distance views are truncated by minor undulations in the landscape which contain the view, however glimpses of the Galloway Hills are present to the north east.	The Figures 5.16a, 5.16e and 5.16f illustrate the proposed view from this location.  Theoretically, blade tips of all 12 of the proposed turbines would be visible on the skyline in views from this location. However, intervening vegetation would entirely screen the turbines.  Should this forestry be felled, the Proposed Development would be viewed in the context of existing wind energy development and would be barely discernible.	On the basis of current baseline conditions, the Proposed Development would have no impact due to the screening effect of existing forestry. In the event of this forestry being clear felled the magnitude of impact would be Negligible and reversed once replacement planting of intervening forestry has matured sufficiently.	Currently there would be no effects on the character of the landscape at this viewpoint. Following felling of intervening forestry, however, Moderate/ Minor effects are anticipated but these would be temporary, which would not be significant.	Currently there would be no effects on the amenity of this viewpoint. Following anticipated felling of intervening forestry, Moderate/ Minor effects on walkers, and Minor effects on general road users are anticipated but these would be temporary and not significant.

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
9	Minor Road South of Mochrum Loch	16.5 km north north west	High: Moss and Forest Lowlands LCT Mochrum Lochs RSA	Medium: General road users	<p>The baseline photographs in Figures 5.17a to 5.17d illustrate the existing view from this location.</p> <p>The view is of a medium scale, rural landscape. Long range views are generally contained by intervening gently undulating topography and areas of woodland/ shelterbelts. However, views to the west are more open and extend to the larger Galloway hills, which form a prominent backdrop.</p> <p>Existing wind turbines at Glenchamber, Artfield Fell, Balmurrie Fell, Kilgallioch and Airies; and consented turbines at Chirmorie Wind Farm are visible crossing a large proportion of the skyline in views to the north north west where they form notable concentration of wind energy development.</p> <p>An electricity distribution line passes in close proximity to the viewpoint location, contributing to the mix of vertical infrastructure in the view.</p>	<p>Figures 5.17a, and Figures 5.17e to 5.17h illustrate the proposed view from this location.</p> <p>All twelve wind turbines would be visible from this viewpoint but would be partially screened by intervening topography.</p> <p>The Proposed Development would be viewed on the skyline, within the context of considerable existing wind farm development.</p>	<p>The Proposed Development would be seen distantly, occupy a small proportion of the view and would be set amidst a considerable clustering of existing turbines and consequently would be barely discernible. On this basis, the magnitude of impact would be Slight.</p>	<p>The residual effect on the character at this viewpoint would be Moderate and not significant.</p> <p>While the Proposed Development would introduce additional turbines and complexity to the background of the view from this location, it would not be inconsistent with the existing baseline context of wind energy development which is a characteristic feature of the plateau moorland landscape to the north of this viewpoint, and which is an established facet of the views across the Moss and Forest Lowlands landscape.</p>	<p>The Proposed Development would represent a Moderate/ Minor effect which is not significant. The Proposed Development would not introduce anomalous visual features to the view from this location or form a new focal point.</p>
10	Knock Fell	11.7 km north	High – Medium: Moss and Forest Lowlands LCT	High: Tourists; Hill walkers	<p>The baseline photographs in Figures 5.18a to 5.18f illustrate the existing view from this location.</p> <p>This elevated viewpoint provides long-range and largely panoramic views which encompass Luce Bay in the south west, the plateau moorland landscape to the west and towards the Galloway Hills in the east. A communications tower and a trig point create some interruption to the panorama in views to the east and south east.</p> <p>The landscape in the foreground and middle ground of the view to the north (i.e. towards the Site) is open and of a large scale, with extensive areas of commercial forestry and moorland and lochs contributing to a mosaic of land uses. Wind energy development is a defining characteristic of the background of views to the west and north, the existing cluster of developments to the north of the A75, (including Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell, Arecleoch, Kilgallioch) forming an especially prominent concentration of turbines.</p>	<p>Figures 5.18a, and Figures 5.18g to 5.18j illustrate the proposed view from this location.</p> <p>The Proposed Development would be clearly apparent in the middle distance, and partially skylined, and would be located in front of turbines at Kilgallioch, and adjacent to those at Artfield Fell and Glenchamber.</p> <p>None of the proposed site infrastructure, such as access tracks would be visible from this viewpoint.</p>	<p>The Proposed Development would be seen amidst a complex and somewhat diverse assemblage of wind turbines that span across the majority of the view to the north.</p> <p>The proposed turbines would appear larger than those which currently operate within the landscape. While the difference in scale would be notable, it is not considered that the difference would result in a disparity across the landscape as there is already considerable variation in turbine scale and rotation speed within the view.</p> <p>Given the extent of existing wind farm development present, the and the relatively limited extent of the view that the Proposed Development would occupy, the magnitude of impact would be Slight.</p>	<p>Whilst the Proposed Development would add to the complexity and diversity of existing wind energy developments to the north of this viewpoint, it would not represent an obvious change to the existing landscape character in the view in this direction which already contains a high level of wind energy development. The effect would be Moderate and not significant.</p>	<p>The Proposed Development would represent a Moderate effect which is not significant.</p> <p>The Proposed Development would represent additional, large scale turbines in views from this location. It would affect a limited proportion of the panoramic view in an area of existing wind energy development and would reinforce the current pattern of development within the view, rather than extending development into areas where none exists currently.</p>

<b>VP No.</b>	<b>Viewpoint Name</b>	<b>Distance and Direction to the Proposed Development</b>	<b>Landscape Sensitivity at Viewpoint</b>	<b>Sensitivity of Visual Receptors at Viewpoint</b>	<b>Existing View</b>	<b>Predicted View</b>	<b>Magnitude of Impact</b>	<b>Residual Effect on Landscape Character at Viewpoint</b>	<b>Residual Effect on Visual Amenity</b>
11	Mull of Galloway	38 km north	High: Peninsula LCT Rhins Coast RSA	High: Tourists (Formal viewpoint)	<p>The baseline photographs in Figures 5.19a to 5.19d illustrate the existing view from this location.</p> <p>Expansive seaward views are provided from this peninsula at the end of the Rhin's landform. The view towards the Proposed Development site extends across Luce Bay, towards the Wigtownshire Peninsula coastline. The Galloway Hills form the background to the view.</p> <p>It is a broad, open view which is dominated by the open water of Luce Bay as well as scattered settlement, roads and caravan parks on Cailness Point, while moorland landscape with dark patches of commercial forestry and a dense cluster of wind farm developments that typify the long distance views of the Wigtownshire Peninsula.</p>	<p>The Figures 5.19a, 5.19e and Figure5.19f illustrate the proposed view from this location.</p> <p>The Proposed Development would be located in the background of the view where up to twelve of its proposed turbines would be visible on the skyline of the view, but would be partially screened by intervening topography and vegetation, and would be seen behind a number of other wind farms including Barlockhart Moor, Carscreugh, Glenchamber, Artfield Fell and Balmurrie Fell.</p> <p>Proposed site infrastructure would not be apparent from this distant viewpoint.</p>	<p>Given the distance at which it would be seen, the small proportion of the view it would occupy, its partially screened position and its context within a substantial existing cluster of turbines, the magnitude of impact would be Negligible.</p>	<p>Residual effects on the character of the landscape at this position would be Moderate/ Minor and not significant.</p> <p>The Proposed Development would represent a barely discernible change to the view from this location and would not detract from the underlying character of the seascape and the landscape at the viewpoint.</p>	<p>Moderate/Minor. The Proposed Development would constitute a barely discernible addition to views and would be seen in the context of the wider developed horizon in the view.</p>
12	A75, Glenluce	10.8 km north north east	High - Medium: Drumlin Pasture in Moss and Moor Lowland LCT	High: Residential receptors; tourists Medium: General road users	<p>The baseline photographs in Figures 5.20a to 5.20f illustrate the existing view from this location.</p> <p>The viewpoint is located on a key road and tourist route at the centre of the study area. Views from this location are of medium scale, extending across undulating farmland with occasional glimpses to moorland hills in the distance.</p> <p>To the north east of the viewpoint (towards the Site) the landscape is settled, with scattered houses and farm buildings, transmission lines and communications infrastructure forming key elements in the view.</p> <p>Other constituents of the view include medium sized fields bounded by a mixture of stone walls, post and wire fences, hedges and shelterbelts. Woodland is present in the low-lying landscape in the foreground of the view.</p> <p>Carscreugh Wind Farm is visible across the hillside and skyline in part of the view. Blade tips of a small number of turbines at Glenchamber are also visible.</p>	<p>The Figures 5.20a, 5.20g and 5.20h illustrate the proposed view from this location.</p> <p>The blade tips of up to six turbines would be visible from this location but would be difficult to discern and would be positioned behind turbines at Carscreugh, and adjacent to those at Glenchamber.</p>	<p>The Proposed Development would constitute a barely discernible change to the view. It would be set within an existing developed horizon. Given this and the transient nature of this viewpoint, the magnitude of impact would be Negligible.</p>	<p>The Proposed Development would be barely discernible and when considered in relation to existing turbines and grid infrastructure would represent only a Minor effect in the character of the landscape at this viewpoint.</p>	<p>Effects on visual receptors at this viewpoint would be Moderate/ Minor in respect of settlement and tourists and Minor in respect of general road users.</p>



Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
13	Whitecairn Caravan Site	7.7 km north north east	High - Medium: Upland Fringe LCT	High: Caravan users/ tourists, residential receptors	<p>The baseline photographs in Figures 5.21a to 5.21d illustrate the existing view from this location.</p> <p>The view from the road to the north east of the Whitecairn Caravan site is generally contained by low, rolling topography. Landuse is a mix of improved pasture and rough grazing, with wind farm development at Carscreugh and Glenchamber prominent in the view to the north east.</p>	<p>The Figures 5.21a, 5.21e and 5.21f illustrate the proposed view from this location.</p> <p>Up to seven of the proposed turbines (three blade tips and four hubs) would be visible from this viewpoint.</p> <p>The Proposed Development would be positioned behind turbines at Artfield Fell and Glenchamber, extending slightly further across the view to the north east and linking to the Airies array.</p> <p>No other aspect of the Proposed Development would be visible.</p>	<p>The Proposed Development would form a notable change in the view, infilling gap between the existing Kilgallioch and Airies schemes.</p> <p>The perceptible difference in the scale of proposed turbines and those of the existing wind farm would not be immediately apparent. However, the variation in rotor speed between developments would be perceptible.</p> <p>The magnitude of impact would be Slight. The Proposed Development would result in the discernible alteration of the baseline condition; however this change would be broadly consistent with the baseline.</p>	<p>The residual effect on the character of the landscape at this viewpoint would be Moderate and not significant.</p> <p>The Proposed Development, whilst contributing to the influence of wind energy development would not be anomalous in the context of the wind farm developments that form a characteristic part of the landscape, and would provide a degree of consolidation of development by infilling a gap between wind farms.</p>	<p>The Proposed Development would represent a Moderate effect which is not significant.</p> <p>The Proposed Development would represent an increase in the complexity and movement evident on the skyline of the view.</p>
14	Sandhead	22.6 km north north east	Medium - High: Peninsula LCT	High: Residential receptors; tourists	<p>The baseline photographs in Figures 5.22a to 5.22d illustrate the existing view from this location.</p> <p>The view from Sandhead is expansive and long-range and dominated by the open water of Luce Bay as well as scattered settlement, roads and caravan parks on Cailness Point, while moorland landscape with dark patches of commercial forestry and a dense cluster of wind farm developments including Barlockhart Moor, Carscreugh, Artfield Fell and Kilgallioch wind farms that typify the long distance views of the Wigtownshire Peninsula.</p> <p>In the foreground, the Luce Sands stretch along the coastline and a small settlement is located with views across the bay.</p>	<p>The Figures 5.22a, 5.22e and 5.22f illustrate the proposed view from this location.</p> <p>Up to eleven blade tips would be theoretically visible from this viewpoint. The majority of the Proposed Development would be screened by intervening topography, and the visible blade tips would be seen at distance and turbines would be positioned behind the Artfield Fell array.</p> <p>No other aspect of the Proposed Development would be visible.</p>	<p>Given the distance from the development, and the presence of existing turbines, the Proposed Development would introduce a barely discernible addition to the influence of wind energy development on the character of the seascape/ landscape. The magnitude of impact would be Negligible.</p>	<p>The residual effect on the character of the landscape at this viewpoint would be Minor and not significant.</p> <p>The Proposed Development, whilst adding to the complexity of the development that is a characteristic of the landscape in the background to views from this viewpoint, would not be inconsistent with the baseline view.</p>	<p>Moderate/ Minor (not significant). The Proposed Development would be too distant to detract significantly from the key coastal views to the north east.</p>
15	Mains of Larg, New Luce	7.1 km north east	Medium - Low: Plateau Moorland LCT	High: Residential receptors Medium: General road users	<p>The photographs in Figures 5.23a to 5.23f illustrate the existing view from this location.</p> <p>The viewpoint is located on a local road at Mains of Larg. Views from this location are of relatively small scale, extending across undulating farmland with occasional glimpses to more distant moorland hills.</p> <p>It is a settled landscape, with scattered houses and farm buildings located within areas of lower lying landscape in the foreground of the view.</p> <p>Broadleaved and coniferous woodland is present within the middle ground of the view and across the low lying hills in the background.</p>	<p>The Figures 5.23a, 5.23g and 5.23h illustrate the proposed view from this location.</p> <p>All twelve turbines would be theoretically visible on the skyline in views from this viewpoint, but as illustrated in the photomontage in Figure 5.23h, intervening topography and vegetation would screen all but 3 hubs and the blade tips of 8 turbines.</p> <p>These turbines would largely be viewed behind turbines at Balmurrie and Artfield Fell, but would extend to the north creating a partial infill between these existing developments and the Kilgallioch array.</p>	<p>The Proposed Development would be substantially screened and seen in the context of a baseline that already contains a substantial development. In this context the magnitude of impact would be Slight.</p>	<p>The Proposed Development would be barely discernible and when considered in relation to existing turbines would represent only a Moderate/ Minor effect on the character of the landscape at this viewpoint.</p>	<p>Effects on visual receptors at this viewpoint would be Moderate in respect of residential receptors and Moderate/ Minor in respect of general road users (not significant).</p>

Table 5.3.2a: Viewpoint Assessment

VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
					Turbines at Kilgallioch, Balmurrie Fell, Artfield Fell, Airies and Glenchamber wind farms are prominent along the skyline, occupying a 90 degree angle to the north east.	No other aspect of the Proposed Development would be visible.			
16	Minor Road, Balmurrie Fell	3.4 km north	Medium - Low: Plateau Moorland LCT	High: Cyclists/ Tourists Medium: General road users	<p>The baseline photographs in Figures 5.24a to 5.24f illustrate the existing view from this location.</p> <p>This viewpoint is located on a minor, single track road in an area of plateau moorland. It is an open landscape, of a large scale but views are of medium to small scale due to the foreshortening effect of the undulating topography.</p> <p>Key aspects of the view comprises a gently undulating moorland with prominent conical fell features, large scale coniferous plantations and extensive wind energy development. The Galloway Hills form a distant focal point on the horizon to the east.</p>	<p>The Figures 5.24a, 5.24g and 5.24h illustrate the proposed view from this location.</p> <p>The majority of the Proposed Development would be screened by the intervening topography of Balmurrie and Artfield Fells.</p> <p>The Proposed Development would appear behind Balmurrie Fell and Artfield Fell wind farms and would appear as a series of twelve blade tips with the consequence that size differences between the Proposed Development turbine and those of neighbouring wind farms would not be readily apparent. Variations in rotor speeds between the Artfield Fell turbines and those of the Proposed Development are likely, however.</p>	Given the substantially screened position of the Proposed Development and its developed context the magnitude of impact would be Slight.	<p>The Proposed Development would represent only a Moderate/ Minor effect on the character of the landscape at this viewpoint, which would not be significant.</p> <p>The character of the landscape in views from this location is already heavily influenced by wind farm development. Therefore, while the Proposed Development would be discernible across the skyline, it would not alter the baseline characteristics of the landscape.</p>	Effects on visual receptors at this viewpoint would be Moderate with respect to cyclists/ tourists and Moderate/ Minor for general road users (not significant).
17	Beneraird	13.2 km south east	High - Medium: Southern Uplands LCT	High: Hill walkers	<p>The baseline photographs in Figures 5.25a to 5.25f illustrate the existing view from this location.</p> <p>The view from Beneraird is long-range and panoramic, extending across the southern upland to the plateau moorland to the south east and west, the low-lying coastal farmland in the north west and across plateau moorland towards the Galloway Hills to the north east.</p> <p>Wind turbines are a frequent feature within the plateau moorland landscape, extending across a high proportion of the view to the south east and south west. Turbines at Arecleoch and Kilgallioch are prominent in the view, with Glenchamber, Artfield Fell, Balmurrie Fell, Airies, Glen App, Assel Valley, Hadyard Hill and Mark Hill wind farms forming a notable concentration of development across the landscape.</p>	<p>The Figures 5.25a, and 5.25g to 5.25j illustrate the proposed view from this location.</p> <p>All twelve turbines of the Proposed Development would be visible to the south east of this viewpoint. They would be located within an area of commercial forestry and within an extensive cluster of existing wind energy developments. Kilgallioch Wind Farm is positioned in front of proposed turbines, with Airies Wind Farm adjacent to the north of the view, and Artfield Fell, Balmurrie Fell and Glenchamber wind farms to the south.</p> <p>No other aspect of the Proposed Development would be discernible.</p>	<p>Given the distance at which the Proposed Development would be seen and its context within the interior of an extensive cluster of turbines the magnitude of impact attributable to the Proposed Development would be Negligible.</p> <p>The Proposed Development would discernibly alter the baseline condition; however this change would be broadly consistent with the exiting view.</p>	<p>The Proposed Development would be a barely discernible addition to the landscape. However, the landscape in this location is characterised by wind energy development and therefore, when considered in relation to existing turbines would represent only a Minor effect (not significant) in the character of the landscape at this viewpoint.</p>	<p>The Proposed Development would represent a Moderate/ Minor effect which is not significant.</p> <p>The Proposed Development would represent an increase in view of turbines from this location but would affect a limited proportion of the view.</p>
18	SUW North of Balmurrie Fell	1.2 km east south east	Medium - Low: Plateau Moorland LCT	High: Southern Upland Way users	<p>The baseline photographs in Figures 5.26a to 5.26f illustrate the existing view from this location.</p> <p>From this viewpoint, the view extends across an area of gently undulating moorland landscape towards wind turbines at Artfield Fell. Airies and Glenchamber wind farms are visible in the background of the view.</p> <p>To the north, longer distance views of the Galloway Hills are available.</p>	<p>The Figures 5.26a, 5.26g and 5.26h illustrate the proposed view from this location.</p> <p>All twelve turbines would be visible in the foreground and middle ground of this viewpoint, thereby extending wind farm development further across the view and bringing turbines closer to the viewpoint</p>	Given the relatively close proximity of the Proposed Development to this viewpoint and its prominence the magnitude of impact attributable to it would be Substantial.	<b>Major/ Moderate</b> (Significant) effect. The Proposed Development would add substantially to the influence of wind energy development at this location. Turbines would interrupt open views towards the Galloway Hills which form a key	The residual effect would be <b>Major</b> and Significant. The Proposed Development would introduce large scale wind turbines in close proximity to users of the Southern Upland Way. It would interrupt longer distance views to the

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
					However, in general the view from this location is foreshortened by intervening topography and forestry. Large areas of commercial forestry contrast with the adjacent moorland and provide a sense of scale. Forestry screens close proximity views to Kilgallioch Wind Farm which lies to the north of the viewpoint.	Proposed site infrastructure would be screened, however, by intervening topography and vegetation.		backdrop to the landscape in this view.	Galloway Hills in the north.
19	Tarf Bridge	2.9 km north north west	Medium - Low: Plateau Moorland LCT	High: Tourists Medium: General road users	<p>The baseline photographs in Figures 5.27a to 5.27f illustrate the existing view from this location.</p> <p>The view from Tarf Bridge is of a small scale, rural landscape characterised by gently undulating topography. Areas of broadleaved woodland and forestry lie across the undulating landscape in the background of the view.</p> <p>Turbines at Artfield Fell and Balmurrie Fell are visible to the west of the view and are seen overtopping the distinctive topographical form of the conical fells west of the Proposed Development Site. Restricted views of Airies Wind Farm are available to the north.</p>	<p>The Figures 5.27a, 5.27g and 5.27h illustrate the proposed view from this location.</p> <p>Up to twelve turbines of the Proposed Development would be visible from this viewpoint. The turbines would be seen on the skyline to the north of those at Artfield Fell. They would be partially screened by intervening topography and commercial forestry.</p> <p>No other aspect of the Proposed Development would be visible.</p>	<p>The Proposed Development would be viewed adjacent to turbines at Artfield Fell. The difference in scale would be discernible, with the Proposed Development appearing substantially larger than the existing turbines. Given the character of the landscape in the view, the larger turbines would not appear out of scale in the landscape but would contrast with the smaller scale Artfield Fell turbines. Variations in rotor speeds between the Artfield Fell turbines and those of the Proposed Development are also likely.</p> <p>The Proposed Development would introduce a series of new turbines to the skyline and would result in a considerable increase the influence of wind energy development on the character and composition of the baseline. and represent a Substantial impact.</p>	<p>The effect on the character of the landscape from this viewpoint would be <b>Major/ Moderate</b> and Significant.</p> <p>The plateau moorland landscape is largely characterised by wind energy development. However, from this viewpoint the influence of development is lessened by the small-scale landscape which screens longer distance views to the broader spread of development.</p>	<p>The Proposed Development would introduce new large-scale wind turbines in medium distance views for local road users. The effect would be <b>Major</b> in respect of tourists and <b>Major/ Moderate</b> in respect of general road users, and therefore Significant.</p>
20	North of Loch Ronald	3.7 km north west	High: Plateau Moorland with Forest LCT	High: local recreation (walkers, fishers, campers)	<p>The baseline photographs in Figures 5.28a to 5.28f illustrate the existing view from this location.</p> <p>The principal view from this location is oriented across Loch Ronald. The shores of the loch are characterised by marshy grassland which rises towards fields of improved pasture. Stone walls create small fields used for grazing. A minor road passes through the middle-distance view and is aligned by mature trees which form a belt of vegetation in the view.</p> <p>In the distance, moorland rise to form an undulating skyline punctuated in places by forest canopy as well as the conical forms of fell landscapes and the existing Artfield Fell turbines, which form prominent features on the horizon of the view. Blades of turbines at Airies Wind Farm are visible above woodland to the north. Carscreugh Wind Farm is also visible across the skyline in views to the south west.</p>	<p>The Figures 5.28a, 5.28g and 5.28h illustrate the proposed view from this location.</p> <p>Up to twelve turbines would be visible from this viewpoint (hubs) in the background of the view. The lower sections of turbine towers would be obscured by intervening topography and vegetation thereby reducing the apparent scale of the turbines.</p> <p>The Proposed Development would be skylined an occupy a horizontal section of the horizon currently without wind turbines. No other aspect of the Proposed Development would be visible.</p>	<p>The Proposed Development would be located adjacent to operational turbines at Artfield Fell. The difference in the size of turbines would be discernible, with the Proposed Development appearing substantially larger than the existing turbines and occupying a different topographical position. Variation in the rotor speed between developments would also be notable.</p> <p>The concentrated layout of the Proposed Development would contrast with the more spaced development at Artfield Fell. Stacking of turbines would result in a greater complexity in the view.</p> <p>Whilst the scale of the Proposed Development's turbines would be partially mitigated by the screening effect of intervening vegetation, the scale of the</p>	<p>The effect on the character of the landscape from this viewpoint would be <b>Major</b> and Significant.</p> <p>The plateau moorland landscape is partly characterised by wind energy development. However, from this viewpoint the influence of development is lessened by the degree of enclosure and compartmentalisation of the landscape surrounding the loch which screens longer distance views to the broader spread of development.</p>	<p>The effect would be <b>Major</b> and therefore Significant.</p> <p>The Proposed Development would introduce new large-scale wind turbines in views for people visiting the loch.</p>

Table 5.3.2a: Viewpoint Assessment									
VP No.	Viewpoint Name	Distance and Direction to the Proposed Development	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Existing View	Predicted View	Magnitude of Impact	Residual Effect on Landscape Character at Viewpoint	Residual Effect on Visual Amenity
							turbine hubs would be apparent and, when seen in conjunction with the adjoining Artfield Fell turbines would represent a clear and substantial change to the existing baseline context.		
21	Eldrig Fell	1.1 km south west	Medium: Plateau Moorland with Forest LCT	High: local high point	<p>The photographs in Figures 5.29a to 5.29f illustrate the existing view from this location.</p> <p>The elevated view provides open, panoramic views across the plateau moorland landscape. Large areas of coniferous forestry create dark shadows across the otherwise open moorland.</p> <p>To the west and north, the moorland landscape extends to the horizon, with little notable variation in the scale of the landform. To the north east and east, the plateau drops towards a central valley and the Galloway Hills provide the backdrop to the long-distance view. To the south, distance views to the sea are glimpsed.</p> <p>In addition to forestry, wind energy development is the key land use within the panoramic view. To the north, south and west, turbines at Airies, Kilgallioch, Glenchamber, Artfield Fell and Balmurrie Fell wind farms are prominent features in views. Longer distance views of Arecleoch, Mark Hill, Chirmorie, Carscreugh and Barkockhart Moor reinforce the characterisation of the plateau moorland landscape as a landscape with wind farms.</p>	<p>The Figures 5.29a, 5.29g and 5.29h illustrate the proposed view from this location.</p> <p>Turbines associated with the Proposed Development would be wholly visible in close proximity from this viewpoint.</p> <p>The turbines would be visible in the foreground of the view, backdropped by moorland with views to Artfield Fell and Kilgallioch wind farms behind.</p> <p>The Proposed Development would break the skyline.</p> <p>No other aspect of the Proposed Development would be visible.</p>	<p>Views of turbines are a characterising feature in the landscape as viewed from this viewpoint. The Proposed Development would be located in closer proximity to the viewer than other wind farms, appearing at a larger scale, particularly in relation to turbines at Artfield Fell. However, it would relate to the scale of turbines at Kilgallioch more readily and would not appear substantially larger.</p> <p>The Proposed Development would interrupt the view to the south west across open moorland, which is interspersed with existing forestry and wind developments.</p> <p>The Proposed Development would result in the considerable alteration of the composition of view from this location. The magnitude of impact would be Substantial.</p>	<p>The effect would be <b>Major/ Moderate</b> (and therefore Significant).</p> <p>While wind energy development is a key characteristic of the plateau moorland landscape, the Proposed Development would bring large scale turbines into the interior of the landscape within the view and would alter the balance of the landscape baseline from this location, where turbines are primarily in the background of the view.</p>	<p>The effect would be <b>Major</b> and Significant</p> <p>The Proposed Development would introduce large scale wind turbines in close proximity views from the summit of Eldrig Fell, interrupting longer distance views across the open plateau moorland.</p>

