



Harestanes South Windfarm Extension

Environmental Impact Assessment Report Addendum

Appendix B – Cumulative Landscape and Visual Impact Assessment

June 2022

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1 Introduction

1.1 Background

1. The purpose of this appendix is to provide an assessment of the changes to the cumulative windfarm environment that have arisen since the submission of the application for the Proposed Development in December 2020. This also takes into account the new position of Turbine 06 of the Proposed Development.
2. The EIA Report Chapter 5 - Landscape and Visual Impact Assessment (LVIA) assessed that there were no proposed (consented or in-planning) windfarms within the Study Area that would have potential to create significant cumulative effects with the addition of the Proposed Development. Aside from the operational windfarms (Harestanes, Minnygap and Dalswinton) which lie in close proximity to the Proposed Development, all other windfarms in the Study Area were beyond 18 km from the Proposed Development.
3. A review was undertaken in April 2022 of the current cumulative environment which identified that the proposed Scoop Hill Community Windfarm and Daer Windfarm (**Figure B1**), which lie at closest 10.5 km north east and 10 km north from the Proposed Development respectively, were the only changes that have potential to have a bearing on the cumulative assessment for the Proposed Development.
4. Changes to the status of other windfarms within the Study Area (beyond 18 km from the Proposed Development) were noted and updated on the figures but taking into account they were not considered to have a bearing on the findings of the EIA Report Chapter 5 - LVIA cumulative assessment, they are not included further in this appendix.
5. This appendix should be read in conjunction with the EIA Report Chapter 5 - LVIA and not as a standalone document. The cumulative assessment methodology remains unchanged to that set out in the EIA Report Chapter 5 - LVIA and its appendices.
6. This appendix is accompanied by the following figures:
 - Figure B1: Cumulative Sites Location Plan 30km Study Area
 - Figure B2: Cumulative Zone of Theoretical Visibility (ZTV) – Proposed Development and Scoop Hill Community Windfarm
 - Figure B3: Cumulative ZTV – Proposed Development and Daer Windfarm
 - Figures B4-B14: Cumulative Wirelines from selected viewpoints
7. The cumulative wirelines (**Figures B4-B14**) include the Proposed Development's relocated Turbine 06 as described and explained in the **Addendum Section 3 Changes to the Proposed Development**.

1.2 Consultation

8. A meeting was held with officers from the Energy Consents Unit (ECU) and Dumfries and Galloway Council (DGC) on 4 May 2022 to discuss the change in position of Turbine 06 and the content of this appendix. It was agreed that the small movement of Turbine 06 would not result in any change to the assessed landscape and visual effects of the EIA Report. It was also agreed that the EIA Report Addendum should focus on the potential cumulative effects of the Proposed Development with the proposed Scoop Hill Community Windfarm and Daer Windfarm, as the two key changes within the Study Area since the application was submitted. No other windfarm(s) or issues were raised as necessary to consider.

1.3 Approach

9. This appendix sets out the assessment of potential cumulative effects on landscape and visual receptors of the Proposed Development in combination with Scoop Hill Community Windfarm; the Proposed Development in combination with Daer Windfarm; and the Proposed Development in combination with both Scoop Hill Community Windfarm and Daer Windfarm.
10. The EIA Report Chapter 5 - LVIA concluded that potential significant effects of the Proposed Development on landscape character would be contained within approximately 5 km and significant visual effects would be contained within approximately 8 km to the south and south east of the Site (defined by the Application Boundary) only. The potential for significant cumulative landscape and visual effects with Scoop Hill Community and Daer Windfarms is therefore most likely within these areas. However, it is also recognised that sequential cumulative effects within the wider study area need to be considered.
11. In order to provide a focussed and proportionate assessment, the appendix first sets out an analysis of cumulative ZTVs (**Figures B2 and B3**) which illustrate the combined visibility of the Proposed Development and Scoop Hill Community Windfarm, and separately with Daer Windfarm. Cumulative wirelines (**Figures B4-B14**) for a selection of the EIA Report Chapter 5 - LVIA viewpoints were updated to include Scoop Hill Community Windfarm and Daer Windfarm. An analysis of these is provided to understand the scale of potential cumulative effect which will then inform the assessment of cumulative effects on the relevant landscape character and visual receptors.

1.4 Cumulative Windfarm Details

1.4.1 Scoop Hill Community Windfarm

12. A planning application for Scoop Hill Community Windfarm was submitted to the ECU in November 2020 (after the cumulative information cut-off date of 18 August 2020 for the Proposed Development EIA Report). Scoop Hill Community Windfarm would be located approximately 10.5 km to the north east of the Proposed Development, approximately 5 km south east of Moffat and 11 km north east of Lockerbie (**Figure B1**). The application is for up to 75 turbines, consisting of a combination of:
 - 22 turbines with a maximum 250 m tip height;
 - 2 turbines with a maximum 225 m tip height;
 - 47 turbines with a maximum 200 m tip height; and
 - 4 turbines with a maximum 180 m tip height.

1.4.2 Daer Windfarm

13. A planning application for Daer Windfarm was submitted to the ECU in May 2021. Daer Windfarm would be located approximately 10 km north of the Proposed Development. It would lie directly adjacent to the Daer Reservoir, approximately 8 km east of Moffat (**Figure B1**). The application is for up to 17 turbines with a tip height of 180 m.

2 Cumulative ZTV and Viewpoint Analysis

2.1 Cumulative ZTVs

2.1.1 Scoop Hill Community Windfarm (Figure B2)

14. **Figure B2** illustrates the combined visibility of the Proposed Development and Scoop Hill Community Windfarm, in addition to the areas where only one or the other would be potentially seen. This shows that the combined visibility would be primarily located in the foothills surrounding the Site, the lower lying area of Annandale to the south east of the Proposed Development and an area south west of Dumfries. There would also be some smaller areas of

combined visibility to the north west around Moffat and west of the Proposed Development, although these are broadly limited to high ground within the foothills, such as Queensberry. Scoop Hill Community Windfarm has potentially greater visibility to the east and within the Lowther Hills to the north, where the Proposed Development would not be visible. Scoop Hill Community Windfarm would not be visible where the Proposed Development would be in a few areas in the west of the Study Area, and in particular the lower lying land north east of Dumfries due to the screening by the Torthorwald Ridge.

2.1.2 Daer Windfarm (Figure B3)

15. **Figure B3** shows that the upland landscape that lies between the Proposed Development and Daer Windfarm would limit combined visibility around each of the Sites, but would be more focussed on the lower lying landscape around Annandale, Dumfries, and south east of Dumfries. There would also be some smaller areas of combined visibility to the north east around Moffat and to the west of the Proposed Development, although these are broadly limited to high ground within the foothills.

