



# **Cloich Forest Wind Farm**

Project Comparison Report
June 2021



### Prepared By:

## **Arcus Consultancy Services**

7th Floor 144 West George Street Glasgow G2 2HG

**T** +44 (0)141 221 9997 | **E** info@arcusconsulting.co.uk **w** www.arcusconsulting.co.uk

Registered in England & Wales No. 5644976



### **TABLE OF CONTENTS**

1	INTR	INTRODUCTION					
	1.1	Introduction	2				
	1.2	Need for the Development	3				
2	СОМ	PARISON OVERVIEW	5				
	2.1	Summary Comparison Table	5				
	2.2	Subject Areas with No Notable Change	8				
3	LANI	OSCAPE AND VISUAL EFFECTS COMPARISON	13				
4	ARCI	ARCHAEOLOGY AND CULTURAL HERITAGE EFFECTS COMPARISON					
	4.1	Comparison of Predicted Archaeology and Cultural Heritage Effects	36				
	4.2	Analysis of Predicted Significant Heritage Effects Between Consented Scheme and the Development	45				
	4.3	Summary of Heritage Changes in Effect	49				
5	SUM	MARY	50				
APP	ENDIX	1 – COMPARATIVE ZTV	51				
ΔΡΡΙ	ENDIX :	2 – CULTURAL HERITAGE WIRELINES	52				



#### 1 INTRODUCTION

#### 1.1 Introduction

This Project Comparison Report (PC Report) has been prepared by Arcus Consultancy Services Ltd (Arcus) and LUC (Land Use Consultants) to accompany the application (including the Environmental Impact Assessment Report (EIA Report)) by Cloich Windfarm Partnership LLP ('the Applicant'), wholly owned by EDF Energy Renewables Limited, for consent to install and operate Cloich Forest Wind Farm and associated infrastructure with a generation capacity exceeding 50 megawatts (MW) ('the Development'). The Development comprises up to 12 wind turbines and associated infrastructure, and a Battery Energy Storage System (BESS). The Development is located within the Cloich Forest estate approximately 5.5 kilometres (km) north-west of Peebles ('the Site'). The Development represents a re-design of the consented Cloich Forest Wind Farm ('the Consented Scheme'), which was granted S36 consent and deemed planning permission following a Public Local Inquiry (PLI), on 8 July 2016 (Planning and Environmental Appeals Division (DPEA) Reference: WIN-140-1).

The Consented Scheme was granted consent based on the design and proposals contained within the 2014 Supplementary Environmental Information (2014 SEI); the 2014 SEI was supplementary to the 2012 Environmental Statement (2012 ES).

This PC Report compares the predicted effects of the Development against the Consented Scheme. Table 1.1 below summarises the key Consented Scheme and the Development parameters.

Table 1.1: Key Parameters

Tubic 1111 Key Furumetere						
Key Parameter	Consented Scheme	The Development				
Maximum No. of Turbines	18	12				
Approximate Capacity (MW)	54	57				
Maximum Tip Height (m)	115	149.9				

The Consented Scheme and the Development turbine layouts are shown on Figure 2.3a-b of the EIA Report.

The PC Report compares the areas of assessment undertaken for the Development and the Consented Scheme to highlight any changes in the residual significance of effects following mitigation, between the two assessments. This is included in Section 2.1 through a summary comparison table. In response to the requests made within the Scoping Opinion more detailed commentary is provided with regard to Landscape and Visual Impact Assessment (LVIA) and Archaeology and Cultural Heritage, respectively. It should be noted that the both the 2012 ES and 2014 SEI were written under previous guidance when compared to the EIA Report; therefore, findings may differ as a result of the change in assessment guidance.

Note that since the EIA was prepared for the Consented Scheme, the approaches taken to various assessments have been refined and developed, taking on board new guidance as it has been published, as well as applying experience gained through working on other projects. Approaches that were common in 2012-4 have developed and further scrutiny is now given to the way effects are determined. Greater precision is also applied in explaining them. As such, comparison of effects using simple word scales leaves aside the nuances of the changes. Where possible, accompanying summary information is provided to explain reasons for differences in judgements. Reference should also be made to the full EIA documentation for each scheme.