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
1	A714, west of Glentroot	Medium - Low: Plateau Moorland with Forest LCT	High: Tourists. Medium: General road users	Artfield Forest	Candidate Development	14 km SW	10.6	<p>In combination with wind turbines associated with existing, consented and in-planning schemes, the Proposed Development would form part of a highly developed skyline in this view. The Proposed Development would be located behind proposed turbines at Airies II and Kilgallioch Extension and would contribute to the Substantial influence of wind energy development in the view.</p> <p>However, due to its position within the center of a group of existing and Proposed Developments, the Proposed Development would represent a minor addition to the overall influence of wind farm development on the character of the landscape and on the composition of the view. The magnitude of impact would be Slight.</p>	<p>In combination effects in conjunction with existing, consented and In-Planning developments would be <b>Major/ Moderate</b> (Significant). Large scale wind energy development across the skyline at Airies II and Kilgallioch would encroach on the smaller scale nature of the landscape at this viewpoint.</p> <p>However, in addition effects attributable to the Proposed Development would be Moderate/ Minor.</p>	<p>In combination effects <b>Major</b> (Significant) in respect of Tourists and <b>Major/ Moderate</b> (Significant) in respect of general road users. Existing, consented and in planning wind energy development along the skyline would considerably alter the composition of the view.</p> <p>However, in addition effects attributable to the Proposed Development would be Moderate (not significant), in respect of Tourists and Moderate/ Minor for general road users.</p>
				Airies	Operational	12.2 km SW	7.3			
				Artfield Fell	Operational	15.5 km SW	4.9			
				Balmurrie Fell	Operational	16.3 km SW	2.5			
				Carscreugh	Operational	20.2 km SSW	1.8			
				Glenchamber	Operational	17.4 km SW	2.4			
				Kilgallioch	Operational	8.6 km SW	2.4			
				Barlockhart Moor Ext	In-Planning	23.9 km SSW	0.5			
				Kilgallioch Extension	In-Planning	12.1 km WSW	9.3			
2	Merrick	High: Rugged Granite Upland LCT Merrick Wild Land Area Galloway Hills RSA	High: Hill walkers	Artfield Forest	Candidate Development	25.2 km SW	6	<p>Existing, consented and in planning schemes will form a complex concentration of wind turbines within the landscape in the middle ground of this view and form a defining characteristic within the view to the west from this position and represent a Substantial impact on views from this location.</p> <p>The Proposed Development would form a minor addition to the overall influence of wind farm development in the view. It would be located at the centre of a cluster of existing and Proposed Development, increasing the level of development in this part of the view. This increase would be across a small proportion of the expansive long-range the panoramic view and would represent a minor change and Slight magnitude of impact.</p>	<p>In-combination effects associated with existing and consented wind farm developments and the Proposed Development would be <b>Major/ Moderate</b> (Significant).</p> <p>However, the In-addition Effects attributed to the Proposed Development would be Moderate and not significant.</p>	<p>In-combination effects associated the Proposed Development and existing and consented wind farm developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, the In-addition effects on the visual amenity of this viewpoint attributed to the Proposed Development would be Moderate and not significant.</p>
				Airies	Operational	23.1 km SW	4			
				Arecleoch	Operational	25.1 km W	12.1			
				Artfield Fell	Operational	26.6 km SW	2.9			
				Ballmurrie Fell	Operational	27.5 km SW	1.5			
				Barlockhart Moor	Operational	35 km SW	1.1			
				Blackcraig Hill	Operational	26.6 km E	7			
				Carscreugh	Operational	31 km SW	1			
				Dersalloch	Operational	17.8 km N	9.2			
				Glen App	Operational	35.7 km WSE	2.4			
				Glenchamber	Operational	28.4 km SW	1.5			
				Hadyard Hill	Operational	18.1 km NW	18.6			
				Hare Hill	Operational	32.5 km N	3.4			
				Hare Hill Extension	Operational	31.9 km N	1.2			
				High Park	Operational	32.8 km N	0.2			
				Kilgallioch	Operational	19.7 km WSW	14.5			
				Knocknain Farm	Operational	50.4 km WSW	0			
Mark Hill	Operational	16.6 km W	9.3							
Meikle Float Farm	Operational	52.3 km SW	0							
North Threave	Operational	26.4 km NW	0.1							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Wether Hill	Operational	27.3 km ENE	2.2			
				Whiteside Hill	Operational	33.6 km N	1.6			
				Windy Standard	Operational	23.8 km N	5.6			
				Windy Standard II	Operational	22.4 km N	10.3			
				Afton	Under Construction	26.2 km N	7.4			
				Sanquhar Six	Under Construction	31.5 km N	1			
				Assel Valley	Consented	22.9 km WNW	4.7			
				Barlockhart Moor Ext	Consented	34.4 km SSW	1.2			
				Benbrack	Consented	18.3 km N	5.3			
				Chirmorie Wind Farm	Consented	23.7 km WSW	6.5			
				Knockman Hill	Consented	24.1 km E	0.5			
				Knockshinnoch	Consented	27.8 km N	0.8			
				Larbrax	Consented	51 km WSE	1.4			
				Lethans	Consented	39.1 km N	3.9			
				Pencloe Consented Wind Farm	Consented	25.7 km N	4.6			
				Sanquhar	Consented	34 km N	0.1			
				South Kyle	Consented	20.3 km N	13.3			
				Tralorg	Consented	23.5 km WNW	1.9			
				Windy Rig	Consented	23.3 km N	0.3			
				Arecleoch Extension	In-Planning	23.3 km W	8.7			
				Ashmark	In-Planning	27.1 km N	1.1			
				Clauchrie Windfarm	In-Planning	10.4 km WNW	16.4			
				Cornharrow	In-Planning	26 km ENE	2.7			
				Enoch Hill	In-Planning	24.7 km N	5			
				Glenshimmeroch	In-Planning	22.8 km E	1.2			
				Greenburn Wind Park	In-Planning	30.3 km NNE	3.3			
				Hadyard Hill Extension	In-Planning	15.7 km NNEW	20.2			
				High Park Extension	In-Planning	32.6 km N	0.5			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Kilgallioch Extension	In-Planning	23.3 km SW	5.1			
				Kirk Hill Wind Farm	In-Planning	25.1 km NW	2.8			
				Lorg	In-Planning	28.6 km ENE	3.3			
				Margree	In-Planning	25 km E	3.7			
				North Kyle	In-Planning	24.6 km NNE	12.6			
				Over Hill	In-Planning	27.5 km NNE	3.3			
				Pencloe Wind Farm Variation	In-Planning	25.7 km N	4.7			
				Sanquhar II	In-Planning	28.5 km ENE	18.4			
				Wether Hill extension	In-Planning	28 km ENE	2.8			
				Wether Hill Extension	In-Planning	28.1 km ENE	2.8			
				Wether Hill Extension	In-Planning	28.1 km ENE	2.8			
				Windy Standard III	In-Planning	20.1 km N	5.9			
				Airies II	In-Planning (Scoping)	24.3 km SW	8			
3	Glenvernock Fell	Medium - Low: Plateau Moorland with Forest LCT	High: Southern Upland Way users	Artfield Forest	Candidate Development	10.3 km WSW	14.1	<p>When viewed in combination with other existing, consented and in-planning developments, the Proposed Development would contribute to a considerable spread of wind turbines across the skyline of the view. Wind farm development would extend from Arecleoch Extension in the north west to Carscreugh in the south west. The combined impact of wind energy development on the character of the landscape and the composition of the view would be Substantial.</p> <p>The addition of Artfield Forest Wind Farm would result in a Slight increase in the extent of development in the view from this location, further consolidating the existing and emerging pattern of development. The Proposed Development would be located in front of turbines at Artfield Fell and Balmurrie Fell, and behind proposed turbines at Kilgallioch Extension and Airies II.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant). However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant). However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.</p>
			Areacleoch	Operational	14.8 km WNW	20.2				
			Artfield Fell	Operational	11.6 km WSE	6.8				
			Ballmurrie Fell	Operational	12.6 km WSE	3.3				
			Barlockhart Moor	Operational	19.9 km SSW	1.9				
			Carscreugh	Operational	15.8 km SW	2.1				
			Glenchamber	Operational	13.2 km SW	3.1				
			Kilgallioch	Operational	6.3 km WNW	38.9				
			Mark Hill	Operational	12.4 km NNW	9.9				
			Airies	Operational	8 km SW	11.2				
			Assel Valley	Consented	23.2 km NNW	4.1				
			Barlockhart Moor Ext	Consented	19.4 km SSW	2				
			Chirmorie Wind Farm	Consented	12.6 km WNW	11.1				
			Tralorg	Consented	25.1 km NNW	2.3				
			Areacleoch Extension	In-Planning	13.5 km WNW	10.5				

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Clauchrie Windfarm	In-Planning	14 km N	23.6			
				Kilgallioch Extension	In-Planning	8.7 km WSW	12.2			
				Airies II	In-Planning (Scoping)	9.2 km WSW	20.2			
4	Bruce's Stone, Merrick car park	High: Rugged Granite Upland with Forest LCT Galloway Hills RSA	High: National Cycle Network Route 7 users; walkers	Artfield Forest	Candidate Development	21.1 km WSW	7	<p>When viewed in combination with existing, consented and In-Planning developments, the Proposed Development would contribute to the notable presence of large-scale wind energy development across a high proportion of the distant skyline in the view. The influence of wind energy development in this part of the view would be moderate, in part due to the distance from the viewer.</p> <p>The addition of the Proposed Development would result in a minor addition to the overall influence of wind farm development in the view. The Proposed Development would be located at the center of a cluster of existing and Proposed Developments, increasing the level of development in this part of the view but not extending development into areas of the view where turbines are not currently present. The magnitude of impact would be Slight.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The Proposed Development would add to the emergent pattern of development within the landscape from this viewpoint.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The addition of the Proposed Development would be broadly consistent with the existing outlook from this position and therefore have no significant effect on the amenity of the viewpoint.</p>
				Airies	Operational	18.7 km SW	4.9			
				Artfield Fell	Operational	22.5 km SW	3.6			
				Ballmurrie Fell	Operational	23.4 km SW	1.8			
				Carscreugh	Operational	26.4 km SW	1.3			
				Glenchamber	Operational	24 km SW	1.9			
				Kilgallioch	Operational	16.3 km WSW	6.4			
				Kilgallioch Extension	In-Planning	19.4 km WSW	5.9			
Airies II	In-Planning (Scoping)	20 km WSW	9.7							
5	Cairnsmore of Fleet	High: Coastal Granite Uplands LCT Galloway Hills RSA	High: Hill walkers	Artfield Forest	Candidate Development	25.2 km W	4	<p>The Proposed Development, when viewed in combination with existing, consented and other in-planning wind energy development would contribute to a considerable influence of wind turbines across the plateau moorland landscape in long distance views from this location. Wind energy development is a characterising element in the view, extending across a high proportion of the view to the north and west from Cairnsmore of Fleet. The magnitude of impact would be Substantial.</p> <p>However, the Proposed Development would be a barely discernible addition to the landscape in the view from Cairnsmore of Fleet. The proposed turbines would be positioned behind proposed turbines at Airies II and Kilgallioch Extension and while they would increase the level of development in this area, it would not be notable, nor influence the character or the composition of the view. Impacts would be localised and occupy a small percentage of the panoramic view from this location. The magnitude of impact would be Slight.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The Proposed Development would add to the emergent pattern of development in views from this elevated position.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The Proposed Development would be broadly consistent with the existing outlook from this position and therefore have no significant effect on the amenity of the viewpoint.</p>
				Airies	Operational	22.4 km W	4.3			
				Arecleoch	Operational	33.5 km WNW	9.5			
				Artfield Fell	Operational	26.6 km W	3.5			
				Ballmurrie Fell	Operational	27.8km W	1.6			
				Barlockhart Moor	Operational	29.5 km WSW	1.5			
				Blackcraig Hill	Operational	24 km N	3.8			
				Carscreugh	Operational	27.5 km WSW	2.1			
				Dersalloch	Operational	37.4 km NNW	1.4			
				Glen App	Operational	41.1 km W	2.1			
				Glenchamber	Operational	27.1 km W	3			
				Hare Hill	Operational	44.7 km NNW	0.1			
				Kilgallioch	Operational	24.6 km WNW	15.9			
				Knocknain Farm	Operational	52.9 km W	0			
				Mark Hill	Operational	29.9 km NW	4.7			
Meikle Float Farm	Operational	48.1 km WSW	0							
Wether Hill	Operational	32.2 km N	1.6							



VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Whiteside Hill	Operational	42.7 km NNE	2.3			
				Windy Standard	Operational	36 km NNE	1.6			
				Windy Standard II	Operational	35 km NNE	3.9			
				Afton	Under Construction	37.4 km NNE	2.8			
				Sanquhar Six	Under Construction	42.1 km NNE	1.6			
				Assel Valley	Consented	39.5 km NW	0.5			
				Barlockhart Moor Ext	Consented	28.6 km WSW	1.4			
				Chirmorie Wind Farm	Consented	31.2 km WNW	4.6			
				Knockman Hill	Consented	23.4 km N	1			
				Knockshinnoch	Consented	46.7 km N	0.4			
				Larbrax	Consented	52.8 km W	1			
				Mochrum Fell	Consented	22.4 km ENE	2.4			
				Pencloe Consented Wind Farm	Consented	39.4 km NNE	2.4			
				Sanquhar	Consented	44.6 km NNE	3.3			
				South Kyle	Consented	35.1 km NNE	4.4			
				Windy Rig	Consented	34.2 km NNE	2.6			
				Arecleoch Extension	In-Planning	32.2 km WNW	4.7			
				Ashmark	In-Planning	41.3 km NNE	2.2			
				Clauchrie Windfarm	In-Planning	27.8 km NNW	11.1			
				Cornharrow	In-Planning	31.4 km N	2			
				Enoch Hill	In-Planning	39.6 km N	2.7			
				Glenshimmeroch	In-Planning	26 km N	4.5			
				Hadyard Hill Extension	In-Planning	35 km NNW	0.1			
				Kilgallioch Extension	In-Planning	25.3 km W	3.8			
				Longburn	In-Planning	29.6 km NNE	3.8			
				Lorg	In-Planning	36.6 km NNE	2.2			
				Margree	In-Planning	26.5 km N	4			
				Pencloe Wind Farm Variation	In-Planning	39.4 km NNE	2.4			
				Sanquhar II	In-Planning	39.5 km N	16.8			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Shepherds Rig	In-Planning	28 km NNE	3.6			
				Troston Loch Wind Farm	In-Planning	27.3 km N	3.4			
				Wether Hill extension	In-Planning	33.5 km N	3.4			
				Wether Hill Extension	In-Planning	33.3 km N	3.5			
				Wether Hill Extension	In-Planning	33.3 km N	3.5			
				Windy Standard III	In-Planning	33.5 km NNE	2.7			
				Airies II	In-Planning (Scoping)	23.7 km W	6.2			
6	Fell End	High - Medium: Drumlin Pasture in Moss and Moor Lowland LCT	High: Hill walkers	Artfield Forest	Candidate Development	6.5 km NW	8.8	<p>Seen in-combination, the existing, consented and in planning schemes would form a complex concentration of wind turbines within the landscape in the middle-ground and background of this view. In views to the north west, wind turbines form a defining characteristic within the view. The Proposed Development would contribute to this concentration of development within the view. The combined impact would be Substantial.</p> <p>The addition of the Proposed Development would result in a minor increase in the influence of wind energy development in the view. It would add a local complexity to the appearance of development in the landscape but would not spread the influence of development into areas of the landscape which are currently without turbines. The proposed turbines would be positioned behind those proposed at Airies II, and adjacent to those proposed at Kilgallioch Extension and would relate to the larger scale of these developments. The magnitude of impact would be slight.</p>	<p>In combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The Proposed Development would reinforce the presence of wind turbines across the plateau moorland landscape without contributing to the spread of development across the landscape.</p>	<p>In combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The addition of the Proposed Development would result in a notable change in the view, however the original baseline would be largely unaltered.</p>
				Airies	Operational	4.3 km NNW	17.5			
				Arecleoch	Operational	17.5 km NW	12.3			
				Artfield Fell	Operational	7.2 km WNW	11.2			
				Ballmurrie Fell	Operational	8.6 km WNW	4.7			
				Barlockhart Moor	Operational	10.6 km SW	3.9			
				Carscreugh	Operational	7.6 km WSW	6.4			
				Glen App	Operational	22.7 km WNW	0.2			
				Glenchamber	Operational	7.3 km W	11.7			
				Hadyard Hill	Operational	30.7 km N	4.1			
				Kilgallioch	Operational	9.5 km N	42.2			
				Mark Hill	Operational	20.6 km N	5.8			
				Meikle Float Farm	Operational	29.1 km SW	0.1			
				Assel Valley	Consented	31.7 km NNW	2.8			
				Barlockhart Moor Ext	Consented	9.9 km SW	4.2			
				Chirmorie Wind Farm	Consented	15.8 km NW	7.2			
				Larbrax	Consented	32.9 km W	0.5			
Tralorg	Consented	33.8 km NNW	1.7							
Arecleoch Extension	In Planning	18.1 km NNW	5.3							
Clauchrie Windfarm	In Planning	23.4 km N	13.8							
Hadyard Hill Extension	In Planning	32.6 km N	2.3							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Kilgallioch Extension	In-Planning	7.8 km NW	12.6			
				Airies II	In-Planning (Scoping)	4.6 km NW	13.9			
7	A75 Creetown	High: Coastal Flats LCT Galloway Hills RSA	High: Residential receptors Medium: General road users	Artfield Forest	Candidate Development	24.1 km WNW	3.1	Large clusters of existing, consented and in planning development would be visible across the skyline in long distance views to the north west. Turbines would be viewed behind areas of commercial forestry and broadleaved woodland. The impact would be Moderate.  The addition of the Proposed Development would contribute to the intensification of wind energy development in the view. The impact would be Negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant)  However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.  Wind energy development would be notable but not a defining characteristic of the landscape or in the view from this location.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Moderate/ Major</b> (significant) in respect of residential receptors and Moderate with regards to general road users.  However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant in respect of Residential receptors and Minor and not significant for general road users.  While discernible, the Proposed Development would not form a focal point in the view and the original baseline conditions would be largely unaltered.
				Airies	Operational	21.5 km WNW	4.3			
				Arecleoch	Operational	34.5 km NW	6.9			
				Artfield Fell	Operational	25 km WNW	3.4			
				Ballmurrie Fell	Operational	26.3 km WNW	1.4			
				Carscreugh	Operational	24.2 km W	0.5			
				Glenchamber	Operational	24.9 km WNW	3.9			
				Kilgallioch	Operational	25.9 km NW	16.4			
				Mark Hill	Operational	33.7 km NW	4			
				Assel Valley	Consented	44.3 km NW	0.4			
				Chirmorie Wind Farm	Consented	32.5 km NW	4			
				Arecleoch Extension	In-Planning	34 km NW	3.7			
				Artfield Forest	In-Planning	24.1 km WNW	3.1			
				Clauchrie Windfarm	In-Planning	33.8 km NNW	7			
Kilgallioch Extension	In-Planning	25 km WNW	3.9							
Airies II	In-Planning (Scoping)	22.3 km WNW	4.5							
8	Fell Loch	High: Moss and Forest Lowlands LCT Mochrum Lochs RSA	High: Walkers Medium: General road users	Artfield Forest	Candidate Development	13 km NNW	6.7	Currently, views of existing, consented and in planning developments area screened by forestry. The effect would be none.  Should the forestry be felled, the Proposed Development would be a barely discernible addition to the influence of wind farm development on the composition of the view and on the character of the landscape.	None.  The Proposed Development cannot be seen in the viewpoint, therefore, there can be no effect.  If forestry were removed, the effect would be Moderate in relation to Walkers and Moderate/ Minor with respect to general road users.	None.  The Proposed Development cannot be seen in the viewpoint, therefore there can be no effect.  If forestry were removed, the effect would be Moderate in relation to Walkers and Moderate/ Minor with respect to general road users.
				Airies	Operational	11.8 km NNW	6.6			
				Arecleoch	Operational	24 km NNW	8.8			
				Artfield Fell	Operational	12.7 km NNW	4.5			
				Ballmurrie Fell	Operational	13.9 km NW	2.2			
				Barlockhart Moor	Operational	8.4 km W	4.5			
				Carscreugh	Operational	9.4 km NW	9.8			
				Glen App	Operational	27.2 km NW	3.2			
				Glenchamber	Operational	11.5 km NW	8.3			
				Kilgallioch	Operational	15.7 km N	23.8			
Mark Hill	Operational	28.7 km NNW	1.8							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Assel Valley	Consented	39.7 km NNW	2.2			
				Barlockhart Moor Ext	Consented	7.6 km W	5.3			
				Chirmorie Wind Farm	Consented	22.7 km NNW	5.3			
				Tralorg	Consented	41.8 km NNW	0.7			
				Arecleoch Extension	In-Planning	25.5 km NNW	3.4			
				Clauchrie Windfarm	In-Planning	31.6 km N	6.3			
				Hadyard Hill Extension	In-Planning	40.8 km N	0.8			
				Kilgallioch Extension	In-Planning	14.8 km NNW	7.6			
				Airies II	In-Planning (Scoping)	11.3 km NNW	5.4			
9	Minor Road South of Mochrum Loch	High: Moss and Forest Lowlands LCT Mochrum Lochs RSA	Medium: General road users	Artfield Forest	Candidate Development	16.5 km NNW	6.2	In-combination with other existing, consented and in-planning developments, the Proposed Development would contribute to a notable level of wind energy development across the distant skyline in views to the north west. The Proposed Development would further consolidate the influence of development. Given the distance from the viewpoint, the in-combination impact would be Moderate. The Proposed Development forms a minor addition to the overall influence of wind farm development across the skyline. It would add to the already complex composition of wind energy development across the skyline; however any impact arising from the addition of the Proposed Development would be Negligible.	In combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ moderate</b> (Significant). However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant. The Proposed Development would represent a minor addition to the influence of wind farm development in the landscape.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate. In-addition effects attributable to the Proposed Development would be Minor and not significant. The Proposed Development would represent a barely discernible addition to influence of wind energy development on the composition of the view. The baseline condition of the landscape or view would largely be unaffected.
				Airies	Operational	15.5 km N	5			
				Arecleoch	Operational	27.2 km NNW	7.3			
				Artfield Fell	Operational	15.8 km NNW	3.2			
				Ballmurrie Fell	Operational	17 km NNW	1.6			
				Barlockhart Moor	Operational	9.3 km WNW	4.1			
				Carscreugh	Operational	11.7 km NW	8.6			
				Glen App	Operational	29.6 km NW	3			
				Glenchamber	Operational	14.2 km NNW	6.5			
				Hadyard Hill	Operational	42.7 km N	3.4			
				Kilgallioch	Operational	19 km N	20			
				Mark Hill	Operational	32.5 km N	3.7			
				Wether Hill	Operational	56.4 km N	0.3			
				Assel Valley	Consented	43.4 km NNW	1.9			
				Barlockhart Moor Ext	Consented	8.6 km NW	5			
				Chirmorie Wind Farm	Consented	26.1 km NNW	4.7			
Tralorg	Consented	45.6 km NNW	1.3							
Arecleoch Extension	In-Planning	28.9 km NNW	2.9							
Clauchrie Windfarm	In-Planning	35.4 km N	9.2							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Glenshimmeroch	In-Planning	50.4 km N	0.9			
				Hadyard Hill Extension	In-Planning	44.6 km N	4.9			
				Kilgallioch Extension	In-Planning	18.3 km NNW	6.3			
				Troston Loch Wind Farm	In-Planning	51.7 km N	0.2			
				Wether Hill extension	In-Planning	57.7 km N	0.6			
				Wether Hill Extension	In-Planning	57.6 km N	0.6			
				Wether Hill Extension	In-Planning	57.6 km N	0.6			
				Airies II	In-Planning (Scoping)	14.9 km NNW	5.3			
10	Knock Fell	High - Medium: Moss and Forest Lowlands LCT	High: Tourists; Hill walkers	Artfield Forest	Candidate Development	11.7 km N	10.4	<p>When viewed in combination with existing, consented and in planning turbines, the Proposed Development would contribute to the considerable influence of wind energy development in the background of views to the north of Knock Fell, across the plateau moorland landscape. The impact would be moderate as the wider panoramic view from this location would not contain such concentrated development.</p> <p>The addition of the Proposed Development would represent a minor increase in the influence of wind farm development within an existing cluster of wind energy development. The proposed turbines would be positioned in front of proposed turbines at Kilgallioch Extension and adjacent to the proposed turbines at Airies II. The magnitude of impact would be Slight.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The Proposed Development would reinforce the influence of wind turbines within the plateau moorland landscape however, while discernible the cumulative baseline would be largely unaffected.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, In Addition effects attributable to the Proposed Development would be Moderate and not significant.</p> <p>The proposed turbines would be discernible, however would not alter the overall composition of the view.</p>
				Airies	Operational	11.2 km NNE	7.5			
				Arecleoch	Operational	21.7 km NNW	8.2			
				Artfield Fell	Operational	10.5 km NNW	4			
				Ballmurrie Fell	Operational	11.5 km NNW	2.2			
				Barlockhart Moor	Operational	3.3 km WNW	10.4			
				Carscreugh	Operational	5.6 km NNW	17			
				Glen App	Operational	23.4 km NW	3.7			
				Glenchamber	Operational	8.5 km NNW	9.8			
				Hadyard Hill	Operational	38.5 km N	5.8			
				Kilgallioch	Operational	13.6 km NNE	25.3			
				Knocknain Farm	Operational	29.5 km WNW	0.1			
				Mark Hill	Operational	28.3 km N	4.2			
				Meikle Float Farm	Operational	21.1 km WSW	0.1			
				Arecleoch Extension	In-Planning	23.8 km NNW	3.8			
				Clauchrie Windfarm	In-Planning	31.6 km NNE	9.8			
Hadyard Hill Extension	In-Planning	40.7 km N	7.7							
Kilgallioch Extension	In-Planning	13.5 km N	8.7							
Kirk Hill Wind Farm	In-Planning	48.6 km N	0.5							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Margree	In-Planning	52.3 km N	1.4			
				Airies II	In-Planning (Scoping)	10.5 km N	11.5			
11	Mull of Galloway	High: Peninsula LCT Rhins Coast RSA	High: Tourists (Formal viewpoint)	Artfield Forest	Candidate Development	38 km NNW	3.8	Existing, consented and in-planning development would form a discernible (but not character defining) element along the skyline of the long-distance view. The Proposed Development would contribute to this. The impact would be Slight.  The addition of the Proposed Development would form a barely discernible addition to the influence of wind energy on the composition and character of the view. The impact would be Negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.  The Proposed Development would be largely consistent with the existing outlook and character of this viewpoint.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.  Given the consistency of the Proposed Development with the outlook from this location, it is not anticipated to constitute a significant visual effect at this location.
				Airies	Operational	38.1 km NNW	2.4			
				Arecleoch	Operational	45.2 km N	3.3			
				Artfield Fell	Operational	36.3 km N	1.4			
				Ballmurrie Fell	Operational	36.8 km N	0.8			
				Barlockhart Moor	Operational	26.9 km NNW	1.1			
				Blackcraig Hill	Operational	73.9 km N	0.1			
				Carscreugh	Operational	30.5 km NNW	2.2			
				Glen App	Operational	42.4 km N	2			
				Glenchamber	Operational	33.7 km N	1.9			
				Hadyard Hill	Operational	64.5 km N	3			
				Kilgallioch	Operational	38.6 km NNW	9.2			
				Wether Hill	Operational	82.2 km N	0.2			
				Whiteside Hill	Operational	92 km N	0.3			
				Assel Valley	Consented	64.3 km N	1			
				Barlockhart Moor Ext	Consented	27 km NNW	1.3			
				Chirmorie Wind Farm	Consented	45.4 km N	2.6			
				Tralorg	Consented	66.5 km N	0.6			
				Arecleoch Extension	In-Planning	48.5 km N	2.9			
				Clauchrie Windfarm	In-Planning	58.2 km NNW	5.3			
Cornharrow	In-Planning	81.3 km N	0.8							
Hadyard Hill Extension	In-Planning	66.8 km NNW	3.5							
Kilgallioch Extension	In-Planning	39.8 km NNW	3.2							
Lorg	In-Planning	86.1 km N	0.8							
Sanquhar II	In-Planning	88.2 km N	3							
Wether Hill extension	In-Planning	83.5 km N	0.3							
Wether Hill Extension	In-Planning	83.3 km N	0.3							