2.2 Viewpoint Analysis

16. All 21 viewpoints from the EIA Report Chapter 5 - LVIA were reviewed using wirelines. It was identified that 11 of these viewpoints would have potential for Scoop Hill Community Windfarm and/or Daer Windfarm to be notably visible with the Proposed Development and have therefore been included in this appendix. This section provides a discussion of the cumulative effects for these viewpoints which concludes in the following cumulative assessment for landscape character and visual receptors. This should be read in conjunction with EIA Report Volume 4 Appendix 5.2 - Viewpoint Assessment which provides the description of the baseline view and scale of effect of the Proposed Development on its own.
17. The Proposed Development was assessed in the EIA Report as having a Low to Negligible scale of effect on 8 of the 11 viewpoints where Scoop Hill Community Windfarm and Daer Windfarm would be potentially visible (Viewpoints 7, 8, 11, 14, 15, 19, 20 and 21). A review of these viewpoint's updated cumulative wirelines (**Figures B4, B5, B8-B10, B12-B14**) identified that the main cumulative effects would arise from Scoop Hill Community Windfarm and/or Daer Windfarm themselves, and the addition of the Proposed Development would not increase or create significant cumulative effects. This is largely due to either distance and/or position of the Proposed Development in relation to Harestanes and Minnygap Windfarms, where the Proposed Development would appear as part of operational turbine array. This is particularly the case for the viewpoints from the north, north east and east (Viewpoints 8, 14, and 15) where the Proposed Development would appear behind Harestanes Windfarm and with blade tips at a similar height due to the lower elevation of its site. A brief discussion for each of these viewpoints is provided in **Table B2.1** below.

Ref.	Viewpoint name	Receptor	Landscape Character Type (LCT) / Landscape designation	Grid Ref.	Elevation (AOD m)	Nearest proposed turbine	Direction	Scale of Effect from Proposed Development
7	Queensberry	Walkers	Southern Uplands – Lowthers unit	298910, 599746	695	6.89	NNW	Low-Negligible
<p>The main cumulative effects at this viewpoint would arise from Daer Windfarm, at 3.3 km closest to the north, in combination with Scoop Hill Community Windfarm, 13.6 km to the south east, in addition to the operational Harestanes and Minnygap Windfarms. The Proposed Development would appear as an extension to the operational Harestanes Windfarm, located within the horizontal extent of operational turbines and would be largely indistinguishable from them. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.</p>								

Ref.	Viewpoint name	Receptor	Landscape Character Type (LCT) / Landscape designation	Grid Ref.	Elevation (AOD m)	Nearest proposed turbine	Direction	Scale of Effect from Proposed Development
8	Southern Upland Way near Beattock	Walkers	Foothills – Ae unit	306080, 601927	239	8.66	NNE	Low-Negligible
<p>Daer Windfarm (6.5 km north west) and Scoop Hill Community Windfarm (6.6 km south east) would extend the presence of wind turbines in addition to Harestanes and Minnygap Windfarms (5.2 km west) within 180 degrees of the view. The foreground undulating landform would provide some separation from the windfarms but Scoop Hill Community Windfarm and Daer Windfarm would potentially create the feeling of being surrounded by wind turbines at this viewpoint. The Proposed Development would appear as an extension to the operational Harestanes Windfarm, largely indistinguishable from the operational turbines, particularly given its blade tip height would be at a similar level to the operational turbines. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.</p>								
11	Romans and Reivers Route, Moffat	Walkers (Roman and Reivers Route/Southern Upland Way (SUW))	Upland Glen – Moffat unit/Southern Uplands – Moffat Hills, Moffat Hills Regional Scenic Area (RSA)	309476, 603087	139	11.38	NNE	Low-Negligible
<p>Daer Windfarm would lie 9.7 km to the west, and Scoop Hill Community Windfarm would lie 4.8 km south west of the viewpoint. Several of the proposed Scoop Hill Community Windfarm turbines would be particularly prominent on top of the uplands close to the viewpoint. Daer Windfarm would be more distant and partially hidden by the intervening foothills. The Proposed Development would appear as a small extension to the operational Harestanes and Minnygap Windfarms, partly obscured by landform, resulting in only a slight change to the baseline. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.</p>								
14	A701 south of Devil's Beef Tub	Walkers, Road users	Southern Uplands – Moffat Hills unit, Moffat Hills RSA	306266, 612031	364	18.42	NNE	Negligible
<p>Daer Windfarm (7.4 km west) and Scoop Hill Community Windfarm (12.6 km south) would be seen on the hilltops either side of the valley, effectively framing the view. The Proposed Development would appear obliquely to the main view south over Annandale, and as only four turbines potentially visible, they would occupy a very small portion of the view where the operational Harestanes and Minnygap turbines are already visible, such that the baseline would not materially change. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.</p>								
15	Hart Fell	Walkers	Southern Uplands – Moffat Hills, Moffat Hills RSA, Talla Hart Fells WLA	311313, 613578	804	21.43	NNE	Negligible
<p>Daer Windfarm (12.5 km south west) and Scoop Hill Community Windfarm (11.7 km south) would sit either side of Harestanes and Minnygap windfarms in the view. Scoop Hill Community Windfarm would be partially obscured by the foreground landform, but Daer Windfarm would be visible across the upland landscape north of Queensberry. The Proposed Development would lie within the operational cluster of wind turbines on the Ae Foothills, over 21 km from the viewpoint, occupying a small proportion within an area already characterised by wind turbines and the overall baseline would not materially change. It is considered that the addition of the</p>								

Ref.	Viewpoint name	Receptor	Landscape Character Type (LCT) / Landscape designation	Grid Ref.	Elevation (AOD m)	Nearest proposed turbine	Direction	Scale of Effect from Proposed Development
Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.								
19	Annandale Way, Hightae	Walkers, Local Residents	Lower Dale – Annandale unit	309522, 579061	51	15.40	SE	Low
Daer Windfarm would lie 26.3 km north west of the viewpoint, mostly behind Harestanes and Minnygap Windfarms, and unlikely to be particularly discernible. Scoop Hill Community Windfarm would lie 17.2 km north of the viewpoint, visible across the tops of the foothills and uplands on the horizon. The photo-panoramas shows that much of Daer and Scoop Hill Community Windfarms would be screened by foreground trees. The Proposed Development would appear distant and separated from the foreground view by the rolling dales landscape and layers of trees and forestry. It is considered that the addition of the Proposed Development would not have potential to create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.								
20	Burnswark Hill Roman Fort	Walkers	Upland Fringe – Annandale Fringe unit	318518, 578624	285	21.43	SE	Negligible
Scoop Hill Community Windfarm lies 16 km north in the panoramic views available from this viewpoint. Daer Windfarm would lie 31.2 km north west and is unlikely to be particularly noticeable. The number and density of Scoop Hill's turbines would increase their prominence within the view at this distance. The Proposed Development (21.4 km north west) would appear within the operational Harestanes array, with hub heights similar to the operational turbines, but blades would be potentially more visible above the skyline. The Proposed Development would increase the density of turbines seen but appear very much as part of the operational windfarm within this very small proportion of the overall view available. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.								
21	Bishop Forest Hill	Walkers	Upland Fringe – Terregles unit, Terregles Ridge RSA	284916, 579647	386	19.91	SW	Negligible
Scoop Hill Community Windfarm (33 km east) and Daer Windfarm (27.2 km north east) would be distant but potentially visible on top of the upland landscape from this elevated viewpoint. The Proposed Development would be discernible at 19.9 km from the viewpoint, but within a very narrow horizontal extent of the overall view that is already characterised by windfarms. The Proposed Development would have potential to appear to fill the narrow gap between Harestanes Windfarm and Scoop Hill Community Windfarm, albeit as Scoop Hill Community Windfarm sits on the foothills beyond the Site over 10 km more distant, they may not be easily read as one. It is considered that the addition of the Proposed Development would not increase or create significant cumulative effects with Scoop Hill Community Windfarm and/or Daer Windfarm at this viewpoint.								