#### 1.2 Need for the Development

As detailed in the Planning Statement, in May 2019 the Committee on Climate Change (CCC) published *Net Zero – The UK's Contribution to Stopping Global Warming*<sup>1</sup>. This report responds to a request from the Governments of the UK and Devolved Administrations of Wales and Scotland, asking the Committee to reassess the UK's long-term emissions targets. The report recommends a new emissions target for the UK: net zero gases by 2050, and recommends a 2045 net-zero target for Scotland to reflect Scotland's greater relative capacity to remove emissions than the UK as a whole. The report highlights the falling cost of key renewable technologies, which is now generally comparable or lower cost than power generated from fossil fuels, while bringing significant co-benefits such as reduced air pollution.

Additionally, in spring 2019, a 'Climate Emergency' was declared in Scotland by the Scottish Government<sup>2</sup>. In response, the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019<sup>3</sup> was enacted. This Act builds upon the previous Climate Change (Scotland) Act 2009<sup>4</sup> by amending carbon reduction targets for Scotland; the 2019 Act sets out a legally binding net zero target for 2045, with interim targets for 2020, 2030, and 2040.

In order to meet the new targets enshrined in law, there is a need to increase wind energy production and utilise ever-improving wind energy technology. This urgency is supported by the CCC, as on 9 December 2020, the CCC released *The Sixth Carbon Budget*<sup>5</sup> which updates intermediary targets for the UK's progress to net zero:

"Our recommended pathway requires a 78% reduction in UK territorial emissions between 1990 and 2035. In effect, it brings forward the UK's previous 80% target by nearly 15 years. There is no clearer indication of the increased ambition implied by the Net Zero target than this."

The report concluded:

"The implication of this path is clear: the utmost focus is required from government over the next ten years. If policy is not scaled up across every sector; if business is not encouraged to invest; if the people of the UK are not engaged in this challenge – the UK will not deliver Net Zero by 2050."

Since the design of the Consented Scheme in October 2012 and the submission of SEI in January 2014, there have been changes in government financial support for renewables and turbine technology, prompting the Applicant to review the Consented Scheme. Technology advances in wind turbine development have resulted in significantly more productive turbines with relatively minor increases in turbine dimensions that are able to produce lower cost renewable electricity.

It is necessary for onshore wind farms to be designed to maximise yield and efficiency within acceptable environmental and planning parameters. Improving site yield is often achieved through utilisation of the most modern wind turbine technology and use of larger wind turbines. As such, the Development allows for an increase in turbine tip

<sup>&</sup>lt;sup>1</sup> Committee on Climate Change (2019) Net Zero – The UKs contribution to stopping global warming [Online] Available at: <a href="https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/">https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/</a> (Accessed 11/06/2021)

<sup>&</sup>lt;sup>2</sup> Scottish Government (2019) The Global Climate Emergency - Scotland's Response: Climate Change Secretary Roseanna Cunningham's statement. [Online] Available at <a href="https://www.gov.scot/publications/qlobal-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/">https://www.gov.scot/publications/qlobal-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/</a> (Accessed on 11/06/2021)

<sup>&</sup>lt;sup>3</sup> Scottish Government (2019) Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 [Online] Available at: <a href="http://www.legislation.gov.uk/asp/2019/15/enacted">http://www.legislation.gov.uk/asp/2019/15/enacted</a> (Accessed on 11/06/2021)

<sup>&</sup>lt;sup>4</sup> Scottish Government (2009) Climate Change (Scotland) Act 2009 [Online] Available at: http://www.legislation.gov.uk/asp/2009/12/contents (Accessed 11/06/2021)

<sup>&</sup>lt;sup>5</sup> The CCC (2020) *The Sixth Carbon Budget: The UK's path to Net Zero* [Online] Available at: <u>The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf</u> (Accessed 11/06/2021)



heights when compared to the Consented Scheme and a reduction in turbine numbers from  $18\ \text{to}\ 12.$ 



#### 2 COMPARISON OVERVIEW

#### 2.1 Summary Comparison Table

Table 2.1 overleaf outlines the subject areas of both the 2014 SEI (Consented Scheme) and the EIA Report (the Development); where the 2014 SEI did not provide an update to the 2012 ES, the findings of the 2012 ES are drawn upon. It should be noted that as the 2014 SEI and the EIA Report were written by different authors the chapter titles, and therefore subject areas, in some instances do not share the exact same titles. The subject areas named in Table 2.1 follow that of the EIA Report.