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Wether Hill Extension	In-Planning	83.3 km N	0.3			
				Airies II	In-Planning (Scoping)	37.3 km NNE	4.4			
12	A75, Glenluce	High - Medium: Drumlin Pasture in Moss and Moor Lowland LCT	High: Residential receptors; tourists Medium: General road users	Artfield Forest	Candidate Development	10.8 km NNE	13.2	In-combination with other existing, consented and in-planning developments, the Proposed Development would contribute to a discernible influence of wind energy development. Turbines would form a notable element in the landscape but would not alter its defining characteristics. The magnitude of impact would be Slight.  As the Proposed Development would be substantially screened by topography the addition of the Proposed Development would be barely discernible within the landscape and in the view. The magnitude of impact would be Negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant in relation to residential receptors and Moderate/ Minor and not significant in respect of general road users.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant effects on residential receptors; Minor and not significant effects on general road users.
				Artfield Fell	Operational	9.1 km NNE	4.8			
				Ballmurrie Fell	Operational	9.5 km N	0.4			
				Carscreugh	Operational	3.3 km N	12.5			
				Glen App	Operational	19 km NW	1.1			
				Glenchamber	Operational	6.5 km NNE	8.5			
				Kilgallioch	Operational	11.5 km N	0.5			
				Kilgallioch Extension	In-Planning	12.6 km NNE	1.7			
Airies II	In-Planning (Scoping)	10.7 km N	16.5							
13	Whitecain Caravan Site	High - Medium: Upland Fringe LCT	High: Caravan users/ tourists, Residential receptors	Artfield Forest	Candidate Development	7.8 km NNE	10.5	When viewed in-combination with other existing, consented and in planning developments, the Proposed Development would contribute to a notable cluster of wind energy development in close proximity views. Wind turbines would obstruct longer distance views to the Galloway Hills to the north. The impact would be substantial.  In addition to other operational, consented and in-planning development in the view, the Proposed Development would form a discernible increase in the influence of wind energy development in the background of the. It would be located within an existing cluster formed by the operational Glenchamber and Artfield Fell wind farms, and the proposed Clauchrie, Kilgallioch Extension and Airies II.  The impact would be Slight.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.  The Proposed Development would reinforce the presence of wind turbines within the landscape but would not fundamentally change the character of the landscape in the view.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Moderate and not significant.  The Proposed Development would increase the number of turbines visible but would only represent a minor addition to the baseline.
				Airies	Operational	8.5 km N	8.8			
				Artfield Fell	Operational	6 km NNE	4.5			
				Carscreugh	Operational	0.4 km E	37.4			
				Glenchamber	Operational	3.4 km NNE	14.9			
				Kilgallioch	Operational	8.4 km NNE	0.5			
				Clauchrie Windfarm	In-Planning	27.9 km NNE	3			
				Kilgallioch Extension	In-Planning	9.5 km NNE	4.5			
Airies II	In-Planning (Scoping)	7.8 km N	23.1							
14	Sandhead	Medium - High: Peninsula LCT	High: Residential receptors; tourists	Artfield Forest	Candidate Development	22.6 km N	6.6	Existing, consented and in-planning development would form a discernible (but not character defining) element along the skyline of the long-distance view. The Proposed Development would contribute to the complexity of development in the view. The impact would be Slight.  The Proposed Development would form a barely discernible addition to the influence of wind energy on the composition and character of the view. The impact would be negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.
				Airies	Operational	24.1 km N	3.2			
				Arcleloch	Operational	26.7 km NNE	5			
				Artfield Fell	Operational	20.9 km N	3.4			
				Ballmurrie Fell	Operational	20.9 km N	1.8			
				Barlockhart Moor	Operational	13.9 km ENE	3.1			
				Blackcraig Hill	Operational	67.2 km ENE	0.1			
				Carscreugh	Operational	16 km N	2.3			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Glen App	Operational	22.6 km N	2.4		The Proposed Development would be largely consistent with the existing outlook and character of the landscape at this viewpoint.	Given the consistency of the Proposed Development with the outlook from this location, the addition of the Proposed Development is not anticipated to constitute a significant visual cumulative effect at this location.
				Glenchamber	Operational	18.6 km N	2.3			
				Kilgallioch	Operational	22.2 km N	10.8			
				Barlockhart Moor Ext	Consented	14.6 km ENE	2.9			
				Chirmorie Wind Farm	Consented	27.7 km NNE	3.8			
				Arecleoch Extension	In-Planning	30.7 km NNE	3.5			
				Clauchrie Windfarm	In-Planning	41.7 km NNE	6.2			
				Kilgallioch Extension	In-Planning	24 km N	5.2			
				Airies II	In-Planning (Scoping)	23.4 km N	8.5			
15	Mains of Larg, New Luce	Medium - Low: Plateau Moorland LCT	High: Residential receptors Medium: General road users	Artfield Forest	Candidate Development	7.1 km ENE	18.1	In-combination with existing, consented and in-planning developments, the Proposed Development would contribute to the notable influence of wind energy development across the skyline of the view to the north east. The Proposed Development would assist in consolidating development across the view but infilling a gap between Balmurrie Fell and Kilgallioch. The impact would be Moderate.  The Proposed Development would be substantially screened by intervening vegetation and topography. Therefore, the addition of turbines at Artfield Forest would be barely discernible. The magnitude of impact would be Negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be Moderate and not significant.  In-addition effects attributable to the Proposed Development would be Minor and not significant.  The Proposed Development would be largely screened by intervening woodland. Its influence on the character of the landscape would be limited.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant) with respect to residential receptors and Moderate and not significant with respect to general road users  However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant with respect to residential receptors and Minor with respect to general road users  The Proposed Development would be largely screened in views by intervening woodland.
				Airies	Operational	10 km ENE	0.7			
				Arecleoch	Operational	11.6 km N	3.4			
				Artfield Fell	Operational	6.2 km ENE	13.5			
				Ballmurrie Fell	Operational	5.7 km ENE	7			
				Glenchamber	Operational	4.9 km E	15.2			
				Kilgallioch	Operational	6.4 km ENE	31			
				Chirmorie Wind Farm	Consented	11.9 km N	1.3			
				Kilgallioch Extension	In-Planning	8.3 km ENE	13.9			
				Airies II	In-Planning (Scoping)	8.5 km E	21.2			
16	Minor Road, Balmurrie Fell	Medium - Low: Plateau Moorland LCT	High: Cyclists/ Tourists Medium: General road users	Artfield Forest	Candidate Development	3.5 km ENE	39.9	Taking account of existing, consented and in-planning turbines in combination with the Proposed Development, the substantial influence of wind energy development would be a characterising element of the landscape within views to the north east, north west and south east from the minor road.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Minor and not significant.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Minor and not significant.
				Airies	Operational	5.2 km ENE	11.6			
				Artfield Fell	Operational	1.6 km ENE	32.2			
				Ballmurrie Fell	Operational	1.8 km ENE	14.4			
				Barlockhart Moor	Operational	7.8 km S	3.6			
				Carsreugh	Operational	3.6 km S	22.5			



Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Glen App	Operational	14.7 km WNW	5.8	In-addition, the proposed turbines would result in a Negligible increase in the influence of development in the view from this location. It would be partially visible in the background of the view within the context of proposed turbines at Kilgallioch Extension and Airies II, with operational turbines at Kilgallioch, Balmurrie Fell and Artfield Fell more prominent in the middle ground of the view.	The Proposed Development would represent a barely discernible addition to the influence of wind energy development on the character of the landscape in the view.	The Proposed Development would not, for all intents and purposes, notably alter the baseline view.
				Glenchamber	Operational	0.7 km SW	90.5			
				Kilgallioch	Operational	3.8 km N	21			
				Barlockhart Moor Ext	Consented	7.9 km S	4.1			
				Kilgallioch Extension	In-Planning	5 km N	21.2			
				Airies II	In-Planning (Scoping)	4.1 km E	44.7			
17	Beneraird	High - Medium: Southern Uplands LCT High - South Ayrshire RSA	High: Hill walkers	Artfield Forest	Candidate Development	13.2 km SE	5.9	In-combination, the Proposed Development would contribute to the considerable and broad spread of existing, consented and in planning wind energy development present within the plateau moorland landscape in views from Beneraird.  In-addition, the Proposed Development would be seen distantly and amidst the emergent pattern of existing and consented development in Dumfries and Galloway. The magnitude of impact would be Negligible.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.  The addition of the Proposed Development would contribute to the emergent pattern of development within the Plateau Moorland landscape in views from this elevated position.	In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).  However, In-addition effects attributable to the Proposed Development would be Moderate/ Minor and not significant.  The addition of the Proposed Development would be broadly consistent with the existing outlook from this position and therefore have no significant effect on the amenity of the viewpoint.
				Airies	Operational	16.3 km SE	5.3			
				Arecleoch	Operational	2.4 km S	98.4			
				Artfield Fell	Operational	14.3 km SE	4.2			
				Ballmurrie Fell	Operational	13.8 km SE	2.1			
				Barlockhart Moor	Operational	22.9 km SSE	1.6			
				Carscreugh	Operational	19.2 km SSE	5.2			
				Dersalloch	Operational	36.6 km N	2.2			
				Downhill Farm	Operational	25.3 km NNE	0.1			
				Glen App	Operational	6.9 km SW	11.9			
				Glenchamber	Operational	16.3 km SSE	5.8			
				Hadyard Hill	Operational	19.3 km N	10.4			
				Hare Hill	Operational	59.8 km ENE	1			
				Hare Hill Extension	Operational	59.7 km ENE	0.3			
				Kilgallioch	Operational	7.9 km SSE	39.2			
				Knocknain Farm	Operational	21.9 km SW	0.1			
				Mark Hill	Operational	12.3 km ENE	10.2			
				Meikle Float Farm	Operational	30.9 km SSE	0.1			
				Afton	Under Construction	54.6 km ENE	0.1			
				Assel Valley	Consented	17.9 km NNE	4.5			
				Barlockhart Moor Ext	Consented	23.2 km SSE	1.7			
				Chirmorie Wind Farm	Consented	5.2 km SE	26.4			
				Knockshinnoch	Consented	45.7 km N	0.5			
				Larbrax	Consented	23.1 km SW	3.3			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Pencloe Consented Wind Farm	Consented	52.8 km ENE	2			
				South Kyle	Consented	46.6 km ENE	1.3			
				Tralorg	Consented	19.9 km NNE	2.6			
				Arecleoch Extension	In-Planning	5.4 km ESE	38.2			
				Clauchrie Windfarm	In-Planning	16.4 km ENE	8.4			
				Greenburn Wind Park	In-Planning	53.7 km N	1.3			
				Hadyard Hill Extension	In-Planning	22.2 km N	8.9			
				Kilgallioch Extension	In-Planning	12.2 km SE	8.6			
				Kirk Hill Wind Farm	In-Planning	28.7 km NNE	2			
				North Kyle	In-Planning	47 km N	4.5			
				Over Hill	In-Planning	50 km N	1.7			
				Pencloe Wind Farm Variation	In-Planning	52.8 km ENE	1.8			
				Airies II	In-Planning (Scoping)	14.3 km SE	3.8			
18	SUW North of Balmurrie Fell	Medium - Low: Plateau Moorland LCT	High: Southern Upland Way users	Artfield Forest	Candidate Development	1.2 km SE	44	<p>In-combination with other existing, consented and in-planning wind farm developments, the Proposed Development would represent a considerable influence of wind energy development within the view. This influence would be a fundamental change to the character of the plateau moorland landscape from this viewpoint. The impact would be Substantial.</p> <p>In-addition to other wind farm developments, the Proposed Development would introduce large scale wind turbines in closer proximity to the viewer, across the full view. The impact would be Moderate.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant)</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant</p> <p>The Proposed Development would represent a noticeable increase in the influence of wind energy on the character of the landscape, however within the context of existing wind developments the character of the landscape would not be altered significantly.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant)</p> <p>In-addition effects attributable to the Proposed Development would be <b>Major/ Moderate</b> (Significant)</p> <p>The Proposed Development would be a notable addition the presence of wind turbines in close proximity views.</p>
				Airies	Operational	4.8 km ESE	18.3			
				Arecleoch	Operational	8.3 km NNW	2.7			
				Artfield Fell	Operational	1.8 km SSE	25.5			
				Ballmurrie Fell	Operational	1.3 km S	15.8			
				Barlockhart Moor	Operational	11.5 km S	2.5			
				Carscreugh	Operational	7.2 km S	3.7			
				Glenchamber	Operational	3.9 km S	8.8			
				Kilgallioch	Operational	0.2 km ESE	144.4			
				Chirmorie Wind Farm	Consented	7.3 km N	13			
				Arecleoch Extension	In-Planning	10.3 km N	6.9			
				Clauchrie Windfarm	In-Planning	19.9 km NNE	3.2			
				Kilgallioch Extension	In-Planning	1.9 km E	43.7			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Airies II	In-Planning (Scoping)	2.7 km SE	31.1			
19	Tarf Bridge	Medium - Low: Plateau Moorland LCT	High: Tourists Medium: General road users	Artfield Forest	Candidate Development	2.9 km N	27.8	<p>In-combination impact would be Substantial. Taking account of other existing, consented and in planning wind energy development, the Proposed Development would contribute to a full skyline of turbines in close proximity views to the north.</p> <p>The addition of the Proposed Development would result in a notable increase in wind turbines within the view, extending the presence of large-scale development to the west of proposed Airies II and in the foreground of proposed turbines at Kilgallioch Extension. The impact would be Moderate.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant)</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant</p> <p>The Proposed Development would further reinforce the presence of large-scale wind energy within the landscape as experienced from this viewpoint.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant) in respect to tourists and Moderate and not significant in respect of general road users.</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not significant with respect to tourists, and Moderate/ Minor and not significant for general road users.</p>
				Airies	Operational	2.6 km N	26.8			
				Artfield Fell	Operational	2.6 km NNE	22			
				Ballmurrie Fell	Operational	3.9 km NW	8.5			
				Carscreugh	Operational	3.9 km SW	7.5			
				Glenchamber	Operational	2.3 km WNW	29.6			
				Kilgallioch	Operational	5.5 km NNE	42			
				Barlockhart Moor Ext	Consented	7.8 km SSW	0.7			
				Clauchrie Windfarm	In-Planning	22.8 km N	3.9			
				Kilgallioch Extension	In-Planning	4.7 km N	21.9			
				Airies II	In-Planning (Scoping)	1.9 km N	50.7			
20	North of Loch Ronald	High: Plateau Moorland with Forest LCT	High: local recreation (walkers, fishers, campers)	Artfield Forest	Candidate Development	3.7 km NNW	14.9	<p>In-combination effects of the Proposed Development, taking account of existing, consented and in planning developments, would constitute a fundamental change to the character of the landscape in views from this location. The impact would be substantial.</p> <p>Due to the relative proximity and prominence of the Proposed Development, its prominent skyline position and its location adjacent to large scale proposed turbines at Airies II, the in-addition effects of the Proposed Development would be Moderate.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>In-addition effects attributable to the Proposed Development would be <b>Major/ Moderate</b> (Significant).</p> <p>The Proposed Development would extend the influence of wind energy development at this viewpoint, adding movement and large structures to the landscape close to this receptor location, thereby affecting the scale and form of the landscape.</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>In-addition effects attributable to the Proposed Development would be <b>Major/ Moderate</b> (Significant).</p> <p>The Proposed Development would notably increase the influence of wind energy development on the composition of the view from this location.</p>
				Airies	Operational	2.6 km NNE	25.6			
				Artfield Fell	Operational	4 km NW	17.3			
				Ballmurrie Fell	Operational	5.3 km WNW	6.9			
				Barlockhart Moor	Operational	8.6 km SW	4.2			
				Carscreugh	Operational	4.8 km WSW	7.6			
				Glenchamber	Operational	3.9 km WNW	20.3			
				Kilgallioch	Operational	6.6 km N	36.8			
				Barlockhart Moor Ext	Consented	8.1 km SSW	4.6			
				Kilgallioch Extension	In-Planning	5.4 km NNW	18.3			
				Airies II	In-Planning (Scoping)	2 km N	20.1			
21	Eldrig Fell	Medium: Plateau Moorland with Forest LCT	High: local high point	Artfield Forest	Candidate Development	1.1 km NW	91.2	<p>The Proposed Development would represent a considerable increase in the influence of wind energy development when considered in combination with other existing, consented and in planning developments present in the view from Eldrig Fell. Wind energy development would be the defining feature within the landscape and within the view. The impact would be substantial.</p> <p>In-addition, the Proposed Development would</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major/ Moderate</b> (Significant).</p> <p>However, In-addition effects attributable to the Proposed Development would be Moderate and not</p>	<p>In-combination effects in conjunction with existing, consented and Proposed Developments would be <b>Major</b> (Significant).</p> <p>In-addition effects attributable to the Proposed Development would be <b>Major/ Moderate</b> (Significant).</p>
				Airies	Operational	1.1 km SSE	50.9			
				Arecleoch	Operational	10.6 km NNW	20			
				Artfield Fell	Operational	2.5 km WSW	28.7			
				Ballmurrie Fell	Operational	3.4 km WSW	11.9			
				Barlockhart Moor	Operational	11.9 km SSW	2.4			

Table 5.3.2b: Viewpoint Assessment (Cumulative Effects)										
VP No.	Viewpoint Name	Landscape Sensitivity at Viewpoint	Sensitivity of Visual Receptors at Viewpoint	Predicted Cumulative View (360 degree)				Magnitude of Cumulative Impact	Residual Cumulative Landscape Effect	Residual Cumulative Visual Effect
				Wind Farm	Status	Approx. Distance and Direction to Proposed and Cumulative Development	Horizontal Angle Subtended (degrees)			
				Carscreugh	Operational	7.6 km SSW	7.3	represent a notable addition to the influence of development, consolidating the spread of wind turbines in the view by in filling space between proposed Airies II, and Kilgallioch Extension, and operational Kilgallioch, Artfield Fell and Balmurrie Fell developments. The impact would be Moderate.	significant. The Proposed Development, seen in conjunction with Kilgallioch and Artfield Fell turbines, and the proposed Airies II turbines would not represent a wholly new feature, but would constitute to a significant increase in the influence of such development on the character of the landscape in views from this location	The Proposed Development would significantly affect the outlook and visual amenity at this location.
				Glen App	Operational	16.4 km WNW	5.1			
				Glenchamber	Operational	4.3 km SW	9.3			
				Hadyard Hill	Operational	25.6 km N	9.4			
				Kilgallioch	Operational	2.9 km ENE	103.4			
				Mark Hill	Operational	15.4 km N	7.4			
				Assel Valley	Consented	26.1 km N	3			
				Barlockhart Moor Ext	Consented	11.7 km SSW	2.8			
				Chirmorie Wind Farm	Consented	9 km NNW	12.1			
				Tralorg	Consented	28.2 km N	2.1			
				Arecleoch Extension	In-Planning	11.5 km NNW	7.3			
				Clauchrie Windfarm	In-Planning	18.9 km NNE	15.4			
				Hadyard Hill Extension	In-Planning	27.8 km N	4			
				Kilgallioch Extension	In-Planning	0.9 km N	53.9			
				Kirk Hill Wind Farm	In-Planning	35.7 km N	1.2			
				Airies II	In-Planning (Scoping)	0.3 km N	158			

## Technical Appendix 5.4: Residential Visual Amenity Assessment



## Technical Appendix 5.4: Residential Visual Amenity Assessment

### 1.1 Introduction

1.1.1 The purpose of this Residential Visual Amenity Assessment (RVAA) is to identify potential effects of the Proposed Development on residential visual amenity. It is, however, important to note that the assessment of residential visual amenity is separate and distinct from the assessment of visual effects as covered in the assessment of landscape and visual effects contained in Chapter 5: Landscape and Visual Amenity (EIAR Volume 2).

### 1.2 Planning Context

1.2.1 The United Kingdom, and more specifically Scottish planning policy and legislation, does not provide for the protection of views from individual properties as this is deemed a matter of private rather than public interest, which is the province of the planning system. The planning system is intended to control development in the public interest, and not the private. The preservation of open views is a private interest, which the planning regime is not intended to protect. But public and private interests may overlap. The issue is whether the number, size, layout and proximity of wind turbines would have such an overwhelming and oppressive visual impact on a dwelling and its amenity space that they would result in unsatisfactory living conditions, and so unacceptably affect amenities and the use of land and buildings which ought to be protected in the public interest.

1.2.2 Practice in respect of the assessment of living conditions or effects on visual amenity of properties has evolved in response to planning decisions and public inquiries throughout the United Kingdom.

1.2.3 This Inspector Lavender in his Appeal Decision in respect of Enifer Downs<sup>1</sup> of 16 March 2009 stated that:

*“when turbines are present in such number, size and proximity that they represent an unpleasantly overwhelming and unavoidable presence in the main views from a house or garden, there is every likelihood that the property concerned would be come to be widely regarded as an unattractive and thus unsatisfactory (but not necessarily uninhabitable) place in which to live. It is not in the public interest to create such living conditions where they did not exist before.”<sup>2</sup>*

1.2.4 In the subsequent Carland Cross Appeal Decision of 19 January 2010, there were 209 properties within 3 km of the proposed turbines. Twenty three were identified as likely to experience *“high significance of visual impact”* which in each case the Council judged to be as *“overwhelmingly adverse.”* However, Inspector Lavender stated that:

1.2.5 *“...those who face the prospect of living close to a wind farm may attach very different value judgements to their visual impact than the wider public, who stand to benefit from the energy produced without seeing the turbines from their homes. In impact, the former is primarily a private interest whereas the latter is a public one and, in the case of the former, few householders are able to exercise control over development by others that may do no more than impinge into the outlook from their property. The planning system is designed to protect the public rather than private interests, but both interests may coincide where, for example, visual intrusion is of such magnitude as to render a property an*

*unattractive place in which to live. This is because it is not in the public interest to create such living conditions where they did not exist before. Thus, I do not consider that simply being able to see a turbine or turbines from a particular window or part of the garden of a house is sufficient reason to find the visual impact unacceptable (even though a particular occupier might find it objectionable).<sup>3</sup>” This has become known as the ‘Lavender test’<sup>4</sup>.*

1.2.6 This position is echoed in Reporters Dent and Jackman's more recent appeal decision in respect of Fauch Hill and Harburnhead Wind Farms<sup>5</sup> in which they stated that:

1.2.7 *“a significant change to a local resident's outlook from their property does not mean a wind farm proposal is necessarily unacceptable. Significant changes are likely to be inevitable for the closest properties. We agree that a ‘higher’ test is relevant.”* They concluded that they *“agree with the conclusions from previous decisions that this means a wind farm would have to be overbearing or dominant.”*

1.2.8 The preceding criteria adopted in consideration of residential visual amenity was reflected in the 2015 Afton Wind Farm appeal (PPA-190-2042) in which the Reporters recommended the test to be applied was whether the wind farm would have any overbearing visual effects on residential amenity to a degree that any property might be considered an unattractive place in which to live.

1.2.9 It is apparent from the foregoing discussion that residential receptors that are predicted to experience significant visual effects in EIA terms would not necessarily be subject to overbearing, oppressive<sup>6</sup> or unpleasantly overwhelming or unavoidable effects in main views and may therefore not represent an unacceptable effect on residential amenity of properties or the undermining of public interest. However, whilst the following assessment comments on the extent of impacts on the amenity of properties it does not draw conclusions regarding the acceptability of such impacts as this is a planning deliberation.

### 1.3 Methodology

#### Method of Assessment

1.3.1 The following study is based on the recently published guidance published by the Landscape Institute<sup>7</sup>, as well as accepted methods that have been tested in planning and public examination previously.

#### Structure and Approach

1.3.2 The study comprises three stages:

- Stage One: Establishing the Scope of the RVAA;
- Stage Two: Survey of Properties; and
- Stage Three: Assessing Impacts on the Visual Amenity of Properties.

1.3.3 The assessment was conducted with reference to Ordnance Survey mapping at various scales, wireline visualisations, and aerial photography. Field reconnaissance was undertaken by members of the project

<sup>1</sup> North Dover (Enifer Downs) Public Inquiry, PINS Appeal Reference APP/X2220/A/08/2071880. Decision Letter, dated 16 March 2009 (‘Lavender Test’)

<sup>2</sup> Paragraph 66 Land west of Enifer Downs Farm and east of Archers Court Road and Little Pineham Farm, Langdon, Appeal decision APP/X2220/A/08/2071880. 28th April 2009 (SPR78).

<sup>3</sup> Paragraph 23, Carland Cross Appeal Decision (APP/D0840/A/09/2103026) 19 January 2010 (SPR82).

<sup>4</sup> North Dover (Enifer Downs) Public Inquiry, PINS Appeal Reference APP/X2220/A/08/2071880. Decision Letter, dated 16 March 2009 (‘Lavender Test’)

<sup>5</sup> Report to the Scottish Ministers, Fauch Hill Wind Farm and Harburnhead Wind Farm, Directorate for Planning and Environmental Appeals, January 2014

<sup>6</sup> From Land between Anderby, Anderby Creek, Chapel St Leonards and Langham. Appeal Decision APP/D2510/A/10/2130539, September 2011

<sup>7</sup> Landscape Institute (2019) Residential Visual amenity Assessment (RVAA) – Technical Guidance Note 2/19

team in April 2020. Due to COVID-19 restrictions surveys were undertaken from publicly accessible locations.

#### *Stage One: Establishing the RVAA Scope*

- 1.3.4 Stage One of the assessment comprised a desk study of mapping, aerial photography, address data, and a Zone of Theoretical Visibility (ZTV) drawing (to blade tip) to identify residential properties within 2 km of the proposed turbines that would be subject to views of the Proposed Development, and where there would be potential for visual receptors to experience significant visual effects<sup>8</sup>. Stage One also considers the potential for significant cumulative effects in respect of other wind farms.
- 1.3.5 The study area was based upon extensive previous experience in respect of similar developments elsewhere and was agreed in consultation with DGC in Scoping.
- 1.3.6 Census data (OS Address Point Data) and 1:25,000 mapping data were utilised during this initial stage and findings verified during preliminary field reconnaissance using ReSoft WindFarm and Ventus AR software.
- 1.3.7 Figure 5.4.1 contains a map of properties within 2 km of the Proposed Development turbines with the blade tip Zone of Theoretical Visibility (ZTV) overlain.
- 1.3.8 Properties falling outwith 2 km of the proposed turbines or outwith the viewshed as depicted in the blade tip ZTV (Figure 5.4.1), were omitted from the RVAA.