Table B2.1 – Viewpoint Discussion

18. The Proposed Development was assessed in the EIA Report as having a Medium scale of effect at Viewpoint 9 – B7020 Chapel Wood (**Figure B6**), Viewpoint 10 – A701 South of Ae Bridgend (**Figure B7**), and Viewpoint 16 - West of Templand (**Figure B11**). These are locations within the settled dales to the south and south east of the Site where the Proposed Development was assessed in the EIA Report as a notable feature in views towards the foothills, where scale comparisons of the proposed turbines can be made against the landform and existing features. An assessment of the cumulative effects with Scoop Hill Community Windfarm and Daer Windfarm is provided in the **Tables B2.2-B2.4** below.

Viewpoint 9: B7020 Chapel Wood	
Grid Reference:	308132, 590291
Figure References:	EIA Report Volume 3 Figures 5.19 a-d Addendum Appendix B, Figures B6a-b
Receptor Type(s):	Walkers (Annandale Way) Road users Middle Dale LCT – Annandale Unit
Distance and Direction from nearest turbine of Proposed Development:	6.05 km East
Elevation:	87 m AOD
Viewpoint description – Existing View	
This viewpoint is located on the B7020, which at this location is also on the Annandale Way, a long distance walking route. The view available is perpendicular to the road in a gap between the roadside vegetation and woodland blocks which are prevalent in this area. The foreground view comprises low lying arable and improved grasslands delineated by post and wire fencing, hedgerows and frequent mature trees and policy woodland. Greenbeck Farm can be seen nestled amongst mature trees in the middle ground. The gently undulating Foothills with Forest LCT forms the backdrop, and Queensberry is visible beyond to the north west. The operational Harestanes and Minnygap Windfarms are noticeable features on the horizon and in front and above Queensberry.	
Predicted View	
The wireline illustrates that Turbines 05-08 would be visible except the base of their towers obscured by the landform. The upper half of the tower, hub and blades of Turbine 04, the hub and blades of Turbine 03, and the blades of Turbine 01 and Turbine 02 would be visible. Turbines 04-08 would appear as a group, with Turbines 07 and 08 closer together. Turbines 01, 02, and 03 would sit apart and be mostly screened by landform and forestry would also screen further.	
Scale of Effect	
The Proposed Development would appear as five prominent turbines on the horizon in front of the operational Harestanes Windfarm and west of the Minnygap turbines. The blades of Turbines 01-03 would be potentially visible, but the landform and forestry would limit this visibility and they would appear associated with the operational turbines rather than the proposed Turbines 05-08. Turbines 05-08 would lie across approximately half of the operational windfarm extent, appearing within the centre of the foothills from this viewpoint. The perimeter foothills would screen the bases of the proposed turbines so they would appear set back with the operational turbines. The scale of proposed turbines is however notably larger than the Minnygap Windfarm turbines that appear on the skyline to the east, although separation and perspective reduces the direct contrast. The Proposed turbines would become a notable feature of the view in the context of operational wind turbines, across a third of the horizon that the foothills occupy at this viewpoint. The scale of effect is considered to be Medium.	
Predicted Cumulative View – Scoop Hill Community and Daer Windfarms	
Daer Windfarm would be largely hidden by the foothills east of Minnygap Windfarm, 15.7 km away at closest, with only three turbine hubs and blades visible, and blades of several others. It would not be particularly discernible and where seen, would appear as distant extension to Minnygap and Harestanes windfarms.	
The wireline illustrates that almost the full extent of Scoop Hill Community Windfarm would be visible along the horizon to the 8.4 km north east of the viewpoint. The large number and density of turbines increases their prominence in front of the upland landscape beyond. However, the photo-panorama shows that the dense woodland edge along the B7020 at this location would screen all views, noting that in winter, there would potentially be glimpse views towards it.	

Scale of Cumulative Effect – Scoop Hill Community and Daer Windfarms	
Given that both Scoop Hill Community Windfarm and Daer Windfarm would not be discernible at this viewpoint, the scale of cumulative effect remains as originally assessed for the Proposed Development in the EIA Report – Medium.	

Table B2.2 – Viewpoint 9 Cumulative Analysis

Viewpoint 10: A701 South of Ae Bridgend	
Grid Reference:	300709, 586361
Figure References:	EIA Report Volume 3 Figures 5.20 a-d Addendum Appendix B, Figures B7a-d
Receptor Type(s):	Road users Local Residents Upland Fringe LCT – Ae Unit
Distance and Direction from nearest turbine of Proposed Development:	5.77 km South
Elevation:	121 m AOD
Viewpoint Description – Existing View	
This viewpoint is located on the A701, at the northern end of the stretch of the road which is aligned north/south before it turns north east. The foreground comprises improved grassland and arable fields of a medium scale, delineated by hedgerows, post and rail fencing, and scattered mature trees. The path of the Water of Ae is apparent across the view from the broadleaved trees that lie along it. There are also small areas of broadleaved woodland on the lower slopes in the middle ground which rise up to the Foothills with Forest LCT. Kirkmichael Hill (274 m AOD) lies to the right of the view separated by a valley from the broader and higher foothills to the north west including Wood Hill (298 m AOD) and Knockespen (344 m AOD). The depths of the valley are obscured by a small rounded hill of farmland (191 m AOD) which lies in the middle ground. The valley does frame views of the operational Harestanes turbines which are seen on the skyline of more distant forested foothills.	
Predicted View	
The wireline illustrates that Turbine 02 would lie centre of the valley, with Turbine 01 and Turbine 03 equally spaced either side, with their bases slightly obscured by the rising landform. The hubs and blades of Turbines 04, and 06-08, and slightly more of Turbine 05 would appear from behind Kirkmichael Hill.	
Scale of Effect	
The Proposed Development would appear as three prominent turbines framed in the skyline within the valley between Kirkmichael Hill and Brownmoor Hill. They would lie in front of the operational Harestanes turbines which as a result of the turbine scale difference would appear more distant. The other proposed turbines would be less prominent as mostly obscured by Kirkmichael Hill and the forestry. The proposed visible turbines would be within a relatively narrow extent of the view, that is already characterised by windfarms and contained by the broad rounded landform. The scale of effect is considered Medium.	
Predicted Cumulative View – Scoop Hill Community and Daer Windfarms	
Daer Windfarm would not be visible from this location, screened by the Ae foothills.	
Scoop Hill Community Windfarm would lie 16.4 km to the north east of the viewpoint, approximately 20 degrees east of the Proposed Development. Scoop Hill Community Windfarm's full extent would appear on top of the foothills and upland edge above Annandale. The photo-panorama shows that the northern end of the windfarm would lie directly aligned with the A701, and the foreground roadside hedgerow would obscure the more southerly extents. The proposed (at inquiry) Faw Side Windfarm lies just to the south of Scoop Hill Community Windfarm, but at 32.4 km from the viewpoint and combined with the intervening forestry, is unlikely to be particularly discernible.	