Those subject areas highlighted in green are discussed in Section 2.2 of this PC Report; and those subject areas highlighted in blue are discussed in further detail in the Sections following Section 2 of this PC Report.

Headline residual significance findings for the Development which represent a change in comparison to the Consented Scheme are highlighted in **bold text** within Table 2.1.



Table 2.1: Summary Comparison Table

Table 2.1. Sulli	Hary Companison is		
Subject Area (2021 EIA Report	2014 SEI Location 2012 ES Location		Headline Residual Significance Findings (Significant or Not Significant)
Location)			Consented Scheme The Development
Landscape and Visual Impact Assessment (Chapter 5)	Chapter 7: Landscape and Visual Effects	Chapter 7: Landscape and Visual Effects	<ul> <li>Significant landscape effects identified.</li> <li>Significant visual effects identified.</li> <li>Significant cumulative landscape and visual effects identified.</li> <li>Significant visual effects identified.</li> <li>Significant visual effects identified.</li> <li>No Significant cumulative landscape or visual effects identified.</li> </ul>
Archaeology and Cultural Heritage (Chapter 8)	Chapter 8: Cultural Heritage and Archaeology	Chapter 8: Cultural Heritage and Archaeology	<ul> <li>Significant setting effects on cultural heritage assets.</li> <li>No significant direct effects on known assets.</li> <li>No significant direct effects on unknown assets.</li> <li>Significant setting effects on cultural heritage assets.</li> <li>No significant direct effects on known assets.</li> <li>No significant direct effects on unknown assets.</li> </ul>
Ecology (Chapter 7)	Chapter 9: Ecology	Chapter 9: Ecology	No Significant effects identified.     No Significant effects identified.
Ornithology (Chapter 8)	Chapter 10: Ornithology	Chapter 10: Ornithology	<ul> <li>No Significant effects identified.</li> <li>No Significant effects identified.</li> </ul>
Geology, Ground Conditions and Peat (Chapter 9)	Chapter 5: Climate Change and Carbon Balance (Including Peat) Chapter 11: Geology, Hydrology and Hydrogeology	Chapter 5: Climate Change and Carbon Balance (Including Peat) Chapter 11: Geology, Hydrology and Hydrogeology	No Significant effects identified.     No Significant effects identified.
Hydrology and Hydrogeology (Chapter 10)	Chapter 11: Geology, Hydrology and Hydrogeology	Chapter 11: Geology, Hydrology and Hydrogeology	No Significant effects identified.     No Significant effects identified.



Subject Area (2021 EIA Report	2014 SEI Location 2012 ES Location		Headline Residual Si (Significant or N			
Location)			Consented Scheme	The Development		
Noise (Chapter 11)	Chapter 12: Noise and Vibration	Chapter 12: Noise and Vibration	No Significant effects identified.	No Significant effects identified.		
Access, Traffic and Transportation (Chapter 12)	Chapter 13: Access, Traffic and Transportation	Chapter 13: Access, Traffic and Transportation	No Significant effects identified.	No Significant effects identified.		
Forestry (Chapter 13)	Chapter 4: Development Description	N/A	Significance on the forestry resource not concluded.	No Significant effects identified.		
Aviation & Radar (Chapter 14)	N/A	Chapter 4: Development Description (Appendix 4.2)	No Significant effects identified.	No Significant effects identified.		
Socio-Economics, Land Use, Recreation and Tourism (Chapter 15)	Chapter 14: Socio- Economics	Chapter 14: Socio- Economics	No Significant effects identified.	No Significant effects identified.		
Climate Change and Carbon Balance (Chapter 16)	Chapter 5: Climate Change and Carbon Balance (Including Peat)	Chapter 5: Climate Change and Carbon Balance (Including Peat)	Significance on the Climate Change and Carbon Balance not concluded.	<ul> <li>Significant (positive) effect on climate change/carbon saving, both individually and cumulatively.</li> <li>No significant effects on environmental receptors.</li> </ul>		
Other Issues (Shadow Flicker, Telecommunications & Utilities, and Health & Safety ((Including: Major Accidents & Disasters)) (Chapter 17)	Chapter 4: Development Description Chapter15: Shadow Flicker	Chapter 4: Development Description Chapter15: Shadow Flicker	No Significant effects identified.	No Significant effects identified.		