#### *Stage Two: Survey of Properties*

- 1.3.9 Stage Two comprised a detailed investigation of properties identified for inclusion in Stage One. This entailed further desk study and field reconnaissance at publicly accessible locations given the COVID-19 restriction at the time of site reconnaissance (April 2020). The findings of the field reconnaissance were recorded in standardised survey forms, which include details of:
- each property's location, geographical extent and curtilage, and landscape and visual context;
  - the type of property: whether detached, semi-detached or terraced; whether the property is single-storey or two-storey;
  - the orientation of the property (i.e. its main entrance and its main façade);
  - main external recreational and amenity spaces;
  - secondary locations, including utilitarian spaces;
  - main approaches that are of relevance to the amenity of the property;
  - main views out (both internal and external), their character and scenic quality, and any specific qualities or elements that are key to the property's amenity; and
  - details of any restrictions on views out, including buildings/ structures, topography and vegetation.
- 1.3.10 The survey also provides an indication of each property's susceptibility to the type of development proposed and potential for appropriate mitigation<sup>9</sup>.

#### *Stage Three: Assessment of Impacts on the Visual Amenity of Properties*

- 1.3.11 Stage Three entailed the identification of likely impacts of the Proposed Development on the key views and defining aspects of the visual amenity at each property, as defined in Stage Two. This stage includes an assessment of the implications of the Proposed Development when considered in conjunction with the cumulative context described in Chapter 5 of the EIAR.

<sup>8</sup> For the purposes of this Stage significant visual effects will be determined based on criteria utilised in the completion of the Landscape and Visual Impact Assessment presented in the EIA Report. The criteria utilised in the RVAA are set out in Stage Three of the methodology in Table 5.4.1.

- 1.3.12 Key considerations in the assessment of impacts include:
- which aspects of the Proposed Development would be visible from each of the key viewpoints at the property, including number of turbines and how they appear (e.g. prominent skyline position or partially obscured behind intervening topography, vegetation or structures);
  - the main and ancillary/ secondary locations at the property subject to views and the approximate distance between them and the nearest visible element of the Proposed Development;
  - any approaches to the property that are adversely affected;
  - height of the Proposed Development relative to each property;
  - whether views are channelled/ focused, direct or oblique and whether they are open or partially constrained;
  - the proportion of the view and skyline occupied by the Proposed Development in terms of horizontal and vertical angle, subtended, and a description of the resultant prominence or dominance of the Proposed Development;
  - the degree of perceived proximity or separation of properties from the Proposed Development; and
  - analysis of cumulative visibility, identifying:
    - the distance and direction to each cumulative development;
    - which aspect and views at each property would be affected; and
    - the cumulative effects attributable to the Proposed Development (i.e. both in terms of what additional effect the Proposed Development would represent, as well as its effect in respect of enclosure or encirclement of properties).
- 1.3.13 Specific terms used to describe the impact of the Proposed Development on the visual amenity of a property are listed below and a definition provided:
- **Overbearing:** Tending to overwhelm. Of such scale and dominance relative to the residential environment and views that the development can be said to represent a significant detractor from views and the character of the environment of the property.
  - **Overwhelming:** Impacts are of such scale and dominance relative to the residential environment and views that the development can be said to be 'overpowering and/ or oppressive'. Such effects are pervasive and largely unavoidable in main views and main/ principal locations in the property.
  - **Oppressive:** Effects may be considered intolerable or of such an extent that they result in a sense of ill-ease and discomfort.
  - **Pervasive:** Effects are ubiquitous or experienced widely throughout the property and associated accesses.

## 1.4 Findings

### **Stage One: Establishing the RVAA Scope**

- 1.4.1 Preliminary desk study and field reconnaissance confirmed a high degree of intervisibility within the landscape within 2 km of the Proposed Development due to the size of the turbines and the nature of the topography not providing a high level of screening within the immediate area. Forestry would provide some screening or filtering of views to the Proposed Development. However, this is commercial forestry which would be felled on a rotational cycle. Consequently, all of the properties within the 2 km study area for the RVAA were included in the assessment to establish whether any would be

<sup>9</sup> Deemed to be appropriate to the character of the property and adjoining landscape, and to not constitute, in itself, an adverse effect on the visual amenity of the property.



subject to impacts that might be considered as overbearing, overwhelming, oppressive or pervasive and therefore potentially material in determination of the application for the Proposed Development.

### **Stage Two: Survey of Properties**

1.4.2 Findings of the survey of properties are set out in Table 5.4.2, below.

### **Stage Three: Assessment of Impacts on the Visual Amenity of Properties**

1.4.3 The level of impacts on residential visual amenity are described in Table 5.4.2 which is intended to provide a considered professional judgement in respect of the criteria set out in the Lavender test, from which the competent authority may draw conclusions regarding the acceptability of the Proposed Development.

1.4.4 The assessment is based upon the definitions defined in Table 5.4.1 which are intended to provide a degree of transparency to the assessment. Stated levels of impact are described as High, High/Moderate, Moderate, Moderate/ Low, Low and None in order to differentiate them from the main SLVIA levels of effect in Chapter 5 of the EIAR (Volume 2) and reflecting the particularities of the RVAA methodology.

## **1.5 Summary and Conclusions**

1.5.1 The purpose of this study was to identify potential effects of the Proposed Development on residential visual amenity.

1.5.2 The study comprised three stages:

- Stage One: Establishing the Scope of the RVAA;
- Stage Two: Surveying Properties; and
- Stage Three: Assessing Impacts on the Visual Amenity of Properties.

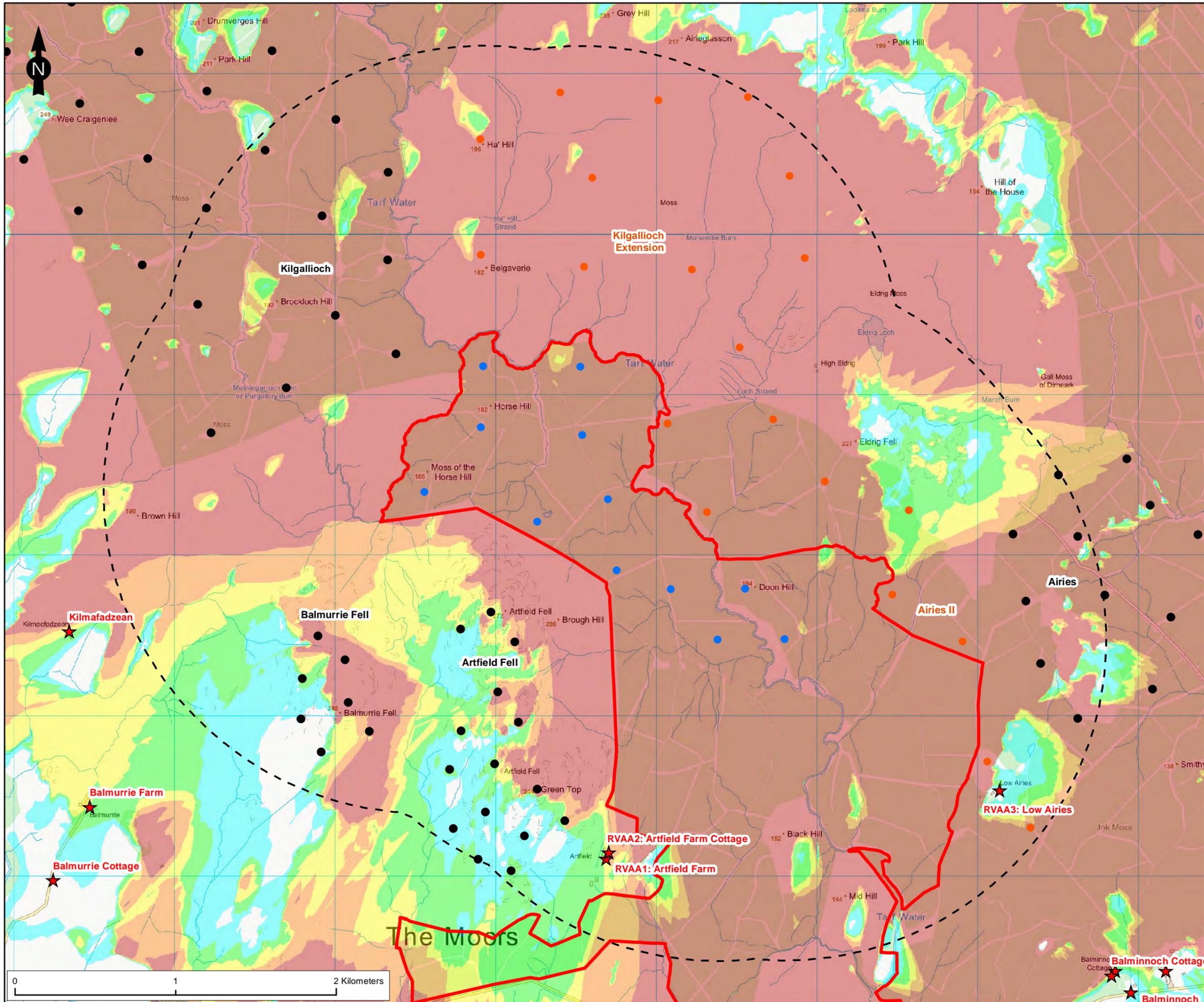
1.5.3 Initially the establishment of the RVAA scope was undertaken using computer modelling of theoretical visibility at recorded properties/ addresses as well as aerial photography analysis and survey at the application site to establish properties with potential views towards the Proposed Development. Based on this exercise, three properties within the 2 km study area with potential views of the Proposed Development (see Figure 5.4.1) were assessed using aerial photography, OS base mapping and verified by fieldwork.

1.5.4 The purpose of this fieldwork was to verify the availability of views towards the Proposed Development from key amenity spaces at properties and to assess the magnitude of impact and visual effect on views from properties based on the criteria set out in the RVAA methodology. Whilst it is undoubtable that the Proposed Development would result in significant visual effects at a number of the properties in SLVIA terms, such effects were not considered likely to prove "overbearing" or "overwhelming", having regard to the criteria examined to assess the nature of the predicted changes as a consequence of the Proposed Development. On this basis it is contended that the properties would not be affected by the Proposed Development to the extent that they would be considered unattractive places in which to live.

Level of Impact	Definition
High	The Proposed Development would form a dominant element in main views and in close proximity to key locations in and around the property, and would be considered oppressive, overbearing or overwhelming. High impacts may also occur where the Proposed Development results in the physical or perceived encirclement or the completion of the encirclement of a property by similarly visually dominant developments, thereby making cumulative effects on the property truly unavoidable, oppressive, overbearing or overwhelming and therefore resulting in a situation where the properties concerned may be considered an 'unattractive place in which to live' which would fail the Lavender test.
High/ Moderate	The Proposed Development would form a prominent element in main views and seen in close proximity to key locations at the property, resulting in considerable change to the quality and character of views from the property, and a corresponding lessening of visual amenity. However, such impacts would not be oppressive, overbearing or overwhelming. High/ Moderate impacts may also occur where the Proposed Development results in a partial encirclement or the completion of the encirclement of a property by similarly visually prominent developments. However, such a cumulative effect may be avoidable in some of the main views and may not be considered oppressive, overbearing or overwhelming.
Moderate	The Proposed Development would form a notable or even prominent element in views from a number of key locations at the property, resulting in notable change to the quality and character of a number of views from the property, and corresponding loss of visual amenity. However, such impacts would not be oppressive, overbearing or overwhelming. Whilst cumulative visibility may be possible, cumulative developments would not form dominant visual elements. The Proposed Development would not contribute to encirclement of the property by development.
Moderate/ Low	The Proposed Development would be appreciable in views from a small number of key locations but would not be prominent. Consequently, it would have little influence of the visual amenity of the property.
Low	The Proposed Development would form an inconspicuous element in views from a small number of key locations and would have a negligible influence on the visual amenity of the property.
None	Whilst the Proposed Development would theoretically be visible from the property, field reconnaissance indicates that it would be screened by intervening structures, localised topographical features or permanent structural vegetation with the result that there would be no effects on the visual amenity of the property.

Stage 2: Survey of Property	Stage 3: Assessment of Impact on Visual Amenity of Properties
<b>Property 1: Artfield Farmhouse (see Figure 5.4.2)</b>	
<p><b>Location:</b></p> <ul style="list-style-type: none"> <li><b>Distance:</b> 1.5 km SSW of the nearest turbine (Turbine 11).</li> <li><b>Location:</b> On gently sloping topography to the south east of Green Top Hill/ Artfield Fell, at an elevation of 160 m AOD.</li> <li><b>Property Type:</b> Detached double storey farmhouse.</li> <li><b>Main Elevation:</b> Main façade of the property faces south east.</li> <li><b>Access to the Property:</b> Access from a local driveway/ farm access track extending north from a local road. The access is approximately 980 m in length</li> <li><b>Related Buildings:</b> Large farm sheds to north of property. Artfield Farm Cottage is located to the north east.</li> </ul> <p><b>Existing Views from Property:</b></p> <ul style="list-style-type: none"> <li><b>Views from the Main Elevation(s):</b> The front of the property opens directly onto the access, which also provides vehicle access to the wider farm building complex. Views to the south west extend across the access track to gently rolling moorland used for rough grazing. Large forestry plantations for the background to the view in the east.</li> <li><b>Views from the Rear Garden/ Rear Windows:</b> Views extend from the southern and western facades across the back garden. Views from the garden are contained by a dense vegetative border. Where present, longer distance views extend to the south across gently rolling moorland/ farmland and farm compounds, towards a forestry belt which lies between the property and Glenchamber Wind Farm. Any available views to the west extend across towards steeply rising moorland to Artfield Fell Wind Farm.</li> <li><b>Principal Views:</b> Contained views to the south and west, away from the Proposed Development.</li> <li><b>Restricted Views:</b> Views are restricted to the north, west and south by large farm buildings, vegetation and – at a slightly greater distance - large blocks of forestry.</li> </ul> <p><b>Existing Wind Farms visible from Property:</b></p> <ul style="list-style-type: none"> <li><b>Operational and Consented Development:</b> The operational Artfield Fell Wind Farm is a prominent feature across the hillside to the west of the property, at a distance of approximately 340 m. Blades and blade tips of some operational turbines at Airies Wind Farm are theoretically visible 2.9 km to the north east, however forestry cover provides effective screening. Glenchamber Wind Farm is theoretically visible to the south west, at a distance of approximately 1.2 km. Forestry cover within the immediate landscape provides a high degree of screening/ filtering of views to existing development in the wider area.</li> </ul>	<ul style="list-style-type: none"> <li><b>Field Survey Assessment Location:</b> Aerial photography, OS mapping and from the property's access track.</li> </ul> <p><b>Visibility of Proposed Development</b></p> <ul style="list-style-type: none"> <li><b>Theoretical Visibility According to ZTV and Wirelines:</b> Seven turbines are theoretically visible across the skyline to the north, occupying an approximately 53.5-degree horizontal angle of the view. Views of turbines contain a mix of blade tips, blades and hubs. The north eastern turbines are the most prominent in the view.</li> </ul> <p><b>Predicted Views from Property:</b></p> <ul style="list-style-type: none"> <li>The proposed wind farm would be visible along the skyline to the north/ north east of the property. Existing farm buildings would provide some localised screening of the Proposed Development. In addition, commercial forestry which is located between the property and the Proposed Development would partially screen turbine hubs and blades.</li> <li>When/ if forestry is felled, views would be similar to those theoretical views described above.</li> <li>The proposed turbines would be seen from the local access road when approaching the property from the south and would be a prominent element in the view to the north of the property.</li> </ul> <p><b>Predicted Cumulative Visibility</b></p> <ul style="list-style-type: none"> <li><b>Other Proposed Development:</b> Proposed (In Scoping) turbines at Airies II Wind Farm would be visible across the skyline, approximately 2.2 km to the north east.</li> <li>Artfield Forest Wind Farm would be located in front of turbines at the proposed Airies II Wind Farm. They would not extend wind farm development further across the view but would intensify the level of development in views to the north east.</li> <li>While operational turbines at Artfield Fell and proposed turbines at Artfield Forest and Airies II would be visible to the north east and west of the property at Artfield Farm, key views to the south east and south would remain free from wind farm development. Therefore, the Proposed Development would not result in the encirclement of the property by wind farm development.</li> </ul> <p><b>Assessment of Impact on Visual Amenity</b></p> <ul style="list-style-type: none"> <li>Views from the property and from its main south east/ south/ west facing elevations/ gardens and key amenity spaces would not be affected by the Proposed Development. It is therefore considered that the Proposed Development would not cause overwhelming, pervasive or unavoidable visual effects on the amenity of this property.</li> <li>Based on the preceding analysis the level of impact on the visual amenity of the property group is considered Moderate. Consequently, there would be no effects that could be described as overbearing such as to render the property an unattractive place to live.</li> </ul>

Table 5.4.2: Survey of Properties and Assessment of Impacts on Residential Visual Amenity	
Stage 2: Survey of Property	Stage 3: Assessment of Impact on Visual Amenity of Properties
Property 2: Artfield Farm Cottage (see Figures 5.4.3)	
<p><b>Location:</b></p> <ul style="list-style-type: none"> <li><b>Distance:</b> 1.4 km SSW of the nearest turbine (Turbine 11).</li> <li><b>Location:</b> On gently sloping topography to the south east of Green Top Hill/ Artfield Fell, at an elevation of 160 m AOD.</li> <li><b>Property Type:</b> Modern two storey house with older annex to rear.</li> <li><b>Main Elevation:</b> Facing south east.</li> <li><b>Related Buildings:</b> Large farm sheds are located to the west of property. Artfield Farmhouse is located to the south.</li> <li><b>Access to the Property:</b> Access gained via a shared farm/ wind farm access track extending north from a local road. The access is approximately 980 m in length.</li> </ul> <p><b>Existing Views from Property:</b></p> <ul style="list-style-type: none"> <li><b>Views from the Main Elevation:</b> Views from the front of the property extend across a small amenity space and across the access track which also provides vehicle access to the wider farm building complex. Views extend across the access track to gently rolling moorland used for rough grazing. Large forestry plantations form the background to the view.</li> <li><b>Views from the Front Garden/ Front of Property:</b> See main elevation above</li> <li><b>Views from the Rear Garden/ Rear Windows:</b> The rear of the property opens directly onto the vehicle access to the house, which also provides access to the wider farm building complex. Turbines at Artfield Fell are visible on the hillside behind the farm complex.</li> <li><b>Principal Views:</b> South east.</li> <li><b>Restricted Views:</b> Views are restricted to the west and south by large farm buildings and local landform.</li> </ul> <p><b>Existing Wind Farms visible from Property:</b></p> <ul style="list-style-type: none"> <li><b>Operational and Consented Development:</b> Artfield Fell Wind Farm is a prominent feature across the hillside to the west of the property, at a distance of approximately 330 m. Blades and hubs of a number of operational turbines at Airies Wind Farm are theoretically visible 3.9 km to the north east, however forestry cover provides effective screening. Glenchamber Wind Farm is theoretically visible to the south west, at a distance of 1.3 km. Forestry cover within the immediate landscape provides a high degree of screening/ filtering of views to existing development.</li> </ul>	<ul style="list-style-type: none"> <li><b>Field Survey Assessment Location:</b> Aerial photography, OS mapping and from the property's access track.</li> </ul> <p><b>Visibility of Proposed Development</b></p> <ul style="list-style-type: none"> <li><b>Theoretical Visibility According to ZTV and Wirelines:</b> Eight turbines are theoretically visible across the skyline to the north/ north east, occupying an approximately 65-degree horizontal angle of the view. Views of turbines are a mix of blade tips, blades and hubs. The north eastern turbines are the most prominent in the view.</li> </ul> <p><b>Predicated Views from Property:</b></p> <ul style="list-style-type: none"> <li>The proposed wind farm would be visible along skyline to north/ north east of the property. Commercial forestry, located between the property and the Proposed Development, would provide some screening of turbine hubs and blades. When/ if forestry is felled, views would be similar to those theoretical views described above.</li> <li>The proposed turbines would be seen from the local access road when approaching the property from the south and would be a prominent element in the view from the north of the property.</li> </ul> <p><b>Predicted Cumulative Visibility:</b></p> <ul style="list-style-type: none"> <li><b>Other Proposed Development:</b> Proposed (In Scoping) turbines at Airies II would be visible across the skyline, approximately 2.1 km to the north east.</li> <li>Artfield Forest Wind Farm would be located in front of turbines at the proposed Airies II Wind Farm. They would not extend wind farm development further across the view but would intensify the level of development in views to the north east.</li> <li>While operational turbines at Artfield Fell and proposed turbines at Artfield Forest and Airies II would be visible to the north east and west of the property at Artfield Farm Cottage, key views to the south east and south would remain free from wind farm development. Therefore, the Proposed Development would not result in the encirclement of the property by wind farm development.</li> </ul> <p><b>Assessment of Impact on Visual Amenity</b></p> <ul style="list-style-type: none"> <li>Views from the property and from its main east facing elevation would not be affected by the Proposed Development. It is therefore considered that the Proposed Development would not cause overwhelming, pervasive or unavoidable visual effects on the amenity of this property.</li> <li>Based on the preceding analysis the level of impact on the visual amenity of the property group is considered Moderate. Consequently, there would be no effects that could be described as overbearing such as to render the property an unattractive place to live.</li> </ul>
Property 3: Low Airies (see Figures 5.4.4)	
<p><b>Location:</b></p> <ul style="list-style-type: none"> <li><b>Distance:</b> 1.6 km SE of the nearest turbine (Turbine 12).</li> <li><b>Access to the Property:</b> Access from a shared farm/ wind farm access track extending north from a local road. The access is approximately 1.8 km in length.</li> <li><b>Location:</b> on sloping south eastern slopes of Meikle Cairn, at an elevation of 145 m AOD.</li> <li><b>Property Type:</b> Single storey farm cottage.</li> <li><b>Related Buildings:</b> Farm sheds to west of property.</li> <li><b>Main Elevation:</b> Facing east (front of property/ front garden).</li> </ul> <p><b>Existing Views from Property:</b></p> <ul style="list-style-type: none"> <li><b>Views from the Main Elevation:</b> Views from the front of the property extend across a front garden towards large areas of commercial forestry. Views of turbines at Airies Wind Farm are visible in close proximity to the north east.</li> <li><b>Views from the Rear Garden/ Rear Windows:</b> The rear of the property opens directly onto the vehicle access to the west of the house, which also provides access to the wider farm building complex. Forestry and topography truncate longer distance views to the west. The rear garden extends from the southern façade of the property. Views from this amenity space are contained by commercial forestry and woodland which is present at the border of the property.</li> <li><b>Principal Views:</b> East.</li> <li><b>Restricted Views:</b> Middle or long distance views are restricted in all directions by local land form and commercial forestry.</li> </ul> <p><b>Existing Wind Farms visible from Property:</b></p> <p><b>Operational and Consented Development:</b> Turbines at Airies Wind Farm are prominent in close proximity views, at a distance of approximately 700 m to the north west of the property. Should Proposed Development at Airies II Wind Farm be constructed, these structures would be located in close proximity in the foreground of the view from Low Airies, within 200 m of the property. Longer distance theoretical views of Glenchamber Wind Farm are available, however are largely screened by commercial forestry in the surrounding landscape.</p>	<ul style="list-style-type: none"> <li><b>Field Survey Assessment Location:</b> Aerial photography, OS mapping and from the property's access track.</li> </ul> <p><b>Visibility of Proposed Development</b></p> <ul style="list-style-type: none"> <li><b>Theoretical Visibility According to ZTV and Wirelines:</b> Three turbine blade tips visible above the skyline to the north west, occupying an approximately 12-degree horizontal angle of the view</li> </ul> <p><b>Predicted Views from Property:</b></p> <ul style="list-style-type: none"> <li>The proposed wind farm would be screened in views from the property by intervening commercial forestry. Should this forestry be removed, it is considered unlikely that the Proposed Development would be discernible in the view from Low Airies.</li> <li>The proposed turbines would be seen from the local access road when approaching the property from the south.</li> </ul> <p><b>Predicted Cumulative Visibility</b></p> <ul style="list-style-type: none"> <li>Due to screening by topography and forestry, the Proposed Development would not add any cumulative effects with other operational, consented or Proposed Developments.</li> </ul> <p><b>Assessment of Impact on Visual Amenity</b></p> <ul style="list-style-type: none"> <li>Based on the preceding analysis the level of impact on the visual amenity of the property group is considered None (or Low, if forestry removed). Consequently, there would be no effects that could be described as overbearing such as to render the property an unattractive place to live.</li> </ul>



**Legend**

- Site Boundary
- 2km Radius From RVA Study Area
- Proposed Turbine
- ★ Residential Property
- Operational Wind Farm
- Other Proposed Wind Farm

**Number of Turbines Visible to Maximum Blade Tip Height (180m)**

- 1 to 3
- 4 to 6
- 7 to 8
- 9 to 10
- 11 to 12

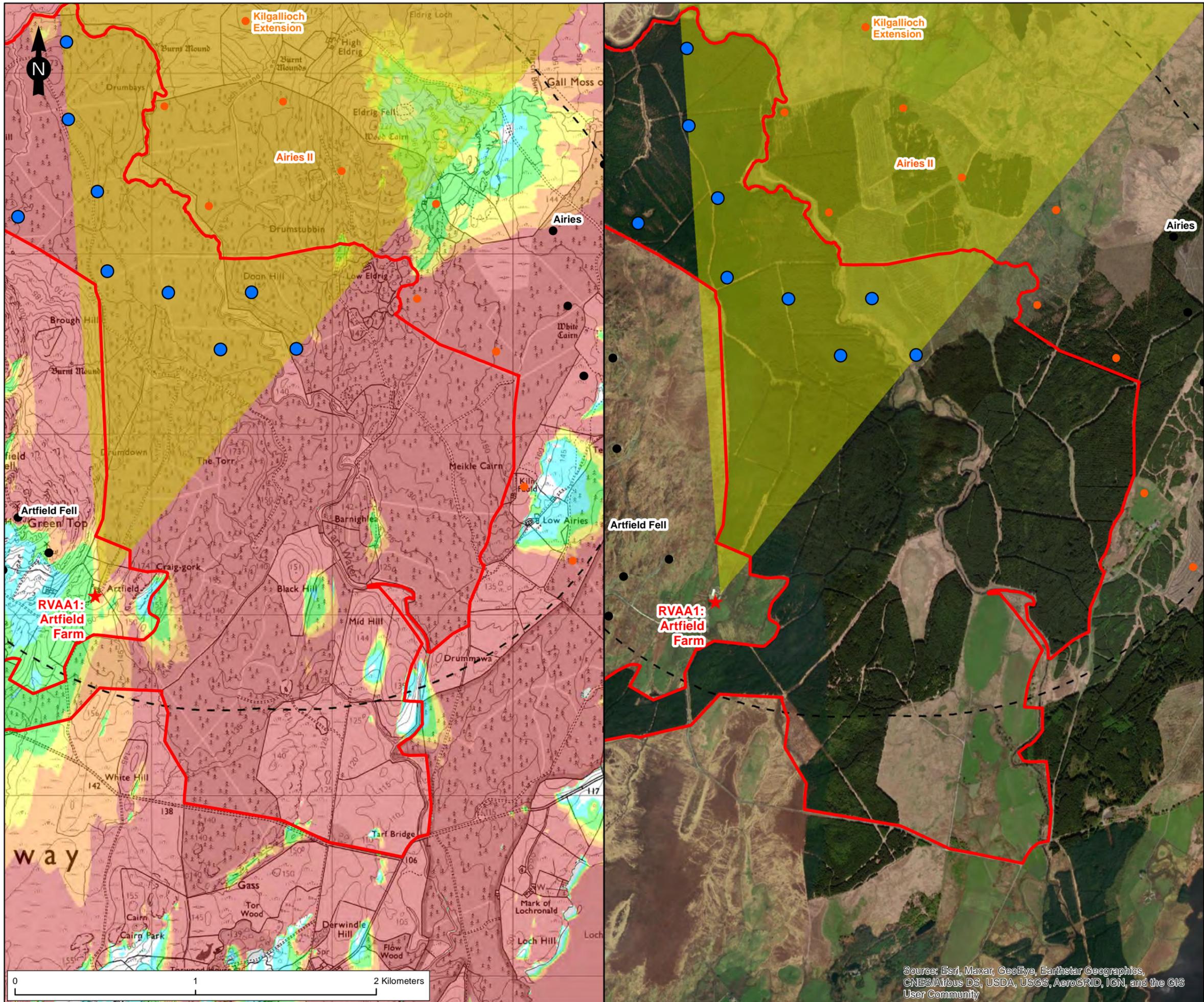
1. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.
2. Predicted visibility based on viewer height of 2m above ground level.
3. Visibility calculated using Proposed Restoration Profile and Ordnance Survey Terrain 5 DTM on a 5m grid.
4. Effect of earth curvature and light refraction is included.