Scale of Cumulative Effect – Scoop Hill Community and Daer Windfarms	
Whilst Scoop Hill Community Windfarm is over 16 km from the viewpoint, it is likely to be discernible in the view against the backdrop of the uplands, due to its turbine height, number and density in an area where there are currently no wind turbines visible. However, Scoop Hill Community Windfarm would not affect the immediate main foreground view of the Ae foothills, appearing more as a distant feature in the wider view. The Proposed Development would be much closer and more prominent in this view than Scoop Hill Community Windfarm at this viewpoint. Therefore, the addition of the Proposed Development to Scoop Hill Community Windfarm would create a scale of cumulative effect largely due to the Proposed Development. The scale of cumulative effect is considered to be Medium.	

Table B2.3 – Viewpoint 10 Cumulative Analysis

Viewpoint 16: West of Templand	
Grid Reference:	307663, 586520
Figure References:	EIA Report Volume 3 Figures 5.26 a-d Addendum Appendix B, Figures B11a-d
Receptor Type(s):	Local Residents Middle Dale LCT – Annandale Unit
Distance and Direction from nearest turbine of Proposed Development:	8.14 km South east
Elevation:	54 m AOD
Viewpoint Description – Existing View	
This viewpoint is located within the settled dale landscape. The foreground view is across flat pasture and arable fields delineated by post and wire fencing, remnant hedgerows and scattered mature trees. To the east, the path of the Kinnel Water is indicated by the dense broadleaved woodland along its route. The prominent Torthorwald Ridge can be seen to the south west. To the north west the foothills with forestry rise up from the dales and appear as a gently undulating plateau, with Queensberry visible in the distance. Some of the operational Harestanes and Minnygap turbines are noticeable in front and either side of Queensberry.	
Predicted View	
The wireline illustrates that Turbines 05-08 would be fully visible in front of the operational Harestanes turbines. The upper tower, hubs and blades of Turbine 04 would be visible close to Turbine 05. The hubs and blades of Turbines 01-03 would be seen, appearing separate from the other turbines, with Turbines 02 and 03 slightly overlapping. Turbines 04-08 would appear in an evenly spaced 2:1:2 arrangement.	
Scale of Effect	
The Proposed Development would appear as a prominent feature on the foothills, notably larger than the operational turbines. Turbines 07 and 08 would lie in front of the operational turbines that lie in front of Queensberry with hubs and blades in the skyline above the hill. Turbines 08 would also appear slightly on the outer edge of the foothills from this viewpoint direction although it would sit within forestry at its base. Turbines 01-03 would not be so notable with forestry screening the towers. The Proposed Development would be a prominent feature but occupy a relatively small portion of the horizontal extent of the foothills seen from this viewpoint and within the area already characterised by wind turbines. It is considered that the scale of effects is Medium.	
Predicted Cumulative View – Scoop Hill Community and Daer Windfarms	
Daer Windfarm would lie over 18.8 km from the viewpoint, barely discernible with only blades visible within the same extent as Harestanes and Minnygap windfarms.	
Scoop Hill Community Windfarm would lie 11.4 km to the north east of this viewpoint, in a separate portion of the view to the Proposed Development. The wireline illustrates that the northern turbines would be visible on and above the uplands, with the foreground landform screening the southern turbines. The photo-panorama shows that the vegetation along the water course in the foreground and layers of woodland behind would screen any view of Scoop Hill Community Windfarm from this viewpoint.	

Scale of Cumulative Effect – Scoop Hill Community and Daer Windfarms
Given that both Scoop Hill Community Windfarm and Daer Windfarm would not be discernible at this viewpoint, the scale of cumulative effect remains as originally assessed for the Proposed Development in the EIA Report – Medium.

Table B2.4 – Viewpoint 16 Cumulative Analysis

2.3 Conclusions of ZTV and Viewpoint Analysis

2.3.1 Daer Windfarm

19. The location of Daer Windfarm, tucked into the Lowther Hills north of the Proposed Development limits the potential for it to be seen in full at locations where the Proposed Development is most noticeable and has its greatest scale of effect. The cumulative ZTV (**Figure B3**) also shows there would be limited intervisibility within approximately 5 km around the two sites despite their relatively close location.
20. Daer Windfarm would be most prominent in views from the north or north east (Viewpoints 7, 8, 11, and 14). In these views the Proposed Development would be more distant than Daer Windfarm and viewed behind Harestanes and Minnygap Windfarms. The Proposed Development's blade tip heights would be at a similar elevation to the operational windfarms due to the lower topography of the Site, creating a negligible to low scale of effect. It therefore would have very limited potential to create significant cumulative effects in addition to Daer Windfarm. Other areas of potential combined visibility in the Study Area shown on the ZTV to the south west, near Dumfries, are also unlikely to create significant cumulative effects due to distance, operational windfarm context, and partial screening by forestry, as illustrated by Viewpoint 21 (**Figure B14**).
21. Significant sequential cumulative effects from the Proposed Development and Daer Windfarm are also unlikely due to the above factors.

2.3.2 Scoop Hill Community Windfarm

22. Scoop Hill Community Windfarm's location on the edge of the uplands and foothills above Annandale, north east of the Proposed Development creates the opportunities for combined visibility across the uplands, foothills, and Annandale area, largely within 20 km of the Site, as shown by the cumulative ZTV (**Figure B2**). More distant combined visibility to the south west is unlikely to create significant cumulative effects as illustrated by Viewpoint 21 (**Figure B14**).
23. The viewpoint analysis shows that the areas to the north and east of the Study Area, where the Proposed Development has the least potential to create significant effects, is where Scoop Hill Community Windfarm has most potential for significant effects. This can be attributed to the reasons discussed in **Section 2.3.1** above for the Proposed Development in combination with Daer Windfarm, and demonstrated by Viewpoints 7, 8, 11, and 14.
24. The main potential for significant cumulative effects of the Proposed Development and Scoop Hill Community Windfarm is therefore to the south, between the A74(M) and A701. Whilst the viewpoints included for the Proposed Development within this area don't provide open views of it and Scoop Hill Community Windfarm (Viewpoints 9, 10 and 16), they are useful to demonstrate the treed nature of the landscape in this area. This limits the potential opportunities of viewing both Scoop Hill Community Windfarm and the Proposed Development together at a stationary viewpoint. However, it is acknowledged that opportunities to see the windfarms sequentially when driving along the network of roads across this area would arise more frequently.

2.3.3 Scoop Hill Community Windfarm and Daer Windfarm

25. The cumulative ZTVs (Figures B2 and B3) show that the main area of combined visibility of Scoop Hill Community Windfarm and Daer Windfarm would lie in the north and east of the Study Area. Viewpoint analysis (in particular Viewpoints 7, 8, 11 and 14) demonstrate that in this part of the Study Area the potential for significant cumulative effects would arise from the combination of Scoop Hill Community and Daer Windfarms, regardless of the presence of the Proposed Development. Elsewhere, there are very limited opportunities for both Scoop Hill Community Windfarm, Daer Windfarm and the Proposed Development to be seen together, apart from at long distances

(Viewpoints 20 and 21 for example). The potential for combined significant cumulative effects from all three windfarms would therefore be very limited.