#### 2.2 Subject Areas with No Notable Change

Those subject areas highlighted in green in Table 2.1 represent no notable change between the residual significance of findings between the Consented Scheme and the Development. Section 2.2.1 onwards provide a short analysis statement of the following subject areas:

- Ecology;
- · Ornithology;
- Geology, Ground Conditions and Peat;
- Hydrology and Hydrogeology;
- Noise;
- Access, Traffic and Transportation;
- Forestry;
- Aviation & Radar;
- Socio-Economics, Land Use, Recreation and Tourism;
- Climate Change and Carbon Balance; and
- Other Issues (Shadow Flicker, Telecommunications & Utilities, and Health & Safety ((Including: Major Accidents & Disasters)).

LVIA and Archaeology & Cultural Heritage are discussed in Sections 3 and 4, respectively.

#### 2.2.1 Ecology

A comparison has been made between predicted effects on Important Ecological Features (IEFs) identified in the 2012 ES and 2014 SEI for the Consented Scheme and the EIA Report for the Development.

Results and predicted effects on IEFs for the Consented Scheme and the EIA Report for the Development are very similar, with no significant effects predicted for any IEFs as part of either assessment.

#### 2.2.2 Ornithology

A comparison has been made between predicted effects on Important Ornithological Features (IOFs) identified in the 2012 ES and 2014 SEI for the Consented Scheme and the EIA Report for the Development.

The Consented Scheme predicted slight disturbance effects on goshawk during the construction and operational phases and slight collision effects on goshawk during the operational phase with no significant effects for all other species considered. The EIA Report for the Development predicted no significant effects for all species considered following implementation of a Breeding Bird Protection Plan (BBPP) to mitigate potential disturbance effects on goshawk and crossbill.

Otherwise, results and predicted impacts for the Consented Scheme and the EIA Report for the Development are very similar.

#### 2.2.3 Geology, Ground Conditions and Peat

A comparison has been made between the predicted effects on the geology, ground conditions and peat resources identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

The Consented Scheme and the Development are very similar developments, with both requiring the approximately a similar hectarage of operational land take ( $\sim$ 15 hectares (ha) and  $\sim$ 17 ha, respectively). Further, baseline conditions remain broadly similar.

The 2012 ES, 2014 SEI, and the EIA Report identified no significant effects and predicted impacts are very similar.



#### 2.2.4 Hydrology and Hydrogeology

A comparison has been made between the predicted effects on the hydrology and hydrogeology resources identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

The Consented Scheme and the Development are very similar developments, as such both developments result in similar effects on hydrology and hydrogeology; however, it is worthwhile noting that the Development requires significantly less foundation excavation due to the drop in turbine numbers (from 18 to 12). This reduction presents as a benefit in terms of impact on hydrology including groundwater.

With regard to Private Water Supplies (PWS), both the residual PWS effects for the Consented Scheme and the Development are not significant.

The 2012 ES, 2014 SEI, and the EIA Report identified no significant effects and predicted impacts are very similar.

#### 2.2.5 Noise

A comparison has been made between noise immission levels presented in the 2012 ES and the 2014 SEI for the Consented Scheme and the EIA Report for the Development.

Table 2.2 below details the difference between predicted noise immission levels presented in the 2012 Environmental Statement, the 2014 SEI, and the Development. A negative margin indicates that the predicted noise level for the Development is less than that of the 2012 ES, or the 2014 SEI.