Figure Title  
**Figure 5.4.1: Residential Visual Amenity Assessment Property Locations**

Project Name  
**Artfield Forest Wind Farm**

Project Number 1620008937	Figure No. 5.4.1
Date November 2020	Prepared By AG
Scale 1:22,500 @ A3	Issue 1

Client  
**Artfield Forest Wind Farm Ltd.**



**Legend**

- Site Boundary
- ★ Property Location
- Proposed Turbine
- 2km Radius From RVA Study
- Theoretical Horizontal Angle of View Occupied by Proposed Turbines
- Operational Wind Farm
- Other Proposed Wind Farm

**Number of Turbines Visible to Maximum Blade Tip Height (180m)**

- 1 to 3
- 4 to 6
- 7 to 8
- 9 to 10
- 11 to 12

1. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.  
 2. Predicted visibility based on viewer height of 2m above ground level.  
 3. Visibility calculated using Proposed Restoration Profile and Ordnance Survey Terrain 5 DTM on a 5m grid.  
 4. Effect of earth curvature and light refraction is included.

Figure Title  
**Figure 5.4.2a: Artfield Farm (RVA1)**

Project Name  
**Artfield Forest Wind Farm**

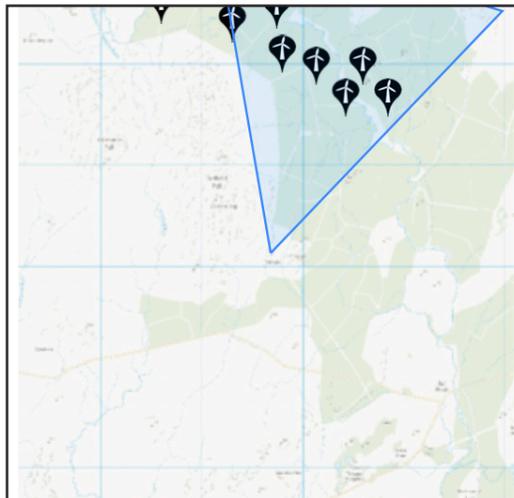
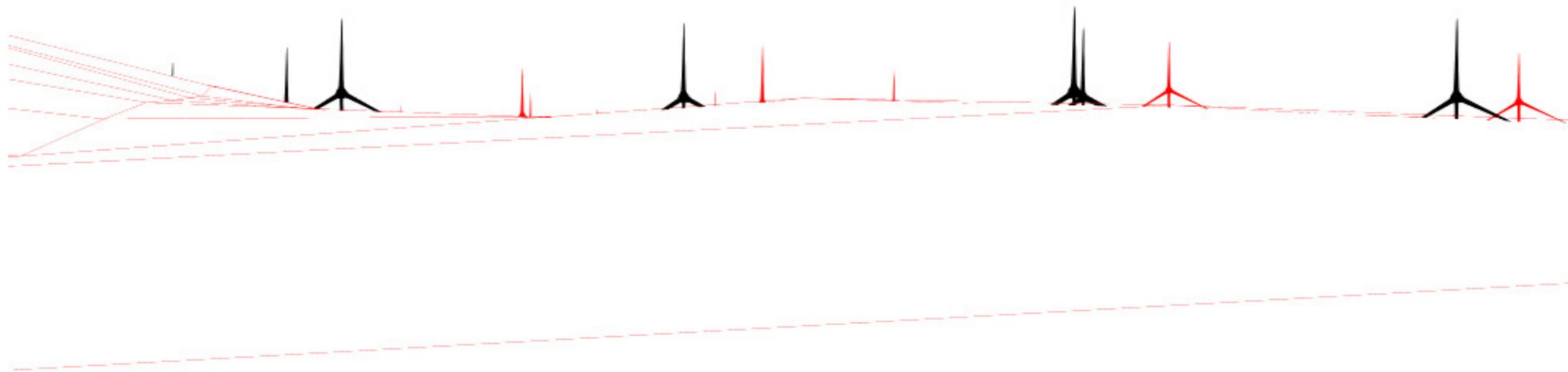
Project Number 1620008937	Figure No. 5.4.2a
Date December 2020	Prepared By NJ
Scale 1:20,000 @ A3	Issue 1

Client  
**Artfield Forest Wind Farm Ltd.**

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Airies II (Scoping)

Artfield Forest



**Key:**

-  Proposed Artfield Forest Wind Turbine
-  Proposed Airies II Wind Turbine (Scoping)

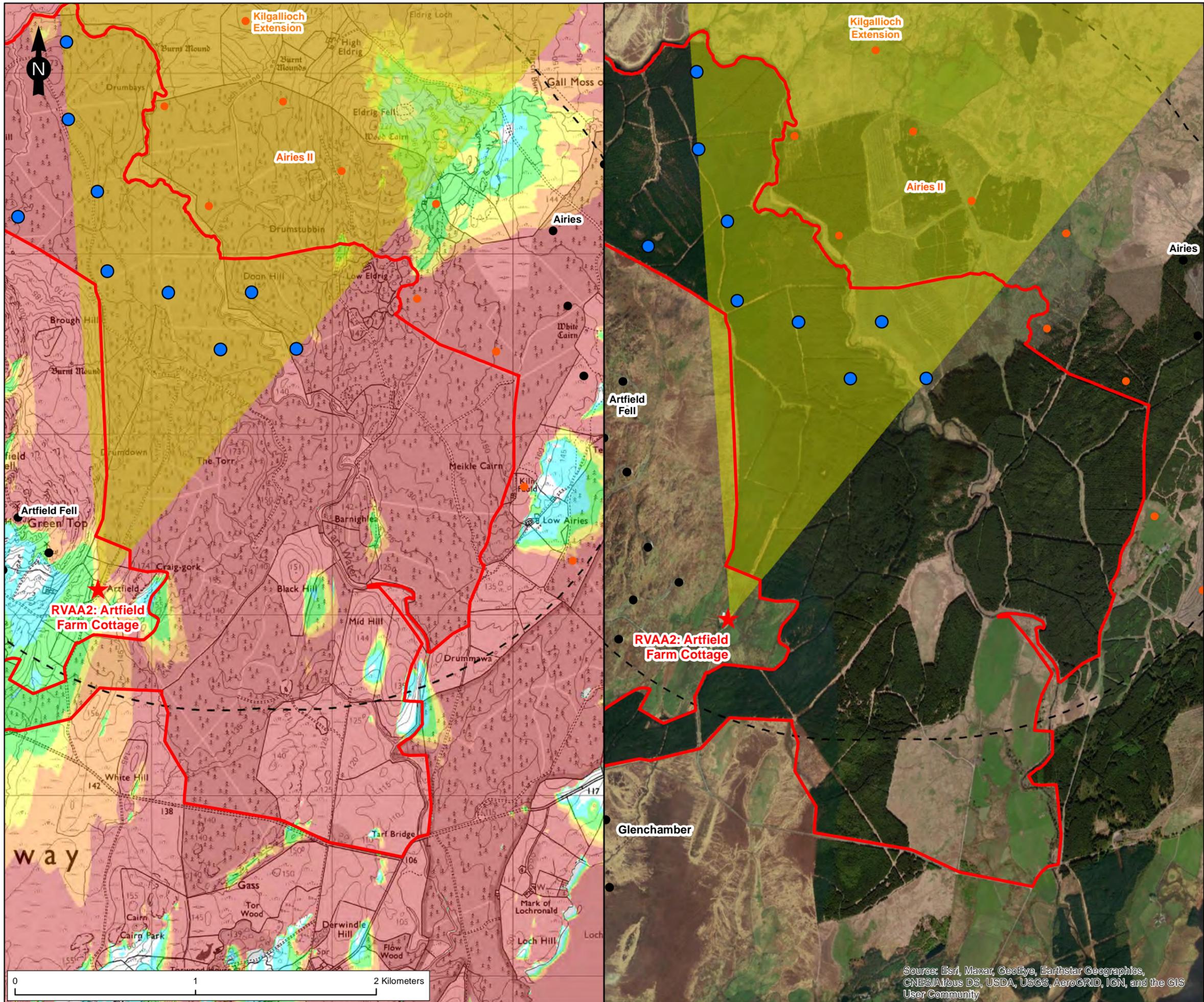
Figure Title:  
Residential Visual Amenity Assessment -  
RVAA1: Artfield Farm

Project Name:  
Artfield Forest Wind Farm  
EIA Report

Project Number: 1620008937	Figure No: 5.4.2b
Date: November 2020	Prepared By: AG
Scale: NTS	Issue: 1

Client:  
**Artfield Forest Wind Farm Ltd**





**Legend**

- Site Boundary
- ★ Property Location
- Proposed Turbine
- 2km Radius From RVA Study Area
- Theoretical Horizontal Angle of View Occupied by Proposed Turbines
- Operational Wind Farm
- Other Proposed Wind Farm

**Number of Turbines Visible to Maximum Blade Tip Height (180m)**

- 1 to 3
- 4 to 6
- 7 to 8
- 9 to 10
- 11 to 12

1. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.  
 2. Predicted visibility based on viewer height of 2m above ground level.  
 3. Visibility calculated using Proposed Restoration Profile and Ordnance Survey Terrain 5 DTM on a 5m grid.  
 4. Effect of earth curvature and light refraction is included.

Figure Title  
**Figure 5.4.3a: Artfield Farm Cottage (RVA2)**

Project Name  
**Artfield Forest Wind Farm**

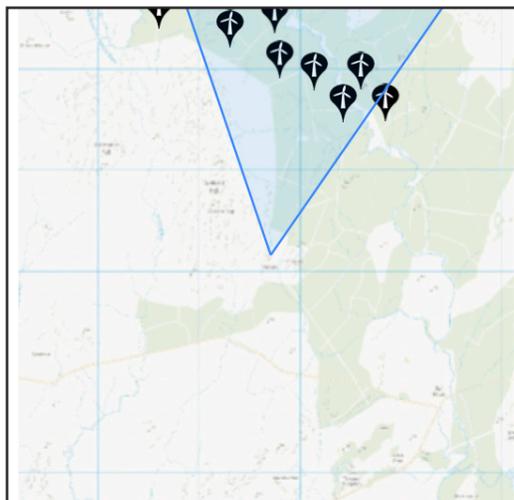
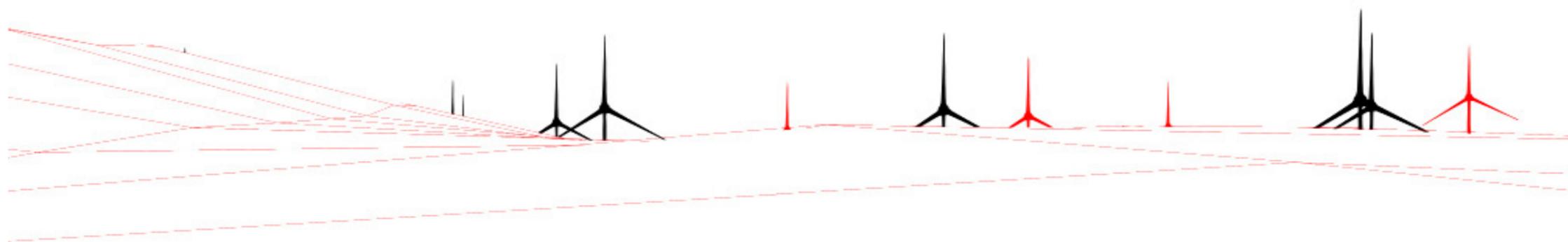
Project Number 1620008937	Figure No. 5.4.3a
Date December 2020	Prepared By NJ
Scale 1:20,000 @ A3	Issue 1

Client  
**Artfield Forest Wind Farm Ltd.**

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Airies II (Scoping)

Artfield Forest



**Key:**

-  Proposed Artfield Forest Wind Turbine
-  Proposed Airies II Wind Turbine (Scoping)

Figure Title:  
Residential Visual Amenity Assessment -  
RVAA2: Artfield Farm Cottage

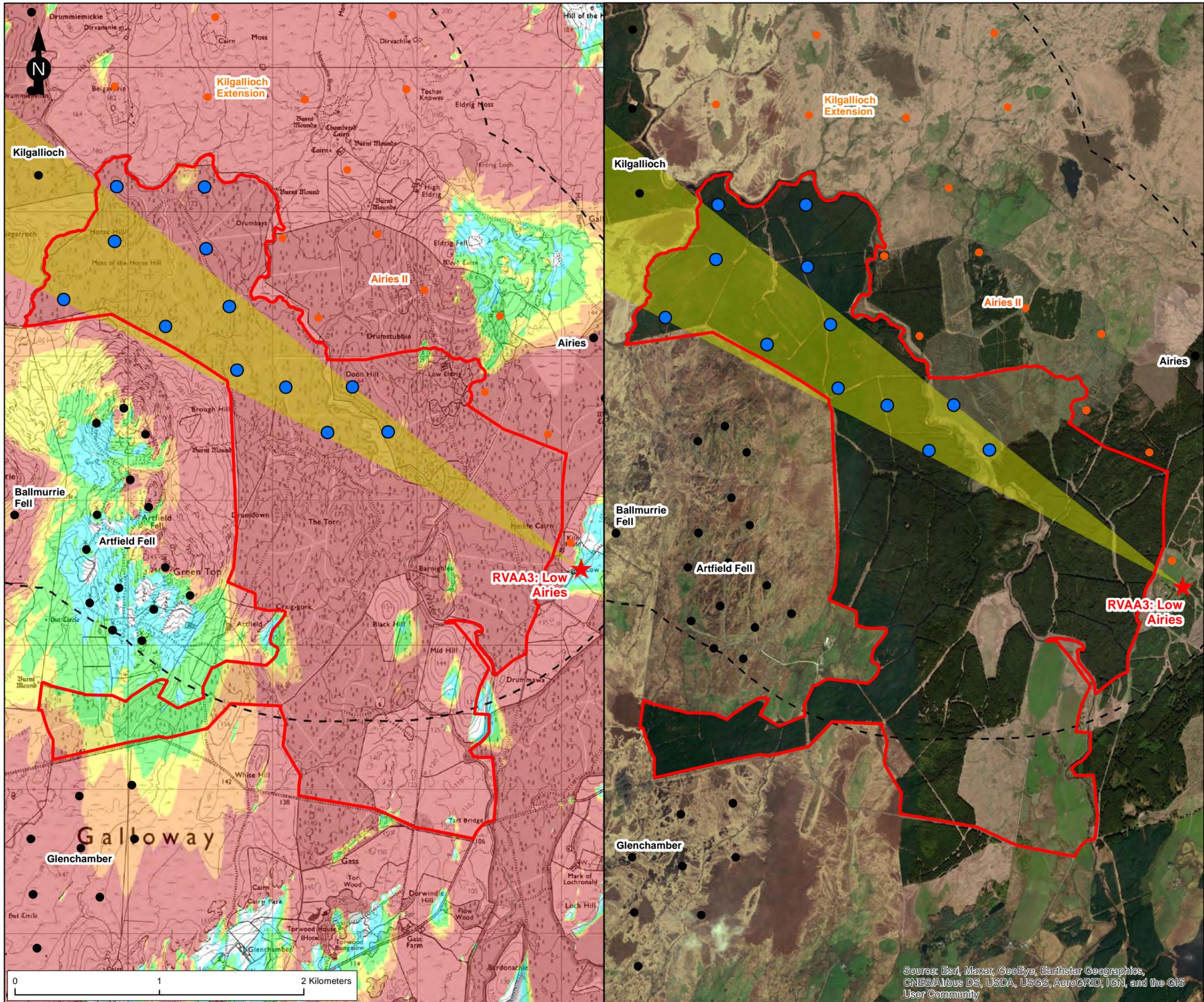
Project Name:  
Artfield Forest Wind Farm  
EIA Report

Project Number: 1620008937	Figure No: 5.4.3b
Date: November 2020	Prepared By: AG
Scale: NTS	Issue: 1

Client:  
**Artfield Forest Wind Farm Ltd**







**Legend**

- Site Boundary
- ★ Property Location
- Proposed Turbine
- 2km Radius From RVA Study Area
- Theoretical Horizontal Angle of View Occupied by Proposed Turbines
- Operational Wind Farm
- Other Proposed Wind Farm

**Number of Turbines Visible to Maximum Blade Tip Height (180m)**

- 1 to 3
- 4 to 6
- 7 to 8
- 9 to 10
- 11 to 12

1. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.
2. Predicted visibility based on viewer height of 2m above ground level.
3. Visibility calculated using Proposed Restoration Profile and Ordnance Survey Terrain 5 DTM on a 5m grid.
4. Effect of earth curvature and light refraction is included.

Figure Title  
**Figure 5.4.4a: Low Airies (RVA3)**

Project Name <b>Artfield Forest Wind Farm</b>	
Project Number 1620008937	Figure No. 5.4.4a
Date December 2020	Prepared By NJ
Scale 1:25,000 @ A3	Issue 1
Client <b>Artfield Forest Wind Farm Ltd.</b>	

**RAMBOLL**

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Coordinate System: British National Grid. Projection: Transverse Mercator. Datum: OSGB 1936.

Artfield Forest

Airies II (Scoping)

Key:

- Proposed Artfield Forest Wind Turbine
- Proposed Airies II Wind Turbine (Scoping)

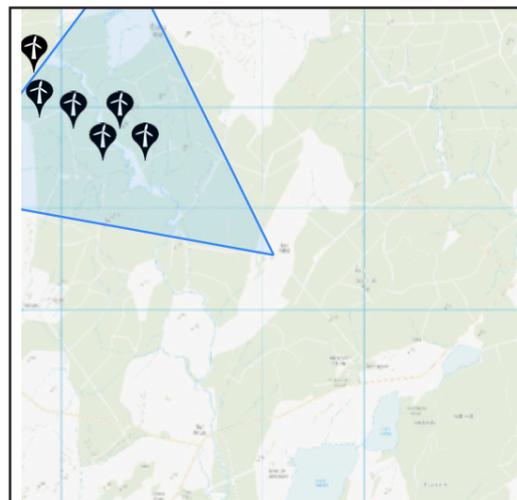


Figure Title:  
Residential Visual Amenity Assessment -  
RVAA3: Low Airies

Project Name:  
Artfield Forest Wind Farm  
EIA Report

Project Number: 1620008937	Figure No: 5.4.4b
Date: November 2020	Prepared By: AG
Scale: NTS	Issue: 1

Client:  
**Artfield Forest Wind Farm Ltd**



## Technical Appendix 5.5: Wild Land Impact Assessment



## Technical Appendix 5.5: Wild Land Impact Assessment

### Methodology

1.1.1 The methodology utilised for the Wild Land Impact Assessment (WLIA) follows NatureScot's Wild Land Assessment Guidance<sup>1</sup> hereafter referred to as the Guidance.

1.1.2 The WLIA comprises the following steps:

- Step 1 – Definition of the study area and scope of the assessment: Comprising the identification of a study area appropriate to the scale of development and extent of likely significant effects on the WLA.
- Step 2 – Verify the WLA baseline: Confirmation of the wild land qualities of the study area, any relevant or substantial changes that have occurred since the description was prepared, and the nature of their contribution to the WLA. The assessment will identify which qualities could be susceptible to the Proposed Development.
- Step 3 – Assess the sensitivity of the qualities of the WLA within the study area, assuming a high value for the included area of landscape. The wild land qualities of the WLA, including the physical attributes and perceptual responses that contribute to those qualities, will be identified that are most sensitive to the type and scale of change proposed.
- Step 4 – Assess the magnitude of the impact<sup>2</sup>: Given the size or scale of change, extent and duration, the effects on individual qualities and/ or combinations of qualities will be described, drawing out which physical attributes and perceptual responses will be affected and how and to what degree, and the potential for mitigation.
- Step 5 – Judgement of the significance of effect: The overall significance of residual effects on the wild land qualities of the WLA will be outlined, taking into account mitigation.

### Step 1 Defining the Study Area

1.1.3 The study area for the WLIA reflects the extent of likely significant effects, including any cumulative effects, and along with the following:

- The scale of development and extent of effects;
- The extent of visibility;
- Routes and movement through the WLA;
- The wild land qualities likely to be affected will be the focus of the assessment; and
- The potential for significant cumulative effects in respect of other developments.

1.1.4 Based on the analysis of the viewshed for the Proposed Development (as illustrated in EIAR Volume 3a: Figure 5.4b) effects on the Merrick Wild Land Area (WLA No.1) have been addressed:

### Step 2 Establishing the Baseline

1.1.5 The baseline appraisal:

- Establishes and describes the extent to which physical and perceptual attributes of wild land are present; and

- Describes the character, sensitivity and condition of the area affected and its contribution to the wild land areas as a whole.

1.1.6 The WLIA considers the baseline context of the WLA, not just areas predicted to fall within the viewshed of the Proposed Development and will consider the effects on the experience of receptors processing into and out of the WLA, as well as to key locations in the WLA.

1.1.7 The principle sources of information used were NatureScot's Wild Land Mapping and the published Wild Land Descriptions<sup>3</sup>. The findings of these publications were verified using Ordnance Survey data/mapping, aerial photography review and by field survey. Where any relevant or substantial changes to the WLA description were identified (where they materially affect the wild land qualities), these were included in the baseline description.

1.1.8 NatureScot's advice to Government in 2014<sup>4</sup>, acknowledges that wildness is a subjective matter that requires informed judgements. This is because people respond differently according to their individual experience and expectations. For some, Scotland's wild landscapes are the setting for their home and workplace; for others, they are places that they visit. But there is sufficient commonality in appreciation to identify a set of attributes and responses that can be assessed if presented in a systematic, transparent and consistent way.

1.1.9 The Guidance defines physical and perceptual attributes of Wild Land as comprising:

- A high degree of perceived naturalness;
- A lack of modern human artefacts or structures;
- Little evidence of contemporary land uses;
- Landform which is rugged, or otherwise physically challenging; and
- Remoteness and/ or inaccessibility.
- The perceptual responses evoked by these physical attributes include:
  - A sense of sanctuary or solitude;
  - Risk or, for some visitors, a sense of awe or anxiety;
  - Perceptions that the landscape has arresting or inspiring qualities; and
  - Fulfilment from the physical challenge required to penetrate into these places.

1.1.10 The extent to which physical attributes and perceptual responses are evident in the field is recorded as high, medium, low or negligible as set out in Table 1 of the Guidance. It is noted that, as the Proposed Development is located outwith the WLA, the focus of the WLIA is on indirect effects on key wild land qualities.

### Step 3 Sensitivity of WLA Qualities

1.1.11 Whilst WLAs are assumed to have a high value, their susceptibility to different forms of development vary according to the particular wild land qualities, to what extent they are intact and the scale and likely impact of different development types on such qualities.

1.1.12 The sensitivity of the WLA qualities to different types and scales of development was informed by NatureScot's WLA descriptions and project specific fieldwork and is classified as High, Medium or Low, as described below. It is noted that NatureScot's WLA description for the Merrick WLA does not make specific reference to wild land characteristics of relevance after dark (i.e. when proposed turbine lighting

<sup>1</sup> NatureScot (2020) Assessing the Impacts on Wild Land Areas – Technical Guidance

<sup>2</sup> Note: The NatureScot WLIA Technical Guidance uses the term 'Magnitude of Effects'. However, to ensure alignment with terminology used in the Guidelines for Landscape and Visual Impact Assessment (3<sup>rd</sup> Edition) and to avoid confusion when assessing the significance of the effect, the term 'Magnitude of Impact' has been used in this assessment.

<sup>3</sup> Available at <https://www.nature.scot/wild-land-area-descriptions>

<sup>4</sup> SNH (2014) Advice to Government – Core Areas of Wild Land 2013 Map, available at <https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land>

may impact on the WLA). For the purpose of this WLIA it has been assumed that the key characteristic of relevance is the WLAs naturalness and remoteness as other aspects of this WLA would be obscured after dark. Consideration of the effect of proposed turbine lighting is therefore focused on these characteristics.

**Step 4 Magnitude of Impact on Wild Land Areas**

1.1.13 Impacts on wild land qualities are expressed as follows:

- Substantial: Total Loss or considerable alteration to attributes, assessed on a case by case basis;
- Moderate: Partial loss or alteration to attributes;
- Slight: Minor loss or alteration to attributes resulting in a change to the baseline;
- Negligible: Very minor loss or alteration to baseline attributes; and
- None: No loss or alteration to baseline attributes.

**Step 5 Judging Significance of Effects**

1.1.14 Professional judgement has been applied to the findings of the baseline and predicted effects arising from the Proposed Development to assess whether effects on the physical attributes and perceptions of the WLA would be significant. As discussed in EIAR Volume 2: Chapter 5: LVIA, residual effects are ascertained by means of a comparison of Sensitivity and Magnitude of Impact, as indicated in Table 5.5.1, below. The judgement also takes into account the mitigation presented in Section 5.5 of Chapter 5: LVIA (EIAR Volume 2) and the overall effect of the development on the special qualities of the WLA. It is important to note that the matrix was not applied prescriptively or arithmetically, but rather, as a starting point from where professional judgement was brought to bear.

1.1.15 A summary of the residual effects arising as a result of the Proposed Development is presented below.

Table 5.5.1 Residual Effects					
	Magnitude of Impact				
Sensitivity	Substantial	Moderate	Slight	Negligible	None
High	Major	Major/ moderate	Moderate	Moderate/ minor	None
Medium	Major/ moderate	Moderate	Moderate/ minor	Minor	None
Low	Moderate	Moderate/ minor	Minor	Minor/ none	None

**Illustrative Materials**

1.1.16 EIAR Volume 3a: Figure 5.4b, presents a Zone of Theoretical Visibility (ZTV) drawing for the Proposed Development and indicates the location and extent of the Merrick WLA. Viewpoint 2 from the LVIA is also relevant to the WLIA (the viewpoints are presented in EIAR Volume 3b: Figures 5.10a to 5.10j) and has been used to inform the assessment.

1.1.17 It should be noted, however, that this viewpoint represents a worst case in respect of likely residual effects, and not necessarily the general effect on the WLA. Consequently, effects on wild land qualities at these viewpoints shouldn't be extrapolated across the wider WLA.