3 Cumulative Assessment

3.1 Landscape Character

26. The analysis and conclusions in **Section 2** of this appendix show that the main potential for significant cumulative effects would arise between Scoop Hill Community and the Proposed Development to the east and south east of the Site. This area is mainly defined by the Middle Dale LCT – Annandale unit which was included in the EIA Report Chapter 5 - LVIA. An assessment of the potential cumulative effects on this unit is provided in **Table B3.1**. The assessment of the Proposed Development on this LCT is repeated from the EIA Report for ease of reading.

LCT: Middle Dale - Annandale	
Distance and Direction from nearest Proposed turbine:	3.5 km south east
Baseline description	
<ul style="list-style-type: none"> • Broad, low-lying dales contained by adjacent foothills and uplands. • Expansive and relatively open gently rolling landform. • Large field pattern within wide floodplains decreasing in size closer to the upland/foothill edges. • Extensive bands of woodland, shelterbelts and hedgerows provide enclosure. • Well settled, with numerous farms and individual houses, as well as villages and small towns including Moffat. • Extensive network of minor roads, A roads and major A74(M) and rail corridor. • Opportunities for views toward the Upland Fringes and Foothills from the more open wider aspects. • Very northern end lies within the Moffat Hills RSA. • Visual influence of Minsca, Dalswinton, Harestanes and Minnygap Windfarms. 	
Value	Susceptibility
Medium: The LCT is of local value relating to the settled and managed landscape, with some areas of value relating to its role as a setting to the adjacent more rural areas such as the Lowther Hills and Moffat Hills.	Medium-Low: The susceptibility of this LCT unit to the Proposed Development would relate to the containment by and views of the adjacent foothills where the Proposed Development would be located, and contrast in scale to the settled characteristics of this LCT. The susceptibility also considers the influence of operational windfarms, enclosure by vegetation, and major transport corridor within the LCT.
Sensitivity	
Medium-Low	
Assessment (including operational cumulative sites)	
Magnitude of change	
The Proposed Development would lie to the west and north west of this LCT, with the Site access at the edge of the LCT. The ZTV illustrates that it is mostly the southern parts of this LCT unit that would have visibility of the Proposed Development. This does not take into account the characteristic extensive bands of woodland, shelterbelts and hedgerows which would also screen and contain views across much of the area. Particularly, from approximately 5 km where the wooded Kinnel Water valley and notable patches of woodland would considerably lessen the visual influence for areas beyond.	
The Proposed Development would extend the influence of wind turbines closer to the southern part of this LCT than currently. It would be more prominent than the operational windfarms perceived from this LCT and would become a notable feature of views from this part of the LCT. The separation provided by the periphery foothills	

<p>at the edge of the LCT moderates the direct contrast of scale of the Proposed Development with the scale of the LCT landscape.</p> <p>Within the northern parts of the LCT, the influence of the Proposed Development would be limited by the more enclosed characteristics of this part of the valley and where perceived it would be largely indistinguishable from the operational windfarms. It would have no effect on the LCT's role as a setting to the more rural upland landscapes in the north.</p> <p>It is considered that within the southern half of the Middle Dale Annandale LCT unit which lies south east of the Proposed Development, within approximately 5 km, there would be a Medium scale of effect over a Medium extent of this area, resulting in a Medium magnitude of change.</p> <p>Within the northern parts of the LCT, the influence of the Proposed Development would be reduced by the more dominant operational windfarm characteristics to which the Proposed Development would be perceived as a small extension without altering the baseline character. The scale of effect would be Low to Negligible across a localised (low) extent of the area, resulting in a Low to Negligible magnitude of change.</p>
<p>Significance of effect</p> <p>As this LCT has a medium-low sensitivity, the significance of effect within the southern half of the LCT within approximately 8 km to the south east of the Proposed Development, would be Moderate-Minor and not significant. The significance of effect across the northern half of the LCT would be Minor and not significant.</p>
<p>Assessment – Scoop Hill Community Windfarm</p> <p>Scoop Hill Community Windfarm would lie within the Foothills and Southern Uplands with Forest LCTs to the east of the River Annan and A74(M) corridor, approximately 2 km at closest to the Middle Dale -Annadale LCT. Due to Scoop Hill's considerable number of turbines and their height, they would become prominent features covering the hillsides above the LCT as demonstrated by wirelines for many of the viewpoints (in particular Viewpoints 7, 8, 14, 15, and 19). The upland fringes would provide some separation between the lower settled landscape and Scoop Hill Community Windfarm when perceived from the LCT, but the considerable extent of wind turbines would have potential to increase the windfarm characteristics of the northern half of this LCT to one defined and contained by views of wind turbines, when also considering the operational Harestanes and Minnygap Windfarms to the west, and Clyde windfarms to the north. Further south within the LCT as the landscape opens out, the influence of Scoop Hill Community Windfarm would be less and it would be perceived within the wider upland context with other operational windfarms.</p> <p>The northern area of the LCT which would be affected most by Scoop Hill Community Windfarm is where the Proposed Development would have least effect due to the operational Harestanes and Minnygap Windfarm context. Where the Proposed Development has more influence (as illustrated by Viewpoints 9 and 10 – Figures B6 and B7) in the south of the LCT, Scoop Hill Community Windfarm would be a noticeable feature, but separate to the Proposed Development. In combination, the Proposed Development and Scoop Hill Community Windfarm would increase the presence of large wind turbines as defining characteristics of the surrounding landscape, potentially affecting the perception of scale of the surrounding uplands.</p> <p>The scale of combined cumulative effect of the Proposed Development and Scoop Hill Community Windfarm on the LCT as a whole is considered to be Medium across a high extent of the area, resulting in a High-Medium magnitude of change.</p> <p>As this LCT has a medium-low sensitivity, the significance of cumulative effect within the LCT overall would be Moderate and significant.</p>

Table B3.1 – Middle Dale (Annandale) LCT Cumulative Assessment

3.2 Landscape Designations

27. The EIA Report Chapter 5 LVIA found that there would be no potential for significant effects on landscape designations from the Proposed Development. Based on the above ZTV and viewpoint analysis, the locations of Scoop Hill Community Windfarm and Daer Windfarm in relation to the Proposed Development and the landscape designations would not create the potential for any significant cumulative effects that included the Proposed Development.

3.3 Visual Amenity

28. The analysis and conclusions in **Section 2** of this appendix show that the main potential for significant cumulative effects would arise between Scoop Hill Community Windfarm and the Proposed Development to the east and south east of the Site. This would include the following visual receptors identified in the EIA Report:
- Visual Receptor Group: Parkgate/Kirkland/Burrance;
 - Visual Receptor Group: Annadale - Nethermill, Templand, Johnstonebridge, Torthorwald;
 - Users of the A701; and
 - Walkers along the Annandale Way.
29. An assessment of the potential cumulative effects on these visual receptors is provided in **Tables B3.2-B3.5**. The assessment of the Proposed Development is repeated from the EIA Report for ease of reading.