Table 2.2: Difference between Predicted Turbine Noise for the Consented

Scheme and the Development

		Sta	ndardis	ed Wind	d Speed	at 10 r	n AGL, ı	ms <sup>-1</sup>	
Receptor	4	5	6	7	8	9	10	11	12
		Diff	ference	Relativ	e to the	Develo	pment	, dB	
2012 ES									
Cloich Farm	-	-4.1	-3.5	-4.5	-4.8	-4.8	-4.8	-4.8	-4.8
Harehope Farm	-	-2.7	-2.1	-3.1	-3.4	-3.4	-3.4	-3.4	-3.4
Nether Stewarton	-	-1.6	-1.0	-2.0	-2.3	-2.3	-2.3	-2.3	-2.3
Ruddenleys	-	-3.5	-2.9	-3.9	-4.2	-4.2	-4.2	-4.2	-4.2
Upper Stewarton	-	-1.5	-0.9	-1.9	-2.2	-2.2	-2.2	-2.2	-2.2
2014 SEI									
Cloich Farm	-3.3	-0.9	0.6	-0.5	-1.4	-1.4	-1.4	-1.4	-1.4
Harehope Farm	-5.7	-3.3	-1.8	-2.9	-3.8	-3.8	-3.8	-3.8	-3.8
Nether Stewarton	-4.7	-2.3	-0.8	-1.9	-2.8	-2.8	-2.8	-2.8	-2.8
Ruddenleys	-2.7	-0.3	1.2	0.1	-0.8	-0.8	-0.8	-0.8	-0.8
Upper Stewarton	-4.1	-1.7	-0.2	-1.3	-2.2	-2.2	-2.2	-2.2	-2.2

As can be seen, predicted noise levels due to the Development are lower than those of the Consented Scheme 2012 ES at all assessed receptor / wind speed combinations, and lower than the noise levels predicted in the 2014 SEI at the large majority of receptor / wind speed combinations. It should also be noted that worst case noise levels due to the



Development are lower than both the 2012 ES, and the 2014 SEI at all receptors. Consequently, the Development would not exceed the noise limits attached to the Consented Scheme.

The Development is therefore a positive effect relative to the Consented Scheme.

#### 2.2.6 Access, Traffic and Transportation

A comparison has been made between the predicted effects on the access, traffic and transportation resource identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

Results and predicted residual effects, following the implementation of a Traffic Management Plan during construction, for both the Consented Scheme and the Development are very similar, with no significant effects predicted for either assessment.

#### 2.2.7 Forestry

A comparison has been made between the predicted effects on the forestry resource identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

The Consented Scheme and the Development are very similar developments, with both requiring felling to accommodate development construction and operation. Table 2.3 below compares the felling for the two developments.

Table 2.3: Felling Comparison

Felling Parameter	Consented Scheme	The Development
Required Felling (ha)	132.7	200.25
Restock (ha)	103.1	121.42
Compensatory Planting (ha)	14.4	70.62

Whilst a direct comparison is not entirely helpful due to differing baseline conditions, it is clear the Development requires more felling of trees than the Consented Scheme. However, as a result of replanting and compensatory planting forestry effects are not significant and similar to those effects that could be anticipated from the Consented Scheme (albeit the 2014 SEI did not conclude significance).

Further, compensatory planting – of which there is more for the Development – can represent an ecological benefit of the Development. Compensatory planting often includes varying, more native, species which are planted in a non-commercial forestry fashion. Due to the monoculture nature of commercial forestry, it holds little ecological benefit, whereas mixed woodland has a greater ability to provide suitable habitat. Much of the forestry that is attributed to the development is at, or reaching, maturity and would be felled before, or during the lifetime of, the Development in the normal course of forest management.

#### 2.2.8 Aviation and Radar

A comparison has been made between the predicted effects on the aviation and radar resource identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

The Consented Scheme and the Development are very similar developments, with both requiring tall infrastructure which has the potential to affect aviation and radar equipment and receptors. Both the Consented Development and the Development are stated to have no effect on aviation and radar.



With regard to the Eskdalemuir Seismic Array, the Development may exceed its current budget using existing modelling approaches. However, the exceedance is small and current modelling assumptions are being reviewed using updated seismological data from existing wind farms in the Eskdalemuir area; this is likely to confirm available budget for the Development.

#### 2.2.9 Socio-Economics, Land Use, Recreation and Tourism

A comparison has been made between the predicted effects on the socio-economics, land use, recreation and tourism resource identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

With regard to socio-economics, both developments have the potential to generate a range of economic opportunities for local business and community; and no significant effects (positive or adverse) were predicted.