1.1.18 Table 5.5.2 presents the results of the WLIA.

**Conclusions and Summary of Effects**

1.1.19 In summary:

- The Proposed Development is not located within, or adjacent to, the boundary of the WLA;
- Within the WLA boundary, the Proposed Development would only be visible from Site facing summits and elevated slopes at a distance of over 20 km to the south west.

- The Proposed Development would form a minor addition to an established large-scale cluster of similar developments which characterise existing views from these elevated parts of the WLA;
- No views of the Proposed Development are available from the interior of the WLA and as such, the 'strong sense of naturalness' would not be impacted;
- No significant effects on the remoteness of the WLIA are anticipated; and
- No significant effects on the degree of challenge and access are anticipated.

1.1.20 In this context, the proposed development is not expected to constitute a significant effect on the wild land characteristics of the Merrick WLA.

<b>Table 5.5.2: Effects on Merrick Wild Land Area (WLA 1)</b>				
<b>Step One (Study Area)</b>	<b>Step Two (Baseline Aspects) 5</b>	<b>Step Three (Sensitivity of Study Area to the type of Development Proposed)</b>	<b>Step Four (Assessment of Magnitude of Impacts)</b>	<b>Step Five (Residual Effects and Significance)</b>
<p>The study area for the WLIA comprised the entirety of the WLA which lies to the west of the Nick of Carclach ridge between Caerloch Dhu and Craiglee, and includes the summits of Dungeon Hill and Mullwharchar.</p> <p>The following LVIA Viewpoints are located within this WLA:</p> <ul style="list-style-type: none"> <li>• Viewpoint 2: Merrick</li> </ul>	<p><i>"A relatively small wild land area but with a strong perception of naturalness, few human artefacts and little contemporary land use."</i></p>	<p>High. Development of the type proposed has the potential to detract from the perceived naturalness of the WLA, introducing modern human artefacts/ land use into a landscape which currently lacks these features.</p>	<p>Negligible.</p> <p>The Proposed Development would not introduce additional human artefacts to the WLA. No views of the Proposed Development are available from the interior of the WLA and as such, the '<i>strong sense of naturalness</i>' would not be affected.</p> <p>Viewed from elevated, site facing summits and elevated slopes, the Proposed Development would add further wind farm development into views from the WLA, but would be seen at a distance of approximately 21 km to the south west of the WLA, where it would be positioned within a landscape that is characterised by existing wind energy developments including Kilgallioch, Airies, Artfield Fell, Balmurrie Fell and Glenchamber Wind Farms. As such, the Proposed Development would not represent a wholly new or unfamiliar or especially conspicuous feature in views in this direction and would be seen distantly.</p> <p>After dark, the proposed development, whilst introducing additional artificial light sources to views out of the WLIA, would be seen distantly, in a low-lying position, and in the context of other artificial light sources associated with the settled coast and settled southern edge of the Moorland Plateau.</p> <p>Consequently, any influence on the landscape's perceived naturalness would be limited.</p>	<p>Minor. Not Significant.</p>
	<p><i>"A wild land area that contrasts with the adjacent Forest Park, especially in terms of human activity."</i></p>	<p>High. Development of the type proposed could reduce the level of contrast between an intensively managed forest, popular for recreational pursuits and the more remote and solitary nature of the WLA. For example, development of the type proposed could introduce wide tracks (and therefore formal access) into the WLA.</p>	<p>Negligible. No works would be carried out within or adjacent to the WLA and therefore the contrast of land uses and human activity which currently exists, would not be impacted.</p> <p>The Proposed Development would form a minor addition to an established large scale cluster of similar developments over 20 km from the WLA. As such the Proposed Development would not be anomalous and would not undermine the contrast between the WLA interior and adjoining landscape.</p>	<p>Minor. Not significant.</p>
	<p><i>"Human elements are widely visible from the tops and outermost slopes but lower-lying areas have a much stronger sense of remoteness."</i></p>	<p>Medium. The study area is largely focussed on hilltops and upper hill slopes where views of existing wind farm development form a prominent element in views out of the WLA</p>	<p>Negligible.</p> <p>The Proposed Development would introduce further wind farm development into views to the south west of the study area where it would overlap with the existing/ consented Kilgallioch, Airies, Artfield Fell and Balmurrie Fell Wind Farms. As such, the Proposed Development would not represent a wholly new or unfamiliar feature in views in this direction and would be seen distantly. This would reflect the current nature of views from the hill tops and outermost slopes within the WLA. In this context and taking account of the distance the Proposed Development would be seen, the Proposed Development would be unlikely to form a discernible impact on the '<i>remoteness</i>' or '<i>sense of sanctuary</i>' of the WLA.</p> <p>This is also the case in respect of potential night impacts associated with aviation lighting on the proposed developments turbines. Whilst this would introduce additional artificial light sources to views out of the WLIA, the lights would be seen distantly, in a low-lying position in views and in the context of existing light sources within the settled coastline of Dumfries.</p>	<p>Minor. Not significant.</p>
	<p><i>"A rugged landscape that provides a surprisingly high degree of physical challenge."</i></p>	<p>High. Introduction of tracks could enable increased access across the WLA (in the area of development).</p>	<p>None.</p> <p>The Proposed Development is located outwith the WLA and would therefore have no effect on the degree or ease of access</p>	<p>None.</p>

<sup>5</sup> Taken from WLA description available at <https://www.nature.scot/sites/default/files/2017-11/Consultation-response-Description-of-Wild-Land-Merrick-July-2016-01.pdf>





## Technical Appendix 5.6: Route Visibility Analysis



Artfield Forest						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.595886169	29.11655497	W
A75	Crocketford to Stranraer	Heading West	10	4.148086792	24.68433512	W
A75	Crocketford to Stranraer	Heading West	11	3.609354408	22.59218256	W
A75	Crocketford to Stranraer	Heading West	12	3.108791976	18.37470288	WNW
A75	Crocketford to Stranraer	Heading West	13	0.922418252	14.96721037	WNW
A75	Crocketford to Stranraer	Heading West	14	0.15628563	12.41282575	W
A75	Crocketford to Stranraer	Heading West	15	0.904772308	7.772361769	NW
A75	Crocketford to Stranraer	Heading West	16	1.941172912	7.699694232	NNW
A75	Crocketford to Stranraer	Heading West	17	3.507157024	8.407338248	N
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	3.317884684	11.93761242	SSW
A714	Girvan to A746	Heading South	6	2.741177344	13.27797603	SSW
A714	Girvan to A746	Heading South	7	1.40702553	13.74862769	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.309909301	13.52999734	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.418941832	18.79042335	W
A714	Girvan to A746	Heading South	12	0.78430019	21.51974418	W
A714	Girvan to A746	Heading South	13	0.374902622	21.7600037	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.5425901	31.63509799	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.08959306	29.51514088	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.974547361	11.77144718	N
A747	Glasserton to Glenuce	Heading North West	7	1.289919464	10.58920742	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.498449145	19.68537213	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	2.703442997	16.23337791	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.839418529	11.77016676	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.821321271	7.666109819	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.02410208	5.739678595	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	3.865022941	4.366045423	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.00000053	1.314439029	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	4.430694752	1.183512588	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	3.61063815	4.530906355	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.236724573	8.20724944	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.622860604	10.61549833	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.00662536	17.25214754	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	4.005851688	17.71858349	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.506737025	20.68764054	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.549473196	23.94923242	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.354856292	34.92626685	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.256929358	32.06020956	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.919376496	28.46038198	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.89806343	25.69044976	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.897667681	22.4117687	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.768093807	19.32231875	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.720027408	17.25373891	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.933470954	16.94327195	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2	0.467639398	13.23378804	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1	0.995237573	19.27728202	NW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2	3.73295489	18.19584853	NW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3	4.055792622	17.19927387	NNW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4	0.022669485	17.24932269	NNW

Afton						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2	0.357367089	39.57069576	NNW
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4	1.266216752	43.00589672	NNW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2	0.106430524	11.90420793	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	3.551795041	5.88748747	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.669008714	6.140067503	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	1.074068044	9.117888343	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	2.030698062	12.32315934	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	0.370395052	18.17962551	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.005158277	20.55126686	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4			

Auries						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.380221206	26.70200373	W
A75	Crocketford to Stranraer	Heading West	10	4.083265317	22.13202867	W
A75	Crocketford to Stranraer	Heading West	11	3.5694678	20.00022079	W
A75	Crocketford to Stranraer	Heading West	12	3.189075747	15.57914105	WNW
A75	Crocketford to Stranraer	Heading West	13	0.798824033	12.45739701	W
A75	Crocketford to Stranraer	Heading West	14	1.371329848	8.717309809	W
A75	Crocketford to Stranraer	Heading West	15	0.729268434	6.403564616	NNW
A75	Crocketford to Stranraer	Heading West	16	2.024811358	6.509913449	NNW
A75	Crocketford to Stranraer	Heading West	17	1.955976151	8.188648789	NNE
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	2.803103055	12.00945998	S
A714	Girvan to A746	Heading South	6	2.545355348	11.96744293	SSW
A714	Girvan to A746	Heading South	7	1.341016683	11.74288191	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.279523858	10.709103	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.65265588	16.19943546	W
A714	Girvan to A746	Heading South	12	0.702592724	19.17211264	NW
A714	Girvan to A746	Heading South	13	0.393684749	19.64120701	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.715798978	30.27442357	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.212275289	28.2580494	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.765486734	11.87678306	NNE
A747	Glasserton to Glenuce	Heading North West	7	0.612104484	11.2322387	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.381070011	17.26603926	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	2.840915066	13.50179895	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.566327081	9.539280361	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.107792444	5.166840511	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.401091919	4.0896993	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	4.20705124	4.540058437	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.00000053	4.773754406	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.63512844	4.77455119	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	1.272438847	7.355572541	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.308881824	10.69827127	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.620953745	13.12288136	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	1.65772624	21.93784645	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.167723069	24.00100921	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.193667298	27.1772243	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.610812076	35.18077944	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.309800801	32.59829311	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.946124208	29.04805712	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.867792971	26.61162059	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.902670121	23.91210582	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	2.557569764	21.28948169	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	0.210516404	21.32348164	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.362879592	13.19633701	NNE
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.931751035	17.34787713	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.958120707	16.83644495	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.738837458	16.26951736	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Auries II						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.646463496	27.19310366	W
A75	Crocketford to Stranraer	Heading West	10	4.240261493	22.81055896	W
A75	Crocketford to Stranraer	Heading West	11	4.502891489	20.38474422	WNW
A75	Crocketford to Stranraer	Heading West	12	3.601905611	16.43014975	WNW
A75	Crocketford to Stranraer	Heading West	13	2.010854504	12.67805225	WNW
A75	Crocketford to Stranraer	Heading West	14	2.500035416	8.765231341	W
A75	Crocketford to Stranraer	Heading West	15	2.141143308	5.960389001	NNW
A75	Crocketford to Stranraer	Heading West	16	2.336359066	6.011363821	NNW
A75	Crocketford to Stranraer	Heading West	17	3.773252768	7.455824982	NNE
A75	Crocketford to Stranraer	Heading West	18	0.272674929	11.15126788	NNE
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	3.499333203	11.97619716	S
A714	Girvan to A746	Heading South	6	3.145993194	12.93694701	SSW
A714	Girvan to A746	Heading South	7	1.80138279	12.71824124	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.854672064	12.25450559	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	1.068073947	16.93014513	W
A714	Girvan to A746	Heading South	12	1.059281217	18.73871432	W
A714	Girvan to A746	Heading South	13	0.605948112	19.83000885	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.702936221	29.81859595	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.23756146	27.76799033	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	1.100247824	11.13529091	NNE
A747	Glasserton to Glenuce	Heading North West	7	1.587881968	10.34455223	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.473622371	18.60313052	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	3.704097405	14.73894498	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	1.412157202	10.71812561	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.832489013	6.59895826	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.804358947	5.10493548	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	4.224875438	4.432819335	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.00000053	2.515465388	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	3.22905927	2.520328415	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	5.947274443	5.947274443	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.970762808	9.44858546	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.634451605	11.92956535	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.708066632	17.83921671	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	4.16610736	18.98612589	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.509553013	22.24243273	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.459712317	25.51010239	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.908341102	34.39261246	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.35034813	31.84119143	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.996503235	28.31045939	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.883125377	25.8884843	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.917254435	23.22147821	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.830396023	20.4246228	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	4.046271845	18.6225199	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	1.35382779	18.34838443	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.576249622	12.38301431	NNE
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	1.109511362	17.36001553	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	4.677524673	16.31988813	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	4.238737697	15.66737697	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.010865493	15.74466927	NNW

Arecleough						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.122597624	39.84929691	W
A75	Crocketford to Stranraer	Heading West	10	3.940505428	35.17023586	W
A75	Crocketford to Stranraer	Heading West	11	3.434780514	31.76127477	W
A75	Crocketford to Stranraer	Heading West	12	3.844368984	27.40278617	W
A75	Crocketford to Stranraer	Heading West	13	0.90185587	24.8786085	W
A75	Crocketford to Stranraer	Heading West	14	1.288734966	21.77786005	W
A75	Crocketford to Stranraer	Heading West	15	0.330466466	19.00431861	NW
A75	Crocketford to Stranraer	Heading West	16	0.536345667	18.44398359	NNW
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2	2.01908406	7.491674324	SSW
A714	Girvan to A746	Heading South	3	0.443688785	6.412658697	SSW
A714	Girvan to A746	Heading South	4	0.836252194	5.974201034	WSW
A714	Girvan to A746	Heading South	5	4.889679415	6.663472773	WSW
A714	Girvan to A746	Heading South	6	3.437335227	11.05543195	WSW
A714	Girvan to A746	Heading South	7	0.147644322	16.04114959	WNW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.12818805	21.32872388	W
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.730456482	29.57829602	W
A714	Girvan to A746	Heading South	12	0.677728266	32.41932218	NW
A714	Girvan to A746	Heading South	13	0.310002421	32.86643057	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.436513343	42.68035065	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.06947332	40.41671309	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	1.852795177	20.87299451	NNW
A747	Glasserton to Glenuce	Heading North West	7	0.1294186	19.50156433	NNW
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.734887471	22.258367	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	2.360680467	19.14770084	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.832092173	15.15699421	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.82882669	14.76317947	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.06500123	10.73323515	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.126359721	8.656934006	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	1.879792627	6.361625078	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	2.270554878	7.809596142	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	2.951585576	11.07950899	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	3.73972751	13.04678682	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.483090161	14.07713841	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.574613215	19.5832049	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.54310299	20.22596954	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.76855756	41.678552	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.182363319	38.32444956	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.416633657	34.22545037	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.63658983	30.68142269	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.855202895	26.56415122	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	3.681382998	23.17210865	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	0.863071747	21.2332939	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.954698791	21.75906418	NNW
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.887033933	30.47016427	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.239688743	29.63150587	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.502742143	27.82319563	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.086790321	27.82631067	NNW

Arecleough Extension						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	3.608457259	34.76865039	NW
A75	Crocketford to Stranraer	Heading West	11	3.111168002	30.95057317	W
A75	Crocketford to Stranraer	Heading West	12	2.6558867	26.2930212	W
A75	Crocketford to Stranraer	Heading West	13	1.113001988	24.07312725	NW
A75	Crocketford to Stranraer	Heading West	14	1.479682088	21.62360417	W
A75	Crocketford to Stranraer	Heading West	15	0.047866552	20.16441763	NNW
A75	Crocketford to Stranraer	Heading West	16	0.495582525	20.18364635	NNW
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2	2.794297129	6.564706835	SSW
A714	Girvan to A746	Heading South	3	2.057221105	3.241526906	SSW
A714	Girvan to A746	Heading South	4	2.712621179	2.924418263	SW
A714	Girvan to A746	Heading South	5	4.946294842	4.858358701	WSW
A714	Girvan to A746	Heading South	6	4.088827525	9.374372644	WNW
A714	Girvan to A746	Heading South	7	0.150784615	14.71585052	WNW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.707434418	20.09505488	W
A714	Girvan to A746	Heading South	10	0.145270792	23.87587029	W
A714	Girvan to A746	Heading South	11	0.847440841	29.34895719	NW
A714	Girvan to A746	Heading South	12	0.560749011	32.47597286	NW
A714	Girvan to A746	Heading South	13	0.350404504	33.23418751	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.618960444	44.03322058	NNW
A747	Glasserton to Glenuce	Heading North West	2	0.940757501	42.09612352	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.460945021	24.71852214	N
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.075772172	20.62670874	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	1.256156293	17.53032331	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.917638975	13.66390674	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	4.056217379	13.37279284	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.634763805	9.682661165	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.724122788	7.429991615	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	1.422593237	7.301362655	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.216596846	9.725741946	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	1.489608963	14.2729907	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.880388736	16.71689863	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.531116085	17.7855093	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	0.052219984	24.06471008	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.987180893	25.07601981	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.770058017	45.10594674	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.159283541	41.85786186	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.5205669	37.85235118	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.595725194	34.45210209	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.858119626	30.49288809	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	2.162599723	28.0405615	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.461002296	24.71852214	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.768276482	31.17648383	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	2.626115368	30.67115682	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.182688782	29.66053174	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.010865493	29.69171092	NNW

Artfield Fell						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.909982891	29.8097389	W
A75	Crocketford to Stranraer	Heading West	10	4.208335036	25.52324978	W
A75	Crocketford to Stranraer	Heading West	11	3.650340802	23.63596961	WNW
A75	Crocketford to Stranraer	Heading West	12	2.375575616	19.84856824	WNW
A75	Crocketford to Stranraer	Heading West	13	0.558157532	16.47196163	WNW
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15	0.820611698	7.807541449	NW
A75	Crocketford to Stranraer	Heading West	16	1.606967475	7.020771315	NNW
A75	Crocketford to Stranraer	Heading West	17	3.175225596	7.10956532	NNW
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	3.068448917	13.56482702	SSW
A714	Girvan to A746	Heading South	6	1.947795954	14.90412094	SSW
A714	Girvan to A746	Heading South	7	1.081991433	15.22840351	SSW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.028289198	15.11452519	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.142172977	19.70411909	W
A714	Girvan to A746	Heading South	12	0.770987699	22.11062776	W
A714	Girvan to A746	Heading South	13	0.286049163	22.18054429	W
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.227307057	31.39262417	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.072005488	28.98579733	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.910298755	10.11358965	N
A747	Glasserton to Glenuce	Heading North West	7	1.253142704	8.844319784	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.45841678	21.09798129	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	0.132236368	20.19683526	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.270818858	13.1101386	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.394895348	9.226708012	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	2.02343138	7.210156989	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	3.387095338	5.946369855	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.00000053	2.158860123	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	3.729857011	1.615649254	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	3.869398434	3.508743561	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.028216734	6.963305425	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.628656104	9.498534286	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.747275559	15.52588717	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	4.039978308	16.64856067	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.433079529	20.0704923	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.33627445	23.37939361	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.008153465	33.18397521	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.22241241	30.26459474	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.884592152	26.60255564	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.87806343	23.83633107	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.897667681	20.77289391	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.772560315	17.8709438	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.580152054	16.21889719	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	1.078852356	16.03055873	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.346723816	11.77986323	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.982665837	19.55945489	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.30244552	17.90362911	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.873861796	16.44330184	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.022669485	16.44771711	NNW

Assel Valley						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	2.662274945	45.26361287	NW
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13	0.040156463	35.16977813	NW
A75	Crocketford to Stranraer	Heading West	14	0.555773613	34.03562059	NNW
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1	1.069077899	1.642820388	ESE
A714	Girvan to A746	Heading South	2	2.115960144	2.351273907	NE
A714	Girvan to A746	Heading South	3	0.518263466	6.88902223	NNE
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	0.260616023	15.42161015	NNW
A714	Girvan to A746	Heading South	6	0.607644972	15.56197399	NNW
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	0.926448665	58.41063184	NNW
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.918678694	22.56177759	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	0.254313711	22.86738558	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.424818342	21.44434981	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.345479855	43.89111045	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	1.571042292	43.85040651	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	1.804060455	44.28446364	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Ballmurrie Fell						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.875458646	31.1471711	W
A75	Crocketford to Stranraer	Heading West	10	4.192614261	26.85751052	W
A75	Crocketford to Stranraer	Heading West	11	3.588216363	24.94628396	W
A75	Crocketford to Stranraer	Heading West	12	1.786994491	21.17793199	WNW
A75	Crocketford to Stranraer	Heading West	13	0.352569085	17.80336352	WNW
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15	0.641622605	9.111775009	NW
A75	Crocketford to Stranraer	Heading West	16	1.378679498	8.092548349	NNW
A75	Crocketford to Stranraer	Heading West	17	2.257268136	8.135155254	NNW
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	2.288092228	14.05654515	SSW
A714	Girvan to A746	Heading South	6	1.405892395	15.65201562	SSW
A714	Girvan to A746	Heading South	7	0.844361556	16.14544854	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.750836548	16.2152156	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.063042878	21.03183122	W
A714	Girvan to A746	Heading South	12	0.637571943	23.43700979	W
A714	Girvan to A746	Heading South	13	0.077435425	23.49921486	W
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.042117296	32.71704507	NW
A747	Glasserton to Glenuce	Heading North West	2	1.054581695	30.20391142	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	1.469078188	10.81894012	N
A747	Glasserton to Glenuce	Heading North West	7	1.021404834	9.625999651	N
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.463686874	22.04800331	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.163263135	14.01754745	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.939713411	10.4202608	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.035974889	8.056972795	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	2.747400427	6.330149693	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	4.94662934	1.877583634	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	4.558809069	0.828188312	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	3.858808054	2.985974043	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.134398179	6.606084565	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.622860604	9.105645441	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	4.128661921	16.15431565	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.42309341	19.42258328	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.35331361	22.71169764	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.889031649	33.60959524	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.211465322	30.59975794	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.83875013	26.85424579	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.874380686	23.95375125	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.892652911	20.71445308	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.764997831	17.68361912	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.66967541	15.79543939	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.771916916	15.56162807	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.729638841	12.03493467	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.954551484	20.85906182	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	2.745771736	19.79944414	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.751828511	17.59571105	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.060259513	17.59938749	NNW

Barlockhart Moor						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	2.438107996	28.17724908	WNN
A75	Crocketford to Stranraer	Heading West	11	1.601417777	25.41094909	WNN
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14	2.533959753	12.83975297	WSW
A75	Crocketford to Stranraer	Heading West	15	1.038935504	7.77756563	WSW
A75	Crocketford to Stranraer	Heading West	16	4.85900648	2.965388387	SW
A75	Crocketford to Stranraer	Heading West	17	4.502461524	0.6176423	SE
A75	Crocketford to Stranraer	Heading West	18	3.484649005	3.317145119	E
A75	Crocketford to Stranraer	Heading West	19	0.854982708	6.788819472	E
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6	0.758491988	24.33098818	SSW
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4	0.008029378	9.557922737	NW
A747	Glasserton to Glenuce	Heading North West	5	0.058267776	7.604699378	NW
A747	Glasserton to Glenuce	Heading North West	6	3.480842628	0.621770677	N
A747	Glasserton to Glenuce	Heading North West	7	1.967802543	0.136510277	NE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.646680819	17.22800074	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.688962004	14.92369499	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	0.84675544	10.63220011	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.065075934	6.075007895	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.20001686	8.181360435	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.0333332	14.04756853	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	3.30411645	14.83226711	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.267087068	18.35106451	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.458433287	23.88138374	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.300710039	21.25479871	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	4.028055905	17.76393354	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.87806343	15.64563316	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.936598496	13.77059146	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.740161059	11.48818923	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	4.085474049	12.41470784	E
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.31276865	13.36879998	E
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1	0.533503669	4.427533418	NNW
National Cycle Route along A747	Altirry to Milton	Heading North	2	1.732092347	1.837300946	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	1.249851602	16.60924345	WNN
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	0.814096456	12.83364989	W
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	2.05548193	9.244326041	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.233459602	9.023214854	NW

Barlockhart Moor Ext						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	2.425446156	27.34915595	WNW
A75	Crocketford to Stranraer	Heading West	10	1.576364989	24.6007499	WNW
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14	2.567445872	11.88349417	WSW
A75	Crocketford to Stranraer	Heading West	15	1.520603512	7.024464995	SW
A75	Crocketford to Stranraer	Heading West	16	4.43733658	2.344240909	SW
A75	Crocketford to Stranraer	Heading West	17	3.834032815	1.100864131	SE
A75	Crocketford to Stranraer	Heading West	18	2.595321513	5.027564628	E
A75	Crocketford to Stranraer	Heading West	19	0.794927878	7.60031996	E
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6	0.55118652	23.96940122	SSW
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	3.508044672	0.832954951	NE
A747	Glasserton to Glenuce	Heading North West	7	1.967802543	0.713758827	NE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.770890295	16.64141093	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.200925265	16.35596067	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.295308958	14.95976297	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	0.567217233	10.82368934	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	0.969937165	6.714232152	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.139873412	8.871838934	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.01372928	14.80683735	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	3.264073892	15.64388859	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.269207523	19.09862263	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.681106095	24.10788556	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.308958096	21.55714009	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	4.065737893	18.17639733	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.87806343	16.19796589	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.936598496	14.47377427	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.711052687	12.24343336	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	4.004489744	13.2239681	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.239581592	14.14541684	E
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1	0.522992178	4.195129047	N
National Cycle Route along A747	Altircy to Milton	Heading North	2	1.739874896	1.896108931	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1	1.265299169	15.7860342	WNW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2	0.860659436	12.05665344	W
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3	2.138977469	8.637967815	NW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4	0.219026993	8.388679431	NW

Benbrack						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	0.243541749	14.00373756	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	0.953749915	15.13587228	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	1.001145448	19.81903829	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4			



Blackcraig Hill						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1	0.597783479	15.26263522	NW
A75	Crocketford to Stranraer	Heading West	2	1.68541456	15.7483813	NW
A75	Crocketford to Stranraer	Heading West	3	2.45939548	18.33183499	NNW
A75	Crocketford to Stranraer	Heading West	4	2.824419023	21.05656902	NNW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	0.494973636	14.4484997	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.159033717	11.13418197	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	1.233889981	10.55088584	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	2.125667737	6.334249265	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	1.27779211	5.943411964	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	2.399621918	7.265852122	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	3.815565968	10.94147989	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11	0.065675886	14.65793906	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12	0.008926394	20.79384694	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13	0.265991926	24.08728269	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Carscreugh						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	1.792320648	28.24574318	W
A75	Crocketford to Stranraer	Heading West	10	3.788500752	24.54033878	WNW
A75	Crocketford to Stranraer	Heading West	11	3.14605132	23.21463095	WNW
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14	2.465275537	11.73190994	WNW
A75	Crocketford to Stranraer	Heading West	15	1.638980803	6.225689578	WNW
A75	Crocketford to Stranraer	Heading West	16	1.934281556	2.556948409	NW
A75	Crocketford to Stranraer	Heading West	17	4.11157375	1.946964438	NNW
A75	Crocketford to Stranraer	Heading West	18	1.199187944	3.721697505	NNE
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	0.788565533	19.95233301	SSW
A714	Girvan to A746	Heading South	6	1.204866101	20.06636089	SSW
A714	Girvan to A746	Heading South	7	0.232624984	20.26475244	SSW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.031127908	19.13568232	WNW
A714	Girvan to A746	Heading South	12	0.608252874	20.05740384	W
A714	Girvan to A746	Heading South	13	0.007709806	20.0929305	W
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	1.695230837	26.21857381	NW
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	2.170877493	4.495640347	N
A747	Glasserton to Glenuce	Heading North West	7	1.967802543	3.069003676	N
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.137374292	25.39822503	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.290143008	13.5310654	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.290644642	12.0566706	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	2.664598594	9.617513723	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.299903176	6.058378651	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.116268792	4.471994098	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.707252578	6.623110874	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	3.292383407	14.62107598	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.34402595	17.96062469	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.175504027	27.41119952	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.259033127	24.66466952	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.927305609	20.95026523	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.873001483	18.41782347	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.91770211	15.82571508	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.717955545	13.15755703	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	1.205850547	13.17111939	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			