Visual Receptor Group: Parkgate, Kirkland, and Burrance	
Distance and Direction from nearest Proposed Turbine:	3.5-4.5 km south east
Baseline description	
This is community area which largely includes properties along the A701, in particular the cluster of properties at Parkgate and those around the Burrance area, connected by a network of minor roads and tracks. Those on the northern side of the A701 tend to be tucked into the side of the foothills, with their main outlook to the south east. To the south of the A701 roads and properties are often within large areas of woodland or shelterbelts. The Parkgate area has a slightly more open aspect but views curtailed to the north by the adjacent foothills. Effects on the users of the A701 is assessed separately in Table 5.18 .	
Relevant Representative Viewpoints:	Viewpoint 2: A701 Kirkland Viewpoint 3: West of Parkgate
Landscape Character Type/Designation:	Upland Fringe – Ae unit
Value	Susceptibility
Medium: The views experienced from visual receptors in these areas is generally of the locally valued settled dales landscape, with many properties and roads positioned on the lower slopes orientated to the south east to take in panoramic views across the Dales to the upland landscape beyond.	High: Local residents, as the primary receptor within this area, are considered to have a High susceptibility to wind development as they have potential to experience views for long periods of time.
Sensitivity	
High-Medium	
Assessment	
Magnitude of change	
The visualisations for Viewpoint 2 at Kirkland, and Viewpoint 3, West of Parkgate (Figures 5.12 and 5.13) show that the proximity of this area to the edge of the Foothills screens visibility of the full extent of the Proposed Development to varying degrees, in addition to screening by forestry and local woodland, so that the scale of effect is Low. At Parkgate, only Turbine 01 would be visible in full, and blades of Turbine 02, with forestry	

screening the other turbines. Slightly further north at Kirkland, only Turbine 05 would be particularly noticeable, appearing from behind the outer slopes of the foothills. There is very limited visibility of the operational Harestanes Windfarm from this area due to the intervening landform. The visible proposed turbines would be noticeable due to the scale contrast against the landform but would only slightly alter the composition of the overall views available from this area and would not be visible within the panoramic views to the south east, which are the main focus of many of views from this area.

The Proposed Development would introduce a small number of large scale wind turbines that would be largely screened in views by the foothills landform which contain this area. The scale of effect is considered to be Low, and over a localised (low) extent. The subsequent magnitude of change is Low.

Significance of effect
Moderate-Minor and not significant.

Cumulative Assessment

Daer Windfarm
Daer Windfarm would not be visible from this receptor group and as such there would be no potential for significant cumulative effects.

Scoop Hill Community Windfarm
Viewpoints 2 and 3 that represent this group do not include any visibility of Scoop Hill Community Windfarm. However, it is understood through ZTV analysis that within the wider area covered by this Visual Receptor Group that there would be potential for visibility of Scoop Hill Community Windfarm in combination or sequentially with the Proposed Development. Scoop Hill Community Windfarm would be approximately 10 km at closest to the north east of the receptor group, such that it would be directly ahead of travellers in this direction on the A701 and local roads. This is illustrated in Viewpoint 10, A701 South of Ae Bridgend (**Figure B7**). In these views, Scoop Hill Community Windfarm would sit separately and distant to the settled dales area and the Ae Foothills where the Proposed Development is located, but nonetheless would become a feature on the skyline due to the number, height and density of its wind turbines. However, as described in the baseline, the large areas of woodland and shelterbelt within and surrounding this receptor group would preclude many open and/or long duration views of Scoop Hill Community Windfarm in combination or sequentially with the Proposed Development.

The Proposed Development in addition to or in combination with Scoop Hill Community Windfarm would have the potential to increase the perception of windfarms as a characteristic of views in the area but due to distance and the screening from vegetation cover, the scale of cumulative effect is considered to be Low over a localised (low) extent. The subsequent magnitude of change is Low. As the receptor group has a High-Medium sensitivity, the significance of cumulative effect is considered **Moderate-Minor and not significant**.

Table B3.2 – Parkgate, Kirkland and Burrance Visual Receptor Group – Cumulative Assessment

Visual Receptor Group - Annandale between A701 and A74(M)	
Distance and Direction from nearest Proposed Turbine:	3.5-10 km south east
Baseline description	
This area includes the network of local roads, including the B7040, and residents within Nethermill, Templand, and Johnstonebridge, as well as more dispersed settlement across the Annandale area between the A701 and motorway, including the settled lower slopes of the Torthorwald Ridge. The gently rolling and treed nature of Annandale precludes constant open long distant views out to the wider landscape, with many of the dispersed properties, hamlets and small villages particularly enclosed by woodland and shelterbelt planting.	
Relevant Representative Viewpoints:	Viewpoint 9: B7040 Chapel Wood Viewpoint 16: West of Templand Viewpoint 17: Sheildhill
Landscape Character Type/Designation:	Middle Dale – Annandale Unit Upland Fringe – Torthorwald Unit

Value	Susceptibility
Medium: The views experienced from visual receptors in these areas is generally of the locally valued settled dales landscape,	High: Local residents, as the primary receptor within this area, are considered to have a High susceptibility to wind development as they have potential to experience views for long periods of time.
Sensitivity	
High-Medium	
Assessment	
Magnitude of Change	
The ZTV illustrates that the majority of visual receptors within middle and lower Annandale, that lie between 3.5 km and 10 km from the Site, would have potential visibility of the Proposed Development. In reality, this is much reduced and restricted by the gently rolling and treed nature of Annandale, particularly to the east and south of the Kinnel Water and Ae Water wooded courses, and more notable areas of woodland in these areas which would filter and screen views.	
Viewpoints offering clear visibility of the Site are difficult to find. However, Viewpoint 16 (Figure 5.26) west of Templand and Viewpoint 9 (Figure 5.19) on the B7040 near Chapel Wood represent these infrequent views and also demonstrate the treed character of the area. The visualisations for Viewpoint 16 (Figure 5.26) illustrate that the Proposed Development would appear as a prominent feature, clearly situated on the horizon within a relatively small proportion of the broad gently undulating foothills. The proposed turbines would be notably larger than the operational Harestanes turbines, although this is minimised by distance and perspective, as well as the generally lower elevation the proposed turbines sit at compared to the operational turbines.	
From the area south east of the Site, the northern turbines of the Proposed Development would potentially lie in front of Queensberry with hubs and blades in the skyline above it. This would have the effect of reducing the scale of the landmark hill, although this is reduced slightly by the perspective with the presence of the intervening foothills which still indicate the hill is a distant feature. The visualisations for Viewpoint 9 (Figure 5.19), which is located slightly further north than Viewpoint 16, show that from settlement east of the Site, visibility of the southern turbines is less likely, and the visible turbines would appear separate to Queensberry in the views.	
Travelling on the network of local roads across Annandale, including the B7020, it is likely that the Proposed Development would be intermittently noticeable as most of the routes are lined by trees and hedgerows.	
For visual receptors in the Annandale area, up to but generally within 8km, it is considered the Proposed turbines would be prominent features on the backdrop that the foothills provide in available views to the north, increasing the influence of windfarms, but clearly associated within the large scale, broad forested foothills with operational windfarms. The scale of effect would vary from Medium across a medium extent of the closer more open areas to a Low scale of effect across localised (low) extent of the rest of the area where it would be noticeable but not a key feature of the view. The magnitude of change would be Medium (within approximately 8 km) reducing to Low.	
Significance of Effect	
Major-Moderate and significant within approximately 8 km, reducing to Moderate-Minor and not significant beyond.	
Cumulative Assessment	
<i>Daer Windfarm</i> The viewpoint wireline analysis illustrated that Daer Windfarm would have very limited visibility from this receptor group and as such there would be no potential for significant cumulative effects.	
<i>Scoop Hill Community Windfarm</i> Scoop Hill Community Windfarm would lie within 5 km at closest to the north east of this receptor group. Viewpoints 9 and 16 (Figures B6 and B11) illustrate that where the characteristic woodland, trees and hedgerows do not obscure the view, Scoop Hill Community Windfarm would be a prominent feature across a	

large proportion of the horizontal view. The gently undulating landform, as shown by the wireline in **Figure B11** for Viewpoint 16 would also screen parts of Scoop Hill Community Windfarm.

The Proposed Development in addition to, or in combination with, Scoop Hill Community Windfarm would increase the presence of large scale turbines in relatively close proximity to the area, seen successively at a stationary viewpoint, and sequentially when travelling through the landscape in this area. The Proposed Development would be viewed associated with an area already characterised by windfarms, whereas Scoop Hill Community Windfarm would be introducing wind development into a new part of the view and as such would create a greater level of effect on its own than in combination with the Proposed Development.

The scale of cumulative effect is considered to be Medium, and over a medium extent of the whole area. The subsequent magnitude of change is Medium. As the receptor group has a High-Medium sensitivity, the overall significance of cumulative effect is considered **Moderate and significant**.

Table B3.3 – Annandale between A701 and A74(M) Visual Receptor Group – Cumulative Assessment

Transport Routes – A701	
Distance and Direction from nearest Proposed turbine:	3.5 km south east
Route description	
The A701 is the main route between Dumfries and Junction 15 of the A74(M) south of Moffat. It generally lies in a north east/south west direction with some sections directly north/south. Travelling from the northern end, south to Dumfries, the first part of the route for approximately 12 km is orientated north/south and very enclosed by dense broadleaved woodland along either side of the road. South of Raehills the A701 changes direction to a north east/south west orientation and it is generally more open in character but with smaller woodland blocks, and roadside hedgerows limiting extensive views.	
Relevant Representative Viewpoints:	Viewpoint 4 – A701 Raehills Viewpoint 2 – A701 Kirkland Viewpoint 10 – A701 south of Ae Bridgend
Landscape Character Type/Designation:	Middle Dale – Annandale unit Upland Fringe – Ae unit Lower Dale – Nithsdale unit
Value	Susceptibility
Medium: The views experienced from the road is primarily of the locally valued settled dales landscape.	Medium: Travellers on roads gain transient views, particularly on this busy and fast A road.
Sensitivity	
Medium	
Assessment	
Magnitude of Change	
Travelling south, there would be limited opportunities to see the Proposed Development except for the occasional glimpsed view, as illustrated by Viewpoint 4 at Raehills (Figure 5.14). Travelling north from Dumfries, the orientation of the road is generally north/south and as such the stretch of road from Locharbriggs to Ae Bridgend, for approximately 5km has potential for direct views of the Proposed Development. Within this stretch, between Locharbriggs and Amisfield, settlement and roadside vegetation would interrupt direct views, but north of Amisfield it becomes more open. This is illustrated by Viewpoint 10 just south of Ae Bridgend (Figure 5.20). The Proposed Development would be seen as a prominent feature within the foothills, partially screened by the perimeter foothills so that it would appear set back from the exterior. Views towards the Site from the A701 as it runs parallel to the Site between Ae Bridgend and St Anns are limited due to the orientation of travel, roadside vegetation and settlement. Viewpoint 2 (Figure 5.12) represents the view from the A701 near Kirkland which illustrates the screening by woodland and the perimeter foothills.	
Overall, the potential for visibility of the Proposed Development from the A701 is limited to a short stretch between Amisfield and Ae Bridgend (approximately 3 km in length) when travelling north. These views also	

include some visibility of the operational Harestanes Windfarm, although it is not particularly noticeable. There is potential for Dalswinton to be seen obliquely from the southern extents of the road. No other windfarm sites are notably visible from the A701.

The Proposed Development would introduce a medium scale of effect to the views from a localised (low) extent of the route which would result in a Medium-Low magnitude of change. Elsewhere along the route the scale of effect would reduce to negligible.

Significance of Effect

As users of the A701 would have a medium sensitivity, the significance of effect is considered **Moderate-Minor** and **not significant**. This would be within a localised extent of the route, with negligible effects across the remaining route.

Cumulative Assessment

Daer Windfarm

The viewpoint wireline analysis illustrated that Daer Windfarm would have very limited visibility from this receptor group and as such there would be no potential for significant cumulative effects.

Scoop Hill Community Windfarm

Scoop Hill Community Windfarm would lie directly ahead of the A701 alignment when travelling north east from Ae Bridgend to St Ann's. Whilst Scoop Hill Community Windfarm is close to the A701 north of St Ann's, the wooded and enclosed nature of the route at this point would prevent any clear and open views towards it.

Viewpoint 10 (**Figure B7**) illustrates the potential view south of Ae Bridgend on the A701. This shows that Scoop Hill Community Windfarm would be noticeable on the distant upland backdrop although the roadside hedgerows and trees would screen some of the windfarm. It is likely that for most of the aforementioned extent of the A701 some of the Scoop Hill Community Windfarm turbines would always be potentially visible, but the treed nature of the surroundings and the undulating landform would likely prevent full open views. The Proposed Development would be more prominent due to closer proximity, but in the context of the operational wind turbines.

The Proposed Development in combination with Scoop Hill Community Windfarm would increase the perception of windfarms as a feature of views when travelling along this relatively short stretch of the A701. The scale of cumulative effect is considered to be Medium from a localised (low) extent of the route which would result in a Medium-Low magnitude of change.

As users of the A701 would have a medium sensitivity, the significance of cumulative effect is considered **Moderate-Minor and not significant**. This would be within a localised extent of the route, with negligible effects across the remaining route.

Table B3.4 - Transport Routes A701 – Cumulative Assessment

Recreational Route – Annandale Way	
Distance and Direction from nearest Proposed Turbine:	4.5 km east
Route Description	
The Annandale Way is a 90 km route that starts in the Moffat Hills in the north and follows the River Annan to the Solway Estuary at Annan. It is split into five walks which are discussed in the assessment section below.	
Relevant Representative Viewpoints:	Viewpoint 4 – A701 Raehills Viewpoint 8 – Roman & Reivers Route, Beattock Viewpoint 9 – B7040 Chapel Wood Viewpoint 14 – A701, south of Devil's Beef Tub Viewpoint 19 – Hightae
Landscape Character Type/Designation:	Middle and Lower Dales – Annandale units Southern Uplands – Moffat Hills unit Moffat Hills RSA