Chimorrie						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	3.788873829	33.17706309	W
A75	Crocketford to Stranraer	Heading West	11	2.520726299	29.58232499	W
A75	Crocketford to Stranraer	Heading West	12	2.384450799	25.11162963	W
A75	Crocketford to Stranraer	Heading West	13	0.772078618	22.79602709	W
A75	Crocketford to Stranraer	Heading West	14	1.201141475	19.86435627	NW
A75	Crocketford to Stranraer	Heading West	15	0.209062365	17.53139225	NW
A75	Crocketford to Stranraer	Heading West	16	0.538861314	17.28144464	NNW
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2	0.869992836	13.0743196	S
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4	0.702991429	5.722116738	SW
A714	Girvan to A746	Heading South	5	4.048698313	6.081801672	SW
A714	Girvan to A746	Heading South	6	2.657083713	9.947093064	WSW
A714	Girvan to A746	Heading South	7	0.289045818	14.08141428	WNNW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.350880127	27.81664673	NW
A714	Girvan to A746	Heading South	12	0.611640484	30.58773069	NW
A714	Girvan to A746	Heading South	13	0.310002421	31.12511665	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.524116383	41.33619277	NNW
A747	Glasserton to Glenuce	Heading North West	2	0.604702539	39.55673723	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.632053591	21.45903711	N
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.80051138	20.38906831	WNNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	2.655251041	17.22037646	WNNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.853532712	13.01421413	WNNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.867013713	12.43804598	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.17906241	8.297866951	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.467265167	6.119865146	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	2.122411578	4.624396299	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.229108829	6.684975288	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	2.103549892	11.02402342	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	3.199713738	13.66149756	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.666900612	14.78498849	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	0.515461634	21.37678049	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.291224191	22.24361519	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.001516806	25.39094474	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.770044703	42.04845275	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.168432107	38.80584275	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.589055316	34.80459372	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.595725194	31.42033686	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.863134396	27.49618173	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	2.781515878	24.1534873	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.632110866	21.45903711	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.744704853	28.81615281	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.311885257	28.12441448	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.263207248	26.73440705	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.010865493	26.74069837	NNW

Clauchrie Windfarm						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	2.859125058	34.64289895	NNW
A75	Crocketford to Stranraer	Heading West	11	3.087170912	31.38190348	NNW
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13	2.328399417	25.01149645	NNW
A75	Crocketford to Stranraer	Heading West	14	2.586897149	25.02660392	NNW
A75	Crocketford to Stranraer	Heading West	15	0.631380384	24.92775411	NNW
A75	Crocketford to Stranraer	Heading West	16	1.364889361	26.78767339	N
A75	Crocketford to Stranraer	Heading West	17	0.757330078	28.52843293	N
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1	1.142635159	8.324417173	ESE
A714	Girvan to A746	Heading South	2	1.964168794	6.973140211	ESE
A714	Girvan to A746	Heading South	3	1.120119492	7.029984604	ENE
A714	Girvan to A746	Heading South	4	0.155691932	7.000359641	NE
A714	Girvan to A746	Heading South	5	2.612809529	6.332370023	N
A714	Girvan to A746	Heading South	6	3.756550519	6.425900981	NNW
A714	Girvan to A746	Heading South	7	2.547044969	11.65181233	NNW
A714	Girvan to A746	Heading South	8	4.916944386	14.6868154	NNW
A714	Girvan to A746	Heading South	9	3.572459307	19.43129942	NNW
A714	Girvan to A746	Heading South	10	1.901945111	25.82879466	NNW
A714	Girvan to A746	Heading South	11	1.768550747	30.74482128	NNW
A714	Girvan to A746	Heading South	12	1.795739556	32.89272978	NNW
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.980718254	49.08882748	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.061169608	46.77865444	N
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.284331624	33.53167856	N
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13	0.193099394	15.56278983	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	0.020206167	12.52162336	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	2.743442002	12.35039458	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	4.69681302	12.75017797	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.614115573	14.10935256	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	3.797147091	13.85098414	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.648880665	14.51272025	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.013133666	19.36475798	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	1.275306072	24.38972909	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.808641957	28.17321716	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.650461326	28.95536346	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	0.042681634	35.95279206	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.952539515	36.91287229	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.31325132	55.10661125	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.280329672	52.12652882	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.8749185	48.35507754	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.84533261	45.26500112	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.878222757	41.59105375	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	2.50717437	39.08887914	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.284388899	33.53167856	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	1.454331591	34.8633946	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	4.89337645	34.85315239	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	4.1951518	35.84466601	N
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			





Gass						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.781395717	27.83851887	W
A75	Crocketford to Stranraer	Heading West	10	4.231079395	23.49708497	W
A75	Crocketford to Stranraer	Heading West	11	3.381125809	21.68132055	W
A75	Crocketford to Stranraer	Heading West	12	2.382108434	17.61912115	WNW
A75	Crocketford to Stranraer	Heading West	13	0.42552183	14.41088506	WNW
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15	0.869350955	6.26641755	NW
A75	Crocketford to Stranraer	Heading West	16	1.912329801	6.072427158	NNW
A75	Crocketford to Stranraer	Heading West	17	2.435609354	6.797826209	N
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	2.925945147	13.03982745	S
A714	Girvan to A746	Heading South	6	1.894887269	13.79662478	SSW
A714	Girvan to A746	Heading South	7	1.162576074	13.60281425	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.926485698	12.70549607	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.056524844	17.64911843	W
A714	Girvan to A746	Heading South	12	0.761128245	20.21560362	W
A714	Girvan to A746	Heading South	13	0.298425925	20.36579146	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.538344518	29.99677286	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.012060332	27.93710706	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.697217623	10.40547239	NNE
A747	Glasserton to Glenuce	Heading North West	7	0.585402128	9.517285411	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.41858871	19.15037862	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	1.119091163	16.80050731	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.252623291	11.39373441	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.213548356	7.087696332	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.962896165	6.005073515	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	3.441523086	5.549807849	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.000000053	3.461297152	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.428571866	3.390412237	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	2.098316537	5.32858387	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.560875679	8.608395565	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.628656104	11.01324764	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.518938077	19.89670357	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.280499764	21.92155433	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.204842867	25.20935123	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.452577359	33.56938414	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.279802739	30.89906935	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.903167926	27.23941591	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.867792971	24.67933163	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.902670121	21.86277799	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	2.691269437	19.19026057	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	0.230046662	19.08634834	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.374615059	11.74570363	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.946167307	17.83632967	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.374765821	16.85278465	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.672730557	15.53796315	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.010865493	15.58376381	NNW

Glen App						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.872081315	45.35962681	W
A75	Crocketford to Stranraer	Heading West	10	0.928804796	42.6418496	W
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15	0.167115696	23.3664614	W
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17	0.303423453	18.97779732	NW
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20	2.072495329	11.34940185	N
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	1.938471207	19.25715094	WSW
A714	Girvan to A746	Heading South	6	0.144158113	23.40326775	WSW
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12	0.356305545	37.77229889	W
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	0.43568465	46.09406138	NW
A747	Glasserton to Glenuce	Heading North West	2	0.388370823	40.07811537	NW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.189238206	21.20516931	NW
A747	Glasserton to Glenuce	Heading North West	7	0.525255046	19.75444776	NW
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.224723165	32.46147516	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.257631305	13.51639544	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	1.844769445	12.74376418	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	2.127290875	12.97497881	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	0.841664856	13.86119054	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	2.33605248	12.57196617	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	4.057331898	12.92282695	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.749707538	13.05179126	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	1.297880895	40.87243903	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.064634502	35.10917895	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	1.600946769	30.84970423	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	3.949250558	26.96597595	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.439291258	22.44854266	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.812613093	18.5996671	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.920123402	14.30217022	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	4.605692977	10.2823519	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9	0.449849293	9.456813979	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10	0.409945451	2.076090712	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11	1.703842017	0.801777074	SE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.892292901	34.84038714	W
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	0.694788492	32.47216495	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	1.933097982	30.55137113	N
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.164803645	29.67980486	NW

Glenchamber						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	1.333964324	29.38505683	W
A75	Crocketford to Stranraer	Heading West	10	4.262795461	25.35091045	W
A75	Crocketford to Stranraer	Heading West	11	4.149513337	23.549092	WNW
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14	2.270483615	11.70517596	WNW
A75	Crocketford to Stranraer	Heading West	15	0.957649943	7.14596451	W
A75	Crocketford to Stranraer	Heading West	16	1.600979511	5.06302562	NNW
A75	Crocketford to Stranraer	Heading West	17	3.685382036	4.981414361	NNW
A75	Crocketford to Stranraer	Heading West	18	0.114356968	6.820393482	NNE
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	1.993902291	16.06665779	SSW
A714	Girvan to A746	Heading South	6	1.3844021	17.10225241	SSW
A714	Girvan to A746	Heading South	7	0.590662703	17.16711049	SW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.35961692	15.88790531	WSW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.061301582	19.64435196	WNW
A714	Girvan to A746	Heading South	12	0.578147327	21.78594514	W
A714	Girvan to A746	Heading South	13	0.082281823	21.66421266	W
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	1.979417381	28.84096213	NW
A747	Glasserton to Glenuce	Heading North West	2	0.869117636	27.50040302	NW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	2.097582419	7.620853788	N
A747	Glasserton to Glenuce	Heading North West	7	1.746019108	6.251761128	N
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.357732205	22.87441263	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	0.5115761	21.42174369	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.608991721	10.81441491	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	0.407082487	9.855046467	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.869368395	8.534767675	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	4.739266559	4.519866799	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	3.728007461	2.382875652	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	4.05480782	1.77869277	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.530704657	5.0835265	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.651838108	7.50480891	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.734248767	16.32809861	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.220332119	18.5582547	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.10043967	21.88666686	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.91003146	30.57739733	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.227919267	27.64797489	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.895932337	24.00506823	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.873001483	21.3055591	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.897667681	18.38990359	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.564270815	15.55465097	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.851692346	14.29738797	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.600618377	14.41156359	ENE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2	0.916322263	8.832938901	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1	1.222894856	18.8482823	W
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2	2.602973399	16.70420124	NW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3	3.686050035	14.64859013	NNW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4	0.098595755	14.64961796	NNW

Glenshimmeroch						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3	0.946610851	26.1831622	NNW
A75	Crocketford to Stranraer	Heading West	4	1.991167814	27.43171796	NNW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.365496479	5.537687156	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	4.561722606	2.057427023	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	4.293941113	1.167567639	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	2.906391754	3.312548245	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	1.047578058	7.538679742	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	1.906278918	9.266307785	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11	0.015486949	13.09226663	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3	1.262113005	50.84488674	NE
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4	0.002584992	51.89946457	NE









Kilgalloch						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.614435027	31.34858388	NW
A75	Crocketford to Stranraer	Heading West	10	4.266644324	26.57855624	NW
A75	Crocketford to Stranraer	Heading West	11	4.858941454	22.84919905	W
A75	Crocketford to Stranraer	Heading West	12	4.359140622	18.23588623	W
A75	Crocketford to Stranraer	Heading West	13	1.367490904	15.88873866	NW
A75	Crocketford to Stranraer	Heading West	14	2.340105016	13.44353348	NW
A75	Crocketford to Stranraer	Heading West	15	0.668661188	10.6552501	NW
A75	Crocketford to Stranraer	Heading West	16	1.981531209	10.19638284	NNW
A75	Crocketford to Stranraer	Heading West	17	2.127608968	10.2391268	NNW
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2	1.109796447	15.30418121	S
A714	Girvan to A746	Heading South	3	0.313202328	10.9787264	SSE
A714	Girvan to A746	Heading South	4	0.201081166	5.44668703	S
A714	Girvan to A746	Heading South	5	4.179711348	5.271613177	SSW
A714	Girvan to A746	Heading South	6	3.707343654	7.037446434	SSW
A714	Girvan to A746	Heading South	7	1.576350056	8.45153976	WSW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.572477517	12.27267081	W
A714	Girvan to A746	Heading South	10	0.090154837	15.83474318	W
A714	Girvan to A746	Heading South	11	1.27524946	20.67521816	NW
A714	Girvan to A746	Heading South	12	1.158808186	23.48914178	NW
A714	Girvan to A746	Heading South	13	0.519937454	24.76080025	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.809735715	34.17960702	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.302733298	32.04478561	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	2.172890441	12.84158089	N
A747	Glasserton to Glenuce	Heading North West	7	1.23225268	11.63768048	N
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.808453766	15.14076672	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	3.689441408	11.58629509	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	1.252937377	7.216578011	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	4.354531561	5.58037833	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.701279666	1.313743704	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	5.000000006	0.159308537	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.000000053	0.135505349	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	5.000000014	0.156802244	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	4.237028112	4.066532751	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	3.363236708	7.175095729	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.81999565	9.864498615	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.319511572	17.99750438	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.738256158	19.23579975	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.37159438	22.32426668	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.30588977	35.40824625	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.218990412	32.32760878	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.867531236	28.5029602	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.874891442	25.45484084	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.888252304	22.00248653	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.790178167	18.77505342	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.982377165	16.43491053	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.072847724	16.39505994	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.930032583	14.06501017	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	1.592806593	22.2580974	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	4.382488159	20.92004855	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	4.10360685	19.67489879	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.080419204	19.699225	NNW

Kilgalloch Extension						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.310085303	30.25204885	W
A75	Crocketford to Stranraer	Heading West	10	4.022541573	25.63429042	W
A75	Crocketford to Stranraer	Heading West	11	3.595819478	22.49914293	W
A75	Crocketford to Stranraer	Heading West	12	3.65396515	18.92941199	W
A75	Crocketford to Stranraer	Heading West	13	1.366028878	15.23115109	W
A75	Crocketford to Stranraer	Heading West	14	1.963834522	11.98388123	W
A75	Crocketford to Stranraer	Heading West	15	0.680646568	9.45706853	NNW
A75	Crocketford to Stranraer	Heading West	16	1.914359193	9.489684064	NNW
A75	Crocketford to Stranraer	Heading West	17	2.825092997	10.22511091	N
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	3.610617696	10.0454256	SSW
A714	Girvan to A746	Heading South	6	3.041214633	11.26389958	SSW
A714	Girvan to A746	Heading South	7	1.453251351	11.95553939	WSW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	1.299011873	13.18369109	NNW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.87083315	19.69485197	W
A714	Girvan to A746	Heading South	12	1.062713683	21.93365448	NW
A714	Girvan to A746	Heading South	13	0.485223856	23.15476457	NW
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.729556105	33.27951871	NNW
A747	Glasserton to Glenuce	Heading North West	2	1.14948545	31.24205121	NNW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.882854948	13.61496732	N
A747	Glasserton to Glenuce	Heading North West	7	1.201404197	12.39472719	NNE
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.548995918	18.08588314	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	3.476802898	14.22774211	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	1.31204699	10.01097927	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	4.000165121	6.654488873	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	3.882949672	3.892949672	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	4.874127291	2.373655305	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	5.000000053	1.012644193	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	3.942689041	1.401096561	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	3.420633033	5.892366204	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	2.328102169	9.531538587	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.611042327	11.84454086	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.07467747	20.03204079	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.269381565	21.87852078	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.475563192	24.88822113	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	3.244394325	36.70949979	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.242149232	33.81424799	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.884592152	30.10446982	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.89306343	27.16929395	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.892652911	23.83484045	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.759183718	20.6822748	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.430065823	18.43296076	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8	0.188458234	18.37402024	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.412343004	15.08344079	N
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	1.036088599	20.76921377	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	4.245717852	19.93843187	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	4.077013812	19.01914825	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.016767463	19.07469939	NNW





Larbrax						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	0.243415672	26.35294207	W
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	0.333792463	19.69458237	W/NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.888692987	14.0856942	W/NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	0.095436991	13.88921763	W/NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	1.208335331	4.147939618	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	2.397626629	4.116275406	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29	0.643206913	5.784621588	NNW
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9	3.088428431	11.0956817	WSW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10	4.83251118	11.21533097	SW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11	1.815044976	12.66767361	SW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Alticry to Milton	Heading North	1			
National Cycle Route along A747	Alticry to Milton	Heading North	2	0.242417115	26.35294207	W
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Alticry	Heading West	1			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	2			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	3			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	4	0.104033728	32.6402225	W

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Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2	0.689708159	32.26941349	NNW
A75	Crocketford to Stranraer	Heading West	3	0.160312049	35.53373463	NNW
A75	Crocketford to Stranraer	Heading West	4	1.206996716	38.84923792	N
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2	3.94118615	3.418115717	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3	4.441340429	0.718031621	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	4.906605039	0.180975566	W/NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.861247595	0.889256602	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	1.792331605	5.493249417	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	1.354624395	9.838054515	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	0.775090502	17.19565968	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.034829164	18.6198636	NNE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	0.867034189	20.94035746	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Alticry to Milton	Heading North	1			
National Cycle Route along A747	Alticry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Alticry	Heading West	1			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	2			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	3			
National Cycle Route along B7005	Wigtown to Alticry	Heading West	4			

Margree						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1	0.07964132	19.97386974	NW
A75	Crocketford to Stranraer	Heading West	2	0.830040197	22.23131583	NNW
A75	Crocketford to Stranraer	Heading West	3	0.078995501	22.81644535	NNW
A75	Crocketford to Stranraer	Heading West	4	0.109722234	26.73736178	N
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	0.105191809	11.36295985	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.223237165	7.060348786	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	1.206450562	4.620002141	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	2.434185376	3.955705576	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	0.902716209	4.287354865	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.409724255	8.244695067	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	2.509955575	10.49542287	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11	0.015486949	14.48141422	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Mark Hill						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10	2.859061912	34.55506029	NW
A75	Crocketford to Stranraer	Heading West	11	3.317829514	31.17410599	NW
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13	0.673805165	24.37279646	NW
A75	Crocketford to Stranraer	Heading West	14	1.178003719	22.91223397	NNW
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1	0.60932369	8.128605153	SE
A714	Girvan to A746	Heading South	2	1.092518588	6.71288804	SE
A714	Girvan to A746	Heading South	3	1.582779741	3.014440957	E
A714	Girvan to A746	Heading South	4	3.60022292	2.446809288	NE
A714	Girvan to A746	Heading South	5	2.461435764	2.718729437	N
A714	Girvan to A746	Heading South	6	3.218188449	4.999407134	NW
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8	0.740318297	16.80557556	NW
A714	Girvan to A746	Heading South	9	0.484788198	18.87728692	NW
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.743446145	30.03243085	NW
A714	Girvan to A746	Heading South	12	1.185133947	32.20343125	NW
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.539979599	11.58890724	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	4.191738551	11.6188017	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	1.560664721	11.75789708	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	1.66069912	10.46379174	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.026150667	10.68692842	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.96631346	32.80681011	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	2.898347205	32.75942563	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	2.032258371	33.29971714	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Meikle Float Farm						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17	0.669420596	16.76586602	WSW
A75	Crocketford to Stranraer	Heading West	18	4.072851251	13.15659106	SW
A75	Crocketford to Stranraer	Heading West	19	0.773514166	12.13298047	SW
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.476810512	29.30539826	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	2.316995038	22.99621682	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	0.286804936	15.51427028	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.168125958	14.34812933	SSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	0.036748284	72.90003968	NE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1	4.115894579	18.41662996	WSW
National Cycle Route along A747	Altircy to Milton	Heading North	2	0.102277292	17.95859029	WSW
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3	0.027793697	24.03483705	WNW
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4	0.812562493	21.63422718	WNW

Mochrum Fell						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1	1.071823089	9.690586154	W
A75	Crocketford to Stranraer	Heading West	2	1.9169538	9.890217522	NW
A75	Crocketford to Stranraer	Heading West	3	3.185819802	11.86479154	NNW
A75	Crocketford to Stranraer	Heading West	4	2.855372613	14.17718326	NNW
A75	Crocketford to Stranraer	Heading West	5	0.844833659	17.84219934	N
A75	Crocketford to Stranraer	Heading West	6	0.069066286	19.82913258	N
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.521897814	46.73870682	NNW
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	0.846615854	20.9891628	SSE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	1.34439547	10.47323678	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	1.381058749	11.92772689	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	1.821458546	14.87730263	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12	0.503363954	22.12406464	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altircy to Milton	Heading North	1			
National Cycle Route along A747	Altircy to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altircy	Heading West	1			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	2			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	3			
National Cycle Route along B7005	Wigtown to Altircy	Heading West	4			

North Kyle						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	1.068205593	34.80879283	W
A747	Glasserton to Glenuce	Heading North West	2	2.643800387	29.45208943	WNW
A747	Glasserton to Glenuce	Heading North West	3	4.825087067	26.51672991	WNW
A747	Glasserton to Glenuce	Heading North West	4	4.840815954	22.31211899	WNW
A747	Glasserton to Glenuce	Heading North West	5	5.000000002	18.75489001	WNW
A747	Glasserton to Glenuce	Heading North West	6	0.683761271	17.95859029	WSW
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	0.201931216	9.683567308	NW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	0.648758313	6.551863052	W
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	0.10871465	4.852679654	WNW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	0.916860306	6.012441857	WSW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11	0.02103706	23.30992751	S
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

North Rhins						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.300497261	48.31977801	WNW
A75	Crocketford to Stranraer	Heading West	10	0.014376211	47.85195794	WNW
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16	0.511065481	22.12841666	WNW
A75	Crocketford to Stranraer	Heading West	17	1.967858049	17.64040034	WNW
A75	Crocketford to Stranraer	Heading West	18	3.379038753	12.7370575	WNW
A75	Crocketford to Stranraer	Heading West	19	4.903435308	8.680819502	WSW
A75	Crocketford to Stranraer	Heading West	20	4.399864994	4.89330027	WSW
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	0.079524138	34.16059611	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	0.393378266	22.18650842	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	2.515396638	19.46436157	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	3.200150155	16.10562444	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	1.430855325	13.20935264	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	3.622109809	9.326038308	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25	4.85433103	5.549681134	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	3.168844415	2.715760479	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	3.946177434	0.616993688	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	2.387006144	1.508053999	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29	0.797168985	3.306946343	NE
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1	0.685579189	24.98410657	W
National Cycle Route along A747	Altirry to Milton	Heading North	2	0.636211294	20.29003899	WNW
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	0.089657284	32.5874108	WNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.765760145	25.8567238	W











South Kyle						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4	0.054830355	44.36030539	NNW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	0.476107523	11.52219656	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	1.048508506	20.16515621	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.045033384	20.88725495	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Stranoch 2						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9	0.879910912	38.19507681	W
A75	Crocketford to Stranraer	Heading West	10	4.391128293	33.89161645	W
A75	Crocketford to Stranraer	Heading West	11	2.467048833	31.01677166	W
A75	Crocketford to Stranraer	Heading West	12	2.622783099	28.29124907	W
A75	Crocketford to Stranraer	Heading West	13	0.648256973	24.39280559	W
A75	Crocketford to Stranraer	Heading West	14	0.423613768	21.22687444	W
A75	Crocketford to Stranraer	Heading West	15	0.460014098	16.03422185	W
A75	Crocketford to Stranraer	Heading West	16	0.682641371	14.43113779	NW
A75	Crocketford to Stranraer	Heading West	17	0.042763076	13.16438384	NW
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2	0.782682332	15.13452691	S
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	3.591300744	10.70108669	SW
A714	Girvan to A746	Heading South	6	1.997214292	14.61140356	WSW
A714	Girvan to A746	Heading South	7	0.272807059	17.42754092	WSW
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9	0.424616196	23.47981046	W
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11	0.358660159	28.18392202	W
A714	Girvan to A746	Heading South	12	0.657563889	30.37317561	W
A714	Girvan to A746	Heading South	13	0.301454142	30.43637922	W
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14	0.74631525	23.77488872	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15	3.325880372	20.78854187	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16	0.808870317	15.96830579	WNN
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	3.787909383	14.35937793	WNN
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	0.36648184	12.71014093	WNN
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20	2.468462854	5.319938528	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21	3.957288355	5.590237983	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22	4.00271677	5.69648911	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23	4.317896872	7.091491592	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24	1.656950743	7.71895548	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26	2.75020085	13.94697599	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27	2.614182736	14.95342862	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28	0.228232004	18.23125838	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2	1.109009949	16.26445732	NNW
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.984442517	27.71255666	W
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	3.012143827	25.53443809	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	3.70906249	23.21831295	NW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.130758536	23.16304498	NW

Torr's Hill						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3	1.670390148	34.47123001	NW
A75	Crocketford to Stranraer	Heading West	4	0.048814552	35.26768121	NW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	1.154702627	17.59596797	SW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	3.080378517	13.67585877	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	3.555692941	11.16807107	WSW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	2.137089593	10.87912931	WNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	2.611877881	11.28543745	W
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.1818961	10.2163985	NW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Tralorg						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14	0.48070418	36.03831147	NNW
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1	0.070720027	2.856923961	ENE
A714	Girvan to A746	Heading South	2	0.931232268	4.45608775	NNE
A714	Girvan to A746	Heading South	3	0.313264187	9.075304401	N
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5	0.200529931	17.32762986	NNW
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12	0.013336569	46.32239381	NNW
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	1.620266714	38.00321146	W
A747	Glasserton to Glenuce	Heading North West	2	2.505666675	32.57496256	W
A747	Glasserton to Glenuce	Heading North West	3	4.72798937	29.41041298	WNW
A747	Glasserton to Glenuce	Heading North West	4	4.381480961	24.99919547	WNW
A747	Glasserton to Glenuce	Heading North West	5	4.975027627	21.11711278	WNW
A747	Glasserton to Glenuce	Heading North West	6	0.528347689	19.81519366	WSW
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17	2.267230622	24.49461511	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18	0.075266173	26.13367531	NNW
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19	0.393892374	23.62011695	N
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	0.555122897	10.12508286	NW
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10	0.562005501	19.37528904	S
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11	1.162799362	20.32503424	S
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1	0.201597694	45.89323022	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2	1.354200729	45.86046943	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	1.835019121	46.43988772	NNW
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Trostie						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1			
A75	Crocketford to Stranraer	Heading West	2			
A75	Crocketford to Stranraer	Heading West	3			
A75	Crocketford to Stranraer	Heading West	4			
A75	Crocketford to Stranraer	Heading West	5	0.202639034	3.809177049	W
A75	Crocketford to Stranraer	Heading West	6	1.159022708	3.622183496	NNW
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1	2.307071367	37.39405728	NW
A747	Glasserton to Glenuce	Heading North West	2	0.99013554	36.03761395	NW
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6	2.346741084	15.07132779	NNW
A747	Glasserton to Glenuce	Heading North West	7	0.636575432	13.75663586	NNW
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	0.309795391	38.83418147	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1	2.753831754	35.50837875	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2	3.19190353	32.12142954	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3	3.459856999	28.00099969	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4	4.699674918	24.43758373	N
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5	4.859734279	20.33083094	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6	4.813668125	16.62647775	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7	3.826102173	13.2401162	NNE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10	0.216766275	8.605177001	E
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11	0.155510164	8.484978964	ESE
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4			