Value	Susceptibility
High-Medium: The Annandale Way encompasses a variety of landscapes from the dramatic Devil's Beef Tub to the more settled dales.	Medium: The susceptibility of users to the Proposed Development would relate to the infrequent but valued views out to the wider landscape which contrast with the largely enclosed nature of the Annan river valley.
Sensitivity	
High-Medium	
Assessment	
Magnitude of Change	
<ul style="list-style-type: none"> Moffat - Devil's Beef Tub loop This northern part of the walk is a loop around The Devil's Beef Tub from Moffat, which includes Spout Craig (565 m AOD) which lies at the western edge of the Talla Hart Fell Wild Land Area. The ZTV illustrates that the majority of this section of the Annandale Way would have no visibility of the Proposed Development due to the valley location except from the more elevated sections largely between Great Hill (466 m AOD) and Spout Craig, and as it descends towards Ericstane, approximately 20 km from the Proposed Development. From these areas the Proposed Development would appear largely behind the operational Minnygap and Harestanes Windfarms, with blade tips at a similar elevation. It would increase the density of turbines within the view, but within the operational windfarm extents. It is considered there would be a Negligible scale of effect along this section of the route. Moffat to Raehills The northern end of this part of the route is along the same section as the Roman and Reivers Route and the Southern Upland Way. Viewpoint 8 (Figure 5.18) illustrates the view from some of the more open parts of the route, where the Proposed Development would lie partially behind the operational Minnygap and Harestanes turbines, appearing with blade tips at a similar elevation, with much of the towers screened by landform. The scale difference of the turbines would not be particularly noticeable, and the Proposed Development would appear as part of the operational array. As the route travels to Raehills, it follows the Kinnel Water through the wooded valley floor where there would be no visibility of the Proposed Development. It is considered that there would be a Low to Negligible scale of effect along this section of the route. Raehills to Lochmaben or Lockerbie South of Raehills the Annandale Way runs through forestry parallel with the B7020 gradually getting closer to the River Annan, where south of Templand, it splits with routes to Lockerbie and routes to Lochmaben. Most of the route in this section is on low lying or gently rolling land, enclosed by the abundance of woodland and trees characteristic of the area. There are glimpsed views out to the wider landscape as illustrated by Viewpoint 9 (Figure 5.19) on the B7020 where the Annandale Way crosses, and also Viewpoint 16 (Figure 5.26) near Templand. In these views the Proposed Development would appear as a prominent feature on the foothills, notably larger than the operational Harestanes turbines. Views in and around Lochmaben and Lockerbie would be limited due to the settlement and woodland pattern. The scale of effect along this section of the route is considered to be Medium within localised parts of the route to negligible elsewhere, resulting in a Medium-Low magnitude of change along this section of the route. Lochmaben or Lockerbie to Hoddom Bridge The Annandale Way runs south from Lochmaben and separately from Lockerbie to meet at Hoddom Bridge, west of Ecclefechan. Views out to the wider landscape continue to be limited. The western route from Lochmaben travels through Hightae which is represented by Viewpoint 19 (Figure 5.29), approximately 15 km south east of the Proposed Development, where a low scale of effect was assessed. This would not be a typically consistent view along this section of the route, so that a Low scale of effect would occur within a very limited (negligible) extent of this section of the route, resulting in a Low magnitude of change. Hoddom Bridge to Solway Firth The southern most section of the Annandale Way travels through Annan to the Solway Firth. The ZTV indicates intermittent visibility along this section, which lies at between 20-30 km from the Proposed Development, would 	

be further limited by vegetation and settlement pattern. There would be a Negligible to no scale of effect along this section.
<ul style="list-style-type: none"> Annandale Way – Overall The nature of the Annandale Way is that it follows the river valleys which, except for the northern end within the Moffat Hills, are generally enclosed through landform and vegetation and views out to the wider landscape are infrequent. Between Beattock and Lochmaben/Lockerbie there would be the most potential for opportunities to see the Proposed Development, albeit intermittently, where it would be a noticeable feature within the context of the operational windfarms and within a relatively narrow proportion of the overall views available. The overall magnitude of change would vary across the route from Medium-Low between Raehills and Lochmaben to Low-Negligible elsewhere
Significance of Effect
As users of this route are considered to have a High-Medium sensitivity, the significance of effect would be at most Moderate and significant for the Raehills to Lochmaben section, and Minor-Negligible and not significant elsewhere.
Cumulative Effects
<p><i>Daer Windfarm and Scoop Hill Community Windfarm</i></p> <p>Scoop Hill Community Windfarm has potential to be visible from much of the Annandale Way from Devil's Beef Tub to Hoddom Bridge. Daer Windfarm would also be notably visible at the northern stretches from Devil's Beef Tub to Raehills. The Proposed Development in combination with Scoop Hill Community Windfarm and Daer Windfarm would increase the potential for views, either successively or sequentially, of windfarms from approximately two thirds of the Annandale Way, albeit the Proposed Development would be in the context of the operational windfarms and within a relatively narrow proportion of the overall views available.</p> <p>Overall, the scale of sequential cumulative effect is considered to be Medium from a medium extent of the route (Devil's Beef Tub and Hoddom Bridge), largely attributed to the Scoop Hill Community Windfarm due to its closer proximity to a longer extent of the Annandale Way. The scale of effect also takes into account the enclosure of parts of the route by vegetation and landform, which would result in an overall Medium magnitude of change.</p> <p>As users of the Annandale Way would have a high-medium sensitivity, the significance of sequential cumulative effect is considered at most Moderate and significant for the section between Devil's Beef Tub and Hoddom Bridge reducing to Minor to Negligible and not significant elsewhere.</p>

Table B3.5 – Recreational Routes: Annandale Way – Cumulative Assessment

4 Lighting Effects

- Scoop Hill Community Windfarm and Daer Windfarm would introduce a considerable number of light sources into areas which are currently unlit, particularly Daer Windfarm's location within the darker Lowther Hills part of the Southern Uplands. Scoop Hill Community Windfarm would lie closer to the A(74)M road and rail corridor which would have slightly more light sources.
- The addition of the Proposed Development's turbine aviation lighting would add another area of lights in an unlit landscape, although moderated by the close influence of light sources associated with the settlements and transport corridors to the east. In combination, the Proposed Development, Scoop Hill Community Windfarm and Daer Windfarm would have the potential to create significant cumulative effects on landscape and visual receptors within the general north east part of the Study Area. However, less influenced by the few lit turbines of the Proposed Development and largely as a result of the 74 Scoop Hill Community Windfarm turbines, and Daer Windfarm's more remote upland location.

5 Summary

45. This appendix has found that the potential for significant cumulative effects of the Proposed Development on landscape and visual receptors in addition to or in combination with Daer Windfarm are unlikely due to the upland landscape that separates the Sites and limits wider visibility of them both together.
46. Significant cumulative effects from the Proposed Development in addition to or in combination with the Scoop Hill Community Windfarm were identified for the Middle Dale – Annandale LCT to the south and south east of the Proposed Development, and visual receptors within this area, notably local residents and users of the Annandale Way. This is moderated by the treed nature of the landscape, and the Proposed Development's location within the context of the operational windfarms, noting the main cumulative effects would arise from the much larger and prominent Scoop Hill Community Windfarm.
47. Sequential cumulative effects from the Proposed Development and Scoop Hill Community Windfarm, and to a lesser extent Daer Windfarm, would be limited to walking or driving within the Annandale area where the characteristic treed nature of the area does not preclude views. The Proposed Development would be mostly seen in the context of the operational windfarms when moving through this area, with Scoop Hill Community Windfarm a more noticeable and continuous presence in sequential views due to its size and location.

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