Troston Loch Wind Farm						
Route	From To	Direction	SegID	Length of Line Visible (KM)	Distance to Nearest Turbine	Direction to Nearest Turbine
<b>A75</b>						
A75	Crocketford to Stranraer	Heading West	1	0.082352784	22.53351983	NW
A75	Crocketford to Stranraer	Heading West	2	0.900939561	24.83455741	NNW
A75	Crocketford to Stranraer	Heading West	3	0.195900933	25.44038873	NNW
A75	Crocketford to Stranraer	Heading West	4	1.555360432	28.40316368	NNW
A75	Crocketford to Stranraer	Heading West	5			
A75	Crocketford to Stranraer	Heading West	6			
A75	Crocketford to Stranraer	Heading West	7			
A75	Crocketford to Stranraer	Heading West	8			
A75	Crocketford to Stranraer	Heading West	9			
A75	Crocketford to Stranraer	Heading West	10			
A75	Crocketford to Stranraer	Heading West	11			
A75	Crocketford to Stranraer	Heading West	12			
A75	Crocketford to Stranraer	Heading West	13			
A75	Crocketford to Stranraer	Heading West	14			
A75	Crocketford to Stranraer	Heading West	15			
A75	Crocketford to Stranraer	Heading West	16			
A75	Crocketford to Stranraer	Heading West	17			
A75	Crocketford to Stranraer	Heading West	18			
A75	Crocketford to Stranraer	Heading West	19			
A75	Crocketford to Stranraer	Heading West	20			
<b>A714</b>						
A714	Girvan to A746	Heading South	1			
A714	Girvan to A746	Heading South	2			
A714	Girvan to A746	Heading South	3			
A714	Girvan to A746	Heading South	4			
A714	Girvan to A746	Heading South	5			
A714	Girvan to A746	Heading South	6			
A714	Girvan to A746	Heading South	7			
A714	Girvan to A746	Heading South	8			
A714	Girvan to A746	Heading South	9			
A714	Girvan to A746	Heading South	10			
A714	Girvan to A746	Heading South	11			
A714	Girvan to A746	Heading South	12			
A714	Girvan to A746	Heading South	13			
<b>A747</b>						
A747	Glasserton to Glenuce	Heading North West	1			
A747	Glasserton to Glenuce	Heading North West	2			
A747	Glasserton to Glenuce	Heading North West	3			
A747	Glasserton to Glenuce	Heading North West	4			
A747	Glasserton to Glenuce	Heading North West	5			
A747	Glasserton to Glenuce	Heading North West	6			
A747	Glasserton to Glenuce	Heading North West	7			
<b>Southern Upland Way</b>						
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	1			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	2			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	3			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	4	0.577586709	8.348061987	S
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	5	2.44669444	4.901881485	SE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	6	3.711932906	3.209771829	ESE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	7	3.006971769	2.832770931	E
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	8	1.710124578	4.595156026	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	9	0.159992297	8.95845145	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	10	1.509299513	10.9880891	NE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	11	0.015486949	14.59720899	ENE
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	12			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	13			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	14			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	15			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	16			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	17			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	18			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	19			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	20			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	21			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	22			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	23			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	24			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	25			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	26			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	27			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	28			
Southern Upland Way	Sanquhar to Portpatrick	Heading South West	29			
<b>Mull of Galloway Trail</b>						
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	1			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	2			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	3			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	4			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	5			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	6			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	7			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	8			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	9			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	10			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	11			
Mull of Galloway Trail	Gallie Craig to Craiganlea Ho	Heading North	12			
<b>National Cycle Route along A747</b>						
National Cycle Route along A747	Altirry to Milton	Heading North	1			
National Cycle Route along A747	Altirry to Milton	Heading North	2			
<b>National Cycle Route along B7005</b>						
National Cycle Route along B7005	Wigtown to Altirry	Heading West	1			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	2			
National Cycle Route along B7005	Wigtown to Altirry	Heading West	3	0.01891997	53.16944055	NE
National Cycle Route along B7005	Wigtown to Altirry	Heading West	4	0.002584992	53.19021966	NE









## Technical Appendix 5.7 Night-Time Lighting Assessment



## Technical Appendix 5.7: Night-Time Lighting Assessment

### Turbine Lighting

- 1.1.1 The use of en-route obstacle lighting on wind turbines is an evolving issue, related to the recent trend towards taller turbines and the requirement for turbines of 150 m or above to be visibly lit in relation to aviation safety. The inclusion of such lighting has potential for significant landscape and visual effects, especially where developments are located in remote rural locations where there are few artificial light sources and where darkness is an integral and valued aspect of the night landscape.
- 1.1.2 For the purpose of the SLVIA the proposed development has assumed the necessity of lighting on all turbines except turbines 3 and 9 (For more details, please see Chapter 12: Aviation and Telecommunications). Medium intensity (2,000 candela) lights would be located at nacelle height and low intensity (32 candela) lights half way between the ground and the nacelle. The lights would be capable of being dimmed to 10% of their peak intensity when a sensor at the wind farm detects that the visibility exceeds 5 km.

### Regulatory Requirements

- 1.1.3 Article 222 (1) of the Civil Aviation Authority's (CAA) Air Navigation Order 2016 and Regulations (ANO) states:
- "an 'en-route obstacle' means any building, structure or erection, the height of which is 150 metres or more above ground level, but it does not include a building, structure or erection:*
- which is in the vicinity of a licensed aerodrome; and*
  - to which section 47 of the Civil Aviation Act 1982 (warning of presence of obstructions near licensed aerodromes) applies."*
- These provisions mean that structures of 150 m or more in the UK are routinely lit with medium intensity (2,000 candela) steady red lights.*
- 1.1.4 ANO Article 222 also contains provisions allowing for exemptions from its lighting requirements. Article 222 (6) provides that:
- "A permission may be granted for the purposes of this article for a particular case or class of cases or generally."*
- While Article 222 (7) states:*
- "This article does not apply to any en-route obstacle for which the CAA has granted a permission to the person in charge permitting that person not to fit and display lights in accordance with this article."*
- 1.1.5 The Proposed Development turbines would be up to 180 m above ground level to blade tip. They would not qualify for the exceptions listed in ANO Article 222 (8) (a) and (b). Therefore, they would normally be subject to the lighting requirements set out in Article 222(1). However, the provisions in the CAA Policy Statement that the intermediate-level lights are only required to be low intensity (32 candela) and that the intensity of the 2,000 candela light may be reduced to 10% of its peak intensity *"if the horizontal meteorological visibility in all directions from every wind turbine generator in a group is more than 5 km."*
- 1.1.6 The technical specifications for medium intensity obstacle lights are set out in International Civil Aviation Organisation (ICAO) Code - Annex 14 Table 6-3 and, for European Union Aviation Safety Agency (EASA) member states such as the UK, in Table Q-3 of CS-ADR-DSN. The ICAO and EASA specifications are identical.

- 1.1.7 The ICAO and EASA specifications for lighting do not use the term "minimum peak intensity" set out in paragraph 4.g. of the CAA Policy Statement. The required and recommended intensity settings for 2,000 candela lights are illustrated in Figure 5.8 (EIAR Volume 3a) and summarised as follows:
- Minimum average intensity between 0 and 3 degrees is 2,000 candela;
  - between 0- and -1-degrees intensity would reduce from 2,000 to 750 candela;
  - between -1- and -2-degrees intensity would reduce to from 750 to 80 candela;
  - between -2 and -3 degrees intensity would reduce from 80 to 40 candela; and
  - between -3- and -4-degrees intensity would reduce from 40 to 0 candela.
- 1.1.8 The implications of this for visibility of the lights from key viewpoints is that, depending upon the angle of receptors relative to the turbine lights, the intensity of light will vary, along with its perceived brightness. For example, for a light with a maximum intensity of 2,000 candela, views from below -3 degrees would see the light source as below 40 candela, a considerable reduction in brightness from the maximum intensity, and if receptors view the light from below -4 degrees there would, theoretically be no direct view of the light. However, depending upon the specification and design of the light, some light reflection off the back of turbine blades may be discernible.
- 1.1.9 In conditions where horizontal meteorological visibility exceeds a 5 km radius from the position of the light significant reductions in light intensity would be experienced, as lighting intensity would be reduced to 10% of the maximum intensity, as summarised below.
- Minimum average intensity at 10% between 0 and 3 degrees would be 200 candela;
  - between 0- and -1-degrees intensity would reduce from 200 to 75 candela;
  - between -1- and -2-degrees intensity would reduce to from 75 to 8 candela;
  - between -2 and -3 degrees intensity would reduce from 8 to 4 candela; and
  - between -3- and -4-degrees intensity would reduce from 4 to 0 candela.
- 1.1.10 Consequently, receptors located over 5 km from the turbines would only ever experience clear visibility to lights at these reduced intensities. In conditions of meteorological visibility less than 5 km the perceived brightness of turbine lights, whilst possibly still visible, are likely to be reduced by such conditions. Additionally, when combined with local sources of light (including internal and/ or external lighting and car lights) such as those present along the A835 corridor and in the settled landscape to the east, approaching the coast, the impact of the turbine lighting on such distant receptor locations may decrease to slight or even negligible magnitude.

### Potential Effects

- 1.1.11 There is a distinction between light pollution or nuisance and the effect of lighting on the character and amenity of the landscape at night. The Guidance Notes for the Reduction of Obtrusive Light GN01:2011 identifies three principle forms of obtrusive lighting or 'light pollution':
- Skyglow - the brightening of the night sky, usually occurring above settlements or other concentrations of artificial light and exacerbated by the presence of dust particles or water droplets;
  - Glare - the 'uncomfortable' brightness of a light source when viewed against a darker background; and
  - Light Intrusion ("Trespass") - the spilling of light beyond the boundary of the property or area being lit.

- 1.1.12 Aviation lighting of the type proposed are designed to focus light horizontally (i.e. between 0 degrees and 3 degrees) and incorporate both opaque caps and collars to avoid up-lighting and reduce downlighting. Outwith these angles there would be a reduction in light intensity.
- 1.1.13 This has been verified during field observations undertaken by the assessor between 2017 and 2020 in respect of the following existing 2,000 candela aviation lights:
- On Queensferry Crossing, Edinburgh – which unlike the lighting that would be utilised on the proposed turbines, is not constant, but illustrates the effect of flashing effects caused by rotor movement;
  - On Craigmally Tower – located on the Binn' that overlooks the coastal town of Burntisland, near Kirkcaldy, Fife and comprising a series of constant red lights at 2,000 candela;
  - On Levenmouth Demonstration Turbine – Fife Energy Park, Methil, Fife, which is a constant red 2,000 candela light that is nacelle mounted;
  - On Hunterston Test Centre (Onshore) – Nr Fairlie, North Ayrshire, which is a constant red 2,000 candela light that is nacelle mounted; and
  - On Windy Standard III Wind Farm test light in Dumfries and Galloway, which was a constant red 2,000 candela light.
- 1.1.14 Field reconnaissance was undertaken:
- From varying distances of up to 15 km from each development to verify the effect of distance on the perception of the lighting;
  - during differing weather conditions including periods of rain, low cloud and clear skies;
  - at different times of day to reflect the variation in perceived brightness and prominence of lights at dusk and during hours of darkness; and
  - from different directions and elevations.
- 1.1.15 It is apparent from this field reconnaissance that whilst skyglow and diffuse light domes can be present from any light source, especially those that emit upwards, aviation lights of the type anticipated at Artfield Forest do not form visible light domes or skyglow. Additionally, no dazzling, glare or light spill intrusion into neighbouring properties or receptor locations was witnessed. The lights were, however, bright and prominent points of light in views, especially where there was a high degree contrast (i.e. the lights were seen against a dark sky or backclothed by a dark landmass, or where there were little, or no, existing artificial light sources present at the viewpoint, in the intervening landscape, or behind the aviation lights. During periods of greater ambient light, (e.g. before dusk) the prominence of lights was observed to be considerably less. It is also the case that the size of the lights reduced according to distance and the perceived brightness of the lights diminished with distance also.
- 1.1.16 Observations during period of low cloud cover (i.e. that enveloped the lights) indicate that there is a noticeable reduction in aviation light intensity. During such conditions localised halo effects were observed in the immediate vicinity of the lights. Halo effects had a low light intensity and did not extend vertically. Other effects witnessed during field reconnaissance include illumination of the base of turbine blades and a 'blinking' effect caused by the screening effect of blades as they pass the light. These effects are dependent upon the direction of wind and the location of the receptor, however. Where a number of lit turbines are present such 'blinking' is likely to be uncoordinated.
- 1.1.17 The key effect of interest in landscape and visual terms is therefore less concerned with light pollution, and more the introduction of new points of artificial lighting within a largely unlit landscape context, with consequent effects on the night character and visual amenity of the area. In this context, effects on landscape character are almost exclusively concerned with perceptions of darkness and remoteness as the key characteristic constituent elements of landscapes are generally obscured after dark.

## Mitigation

- 1.1.18 There are principally five current sources of potential mitigation in respect of aviation lighting on turbines, which have been introduced and accepted to varying degrees by aviation authorities in countries around the world (including by the United States Federal Aviation Authority ('FAA'), German Federal Aviation Office ('LBA'), and the Netherlands Aerospace Centre ('NAC')):
- the reduction in lighting intensity during periods of meteorological visibility in excess of 5 km (as discussed previously);
  - The inherent reduction in apparent light intensity depending upon the size of light source when viewed over distance;
  - The reduction in lighting intensity for receptors at different elevations and distances relative to source, as a result of design of the lights;
  - The design of the lights to avoid illumination of turbine nacelles, towers and blades;
  - The lighting of cardinal or perimeter turbines, thereby limiting the number of lights visible at any given location; and
  - Use of a radar or transponder activated lighting solution. Such systems would mean that lights would only be activated by 'nearby' aircraft and are therefore likely to be illuminated infrequently and for a short duration.

### *Reduced Lighting Intensity Over Distance*

- 1.1.19 As observed during field reconnaissance, the perceived brightness and size of the light source, as experienced at different locations, will vary according to distance and atmospheric conditions. The intensity and brightness of the visible light, whilst constant in actuality, reduces as distance increases, due primarily to a reduction in the size of the lights surface and light energy reaching receptors. Clearly, any water droplets or air borne particles compounds this effect, partially or entirely obscuring the light source.

### *Reduced Lighting Intensity by Relative Elevation*

- 1.1.20 Figure 5.8 (EIAR Volume 3a) illustrates the intensity of turbine lights at different locations across the LVIA study area (assuming lighting of all turbines), taking account of the angle at which they are seen from receptor locations. It is apparent from this figure that the greatest intensity and brightness experienced would occur at elevated locations which are infrequently visited after dark, whilst considerable reductions in intensity and brightness would be witnessed from low lying locations close by to the turbines, at primary receptor locations.

### *Lighting Design*

- 1.1.21 The degree of mitigation achieved through careful design of lights is crucial. Lights on the side of towers can be designed to minimise illumination of the tower. Similarly, the incorporation of light caps and collars can restrict up-lighting effects and the degree of downlighting and illumination of the nacelle of the turbine. In the case of the Proposed Development these are not required given the moorland location of the proposed turbines.

### *Radar/Transponder Activated Lights*

- 1.1.22 There is some degree of uncertainty as to the availability and practicality of using radar activation at the Proposed Development. This may be a matter that can be dealt with as a suspensive condition, but depending on design further examination of potential landscape and visual effects for such as system may not be necessary, and a clearer indication of the potential frequency of the activation of lights would be important. For avoidance of doubt, the current assessment has assumed no radar activation.

## Assessment of Landscape and Visual Effects

1.1.23 This assessment is based on lighting on all but two of the proposed turbines as described in 1.1.2 above.

### Baseline Context

1.1.24 The Proposed Development is situated on a gently undulating plateau moorland landscape of large scale. This is an extensive landscape, covering the area from the River Cree valley in the east to the Southern Uplands and upland fringe near the west coast of Dumfries and Galloway. In places the plateau topography is interrupted by conical fell summits. The landscape is highly modified, with extensive areas of commercial forestry, areas of pasture, and numerous wind farm developments. In contrast, much of the eastern half of the study area comprises remote uplands including the Galloway Forest Park and hills including the Merrick. These areas are typically devoid of artificial lighting but may afford views into the settled lowland landscape (e.g. the A76 and Glenvernock Fell) and/ or towards the coast. The southern and western part of the study area is characterised by the coast and open waters of the Solway Firth.

1.1.25 The main sources of artificial light within the study area are associated with settlement which is generally located approaching the coast around Wigtown Bay, Luce Bay, along water courses (River Cree, Water of Luce and Duisk River), and road corridors of within the study area (the A75, A714, A747 and the A77). Main settlements include Newton Stewart, Creetown, Wigtown, Whitehorn, Glenluce, Stranraer, Kirkcowan, Barrhead and New Luce. Most of these settlements are relatively distant. Lighting at these settlements is associated with internal lights in properties/ buildings as well as street lighting and vehicle lights on roads, both within and approaching the settlements. The number and concentrated nature of light can substantially reduce the sense of remoteness and darkness in their vicinity.

1.1.26 In addition to these main settlements there are numerous scattered farmsteads, hamlets and scattered dwellings present. Many of these properties are concentrated in the more remote parts of the coastline, along the lower slopes of moorlands (the fell landscape) and within rural valleys, and there are numerous hamlets and clusters of settlement on the Machars headland in the southern part of the study area. There is a greater degree of darkness on the moorland/ fell landscapes and remote areas. Artificial lighting at such properties generally comprises internal and external lighting, which can include external security lights, which can be associated with glare and light spill that is especially intrusive.

1.1.27 Associated with settlements and scattered properties, as well as more open areas of landscape and seascape, existing light sources also include vehicle headlights on the minor roads which traverse the plateau moorland within which the Proposed Development is located, and along the A75 and the A76 within the wider study area. The prominence of such lighting is exacerbated by its low-lying position, backclothing by the dark silhouetted landforms of position and by the movement of such light sources through the landscape. It is also the case that headlights have a high intensity (up to 40,000 candela) and their broad beam and the degree to which they cause glare makes them especially conspicuous.

1.1.28 The principal receptors present within landscape of the study area include residents of dwellings as well as road users within vehicles, both receptor locations themselves representing sources of artificial light sources, however. The perception of both receptor types in respect of the darkness of the landscape is conditioned, in part, by whether the property has blinds or curtains (effectively screening views out from the property) or internal lights that can obscure or lessen the degree of perceived darkness outwith the property. Views from within road vehicles will also be affected by dashboard lights and headlight beams, thereby lessening the perceived darkness of the adjacent landscape. The perception of road users is also transitory, and of limited duration in comparison to that of residents of dwellings.

1.1.29 The number and frequency of receptors present on elevated summits from the Galloway Forest Park and hills, including Merrick, is likely to be relatively low and generally restricted to small number of wild campers. Impacts on wild land characteristics are discussed in TA5.5: Wild Land Impact Assessment.

1.1.30 The Galloway Dark Skies Park has been considered in the lighting assessment as a sensitive receptor at the request of DGC principally. The key sensitivities of the park relate to the preservation of clear views and appreciation of the dark skies and night skies within both the core and transitional areas of the park. For the Proposed Development to have an adverse effect on the dark skies park it would need to introduce artificial lighting between viewers and the night sky, or to cause skyglow or glare that would detract from the night sky in the park. However, the Proposed Development is located over 12 km to the west of the park and the proposed turbine lights would not lead to skyglow or glare and would not detract from the night sky within the park. Consequently, such effects are not considered further in this assessment.

## Residual Effects

### Visibility and Intensity of Lights

1.1.31 According to the analysis presented in Figure 5.8 (EIA Volume 3a) the pattern of visibility of the lights would be broadly consistent with the hub-height viewshed of the proposed development, as depicted in Figure 5.6a (EIA Volume 3a). The greatest theoretical light intensity and brightness would be experienced at elevated locations, including:

- The Merrick (viewpoint 2), which is located over 25 km to the northeast of the Proposed Development;
- Near Bruce's Stone car park (viewpoint 4), situated over 21 km northeast of the Proposed Development;
- Cairnmore of Fleet (Viewpoint 5a), located over 25 km east of the Proposed Development, and
- The summit of Beneraid (Viewpoint 17), situated over 13.2 km northwest of the Proposed Development.

1.1.32 However, as these locations are over 5 km from the proposed development, the maximum intensity of light that would be experienced in clear meteorological conditions would be 200 candela, as previously discussed. In clear weather the view in the direction of the Proposed Development would also be towards to the North Channel to the west and the open water of Luce Bay and Wigtown Bay to the southwest. After dark, the expanse of water can have a reflective quality which would be more reflective during periods of the waxing moon (when visible), and less so during the waning moon and particularly at the dark of the moon (a few nights a month). There are also several lochs (most probably Loch Ochiltree and Loch Dornal) visible in the twilight on the plateau between the highlands and the source of the proposed lights (as clearly illustrated in viewpoint 2, Figure 5.10j (EIA Volume 3b)). This visualisation demonstrates that the proposed lights would appear to be distant as would be expected given that the majority of these viewpoints from summits are over 20 km from the Proposed Development and therefore subject to further mitigation due to distance. It is also the case that these receptor locations are infrequently visited after dark.

1.1.33 For the moorlands and fells within the study area, the visibility of turbine lights would be substantially constrained by a combination of intervening topography and vegetation. The principal location from where the lights would be visible would be from vehicles travelling along the A75, from which there would be intermittent visibility between Creetown and Glenluce. Fragmented views would be available for approximately 6 km of the A75 between Kirkcowan and Glenluce, and approximately 3 km between Creetown and Newton Stewart (overall visibility equating to approximately 6 minutes visibility at 60 mph, which is the national speed limit for an A road). Viewed from locations further than 5 km from

the Proposed Development, the lights would be experienced in clear meteorological conditions at between 75 and 8 candela.

- 1.1.34 Figures 5.10j, 5.11h and 5.14l (EIAR Volume 3b) illustrate the anticipated lighting at:
- Viewpoint 2: Merrick (over 25 km from the proposed lights) from where the light intensity viewed would be up to 200 candela during periods of clear meteorological visibility; during which time light intensity at turbines would be reduced in accordance with the mitigation referenced in paragraphs 1.1.9 and 1.1.10, above.
  - Viewpoint 3: Glenvernock Fell (around 10.3 km northeast of the proposed lights) from where the lights would be seen at an intensity of up to 75 candela during periods of clear meteorological when reductions in light intensity would apply.
  - Viewpoint 6: Fell End which is approximately 6.5 km southeast of the proposed lights, and from which the lights would be seen at up to 75 candela during clear meteorological conditions.
- 1.1.35 The images were produced at dusk, whilst there was some ambient light and some of the landscape context was still evident.

#### *Effects on Landscape Character*

- 1.1.36 The greatest degree of perceived remoteness is associated within elevated locations, from where receptors would experience lighting intensities of no more than 200 candela and would generally be seen distantly and experienced as points of light within a largely dark context. There would be fragmented areas of potential visibility from upper reaches of some parts of the south-west and west facing Galloway Hills (LCTs 179 and 180). Whilst these would be subject to up to 200 candela intensity of lighting under the right meteorological conditions, the distance of approximately 25 km would mitigate the perceived brightness of the proposed lights. The lower slopes would be subject to lower intensity of lights and many of these areas have forest cover which would screen potential visibility.
- 1.1.37 The upper slopes of the Southern Uplands (LCTs 177, 81 and 82) which are located northwest of the proposed lighting would also experience lighting intensities of no more than 200 candela. The summit closest to the Proposed Development, Beneraid is situated approximately 13.2 km distance. Distance would reduce the perception of light intensity at this distance.

#### *Effects on Visual Amenity*

- 1.1.38 Minor roads and footpaths within 5 km of the Proposed Development would generally be subject to low levels of light intensity as illustrated in Figure 5.8 (EIAR Volume 3a). This also illustrates high levels of light intensity to the north, west and south of the Proposed Development, most of which would be within areas of forestry and the existing Kilgallioch Wind Farm. A small section of the Southern Upland Way (SUW), within Kilgallioch Wind Farm, and for approximately 1 km south of Kilgallioch turbines, as well as a short section of minor road along the southern boundary of the Proposed Development site (approximately 3 km length) would be subject to **major/ moderate** (significant) effects. The light intensity mapping (EIAR Volume 3a: Figure 5.8) also shows high intensity lighting potentially visible from the minor road to Glenluce near Tarf Bridge. However, these areas of potential visibility are fragmented and mature forestry bounds part of the road in this section. This would reduce the potential effect for road users on this road.

#### *Conclusions on Lighting Effects without Further Mitigation*

- 1.1.39 The issue of lighting effects is complex and highly nuanced. How the lights are experienced will depend, in part, on the elevation and distance of receptors from them, the extent of residual ambient light and contrast between the night landscape and light sources, and consequent perception of light intensity and brightness, the visibility and brightness of lights being reduced in low lying positions close to the

Proposed Development, whilst elevated distant locations are often liable to clear views of the brightest section of the lights, but seen distantly.

- 1.1.40 Lighting effects on landscape character and visual amenity are primarily concerned with effects on the darkness and remoteness of landscapes as the key characteristics apparent during daylight hours are obscured at night. In respect of landscape character the lights at the Proposed Development would primarily affect elevated upland landscapes locations which have a greater degree of remoteness than more settled lowland landscapes and which are substantially unpopulated after dark. Lighting intensity of up to 200 candela may be experienced from parts of the Galloway Hills, including the Merrick summit (within LCT 179 and LCT 180). However, night visitors to such elevated position are infrequent and the Proposed Developments turbine lights would be seen at distances of over 20 km, appearing as distant points of light, and in a context of existing nearby artificial light sources within the settled coastline and along key transportation routes. Consequently, the effect of the turbine lighting is not anticipated to be significant. Views of the lights from lower lying plateau and fell landscapes would be substantially restricted by the degree of forestry within these areas in the study area. Such landscapes also have a lesser degree of perceived remoteness, often containing existing light sources associated with scattered farmsteads and dwellings as well as the headlights and interiors of vehicles.
- 1.1.41 In terms of visual amenity, significant effects would be confined mainly to road users in vehicles on the minor road along the southern boundary of the Proposed Development site and for night-time walkers along discrete sections of the of the SUW mainly within the Kilgallioch Wind Farm part of the route.
- 1.1.42 Drivers on the minor road adjacent to the southern boundary of the Proposed Development would experience car dash-lights and headlights coupled with the transient nature of views from vehicles which would lessen the magnitude of impacts arising from the turbine lights.
- 1.1.43 The effects presented above represent a worst-case scenario, but could be substantially reduced through the use of radar/ transponder activated lighting. Such automated lighting systems are only activated by low flying aircraft which enter a specified horizontal and vertical distance around turbines. Whilst the CAA do not specify such distance, it is not unreasonable to assume that, based on similar systems elsewhere, the adopted approach for the lights at the Proposed Development would be in the order of 5.5 km horizontal radius around turbines, and 304 m above maximum blade tip heights. Given the low lying position of the Proposed Development and the likely area within which the lights would be activated by only low flying aircraft such as private planes and rescue/ emergency aircraft are likely to trigger the lighting, then any such activation is likely to be highly infrequent and of short duration.