With regard to land use, both developments are similar. As stated in Section 2.2.3, both developments require approximately a similar hectarage of operational land take ( $\sim$ 15 hectares (ha) and  $\sim$ 17 ha, respectively). No significant effects on land use are predicted in respect of either the Consented Development or the Development.

With regard to recreation and tourism, the developments again have very similar impacts due to their similar scale and nature. One significant effect was identified during the construction period of the Development; the significant construction effect was in relation to the Development's effect on the Cross Borders Drove Road. However, following the application of mitigation, in the form of an Access Management Plan, the residual effect is not significant. Therefore, both the Consented Scheme and the Development's effects on recreation and tourism are assessed as not significant.

#### 2.2.10 Climate Change and Carbon Balance

A comparison has been made between the predicted effects on the climate change and carbon balance resource identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

Both developments represent beneficial developments in the context of climate change and the climate emergency, with both offsetting carbon dioxide that would otherwise be produced by carbon-emitting electricity generation. It is not possible to provide a direct comparison between the two developments in terms of carbon savings due to the differing times in which assessments have been undertaken, as well as the difference in megawatt capacities of the developments.

Significance was not concluded in the 2012 ES or 2014 SEI for the Consented Development; however, the EIA Report states a significant (positive) effect on climate change/carbon saving for the Development, both individually and cumulatively alongside other renewable energy developments within the UK.



## 2.2.11 Other Issues (Shadow Flicker, Telecommunications & Utilities, and Health & Safety ((Including: Major Accidents & Disasters)).

A comparison has been made between the predicted effects on the other issues (noted above) identified in the 2012 ES and the 2014 SEI for the Consented Scheme, and the EIA Report for the Development.

The 2012 ES and 2014 SEI for the Consented Scheme did not conclude significance on telecommunications and utilities, and health and safety (including: major accidents and disasters<sup>6</sup>); however, no effects were broadly anticipated in agreement with the findings of the EIA Report for the Development.

No significant shadow flicker effects were identified for either Development.

-

 $<sup>^{6}</sup>$  It is noted that the assessment of Major Accidents and Disasters was not a requirement under EIA Regulations at the time of writing the 2012 ES and 2014 SEI.



#### 3 LANDSCAPE AND VISUAL EFFECTS COMPARISON

The Landscape and Visual Impact Assessment (LVIA) for the Development is set out in Volume 1, Chapter 5 of the EIA Report, with supporting figures in Volume 2b and supporting visualisations in Volume 2c. The LVIA includes the following technical appendices:

- Appendix 5.1 LVIA Methodology;
- Appendix 5.2 Zone of Theoretical Visibility (ZTV) Mapping and Visualisation Methodology; and
- Appendix 5.3 Residential Visual Amenity Assessment (RVAA).

The LVIA methodology has been developed primarily in accordance with the principles contained within the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)<sup>7</sup>. **Moderate** and **major** effects are considered to be significant in the context of the EIA Regulations.

A summary of predicted landscape and visual effects is provided in Section 5.11, Table 5.71 of the LVIA.

#### 3.1.1 Comparison of Predicted Landscape and Visual Effects

The following table provides a comparison of predicted effects as set out in the LVIA for the Development, and the LVIA for the Consented Scheme (18 turbines, 115 m height to tip) contained within the 2014 SEI. Note that the LVIA for the original application (18 turbines, 132 m height to tip)<sup>8</sup> was superseded by that for the Consented Scheme. **Significant effects** are in **bold**.

The LVIA for the Consented Scheme and the LVIA for the Development use different terminology for levels of effects. The term 'substantial' is broadly equivalent to a 'major' effect; and a 'slight' is equivalent to a 'minor' effect. Both assessments use the term 'moderate' for the intermediate grades. 'Moderate', as used in the 2014 SEI was calibrated to lie just below the significance threshold, and 'moderate', as used by LUC in 2021 is considered to lie just above it. Calibrations are therefore slightly different, and professional judgement was applied in making comparisons.

Table 3.1: Comparison of Predicted Landscape and Visual Effects

Receptor	Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)			
Construction Effect	s				
The Site	Significant (None to substantial)	Significant (major)			
Operational Effects on Landscape Character					
The Site	Significant (Substantial)	Significant (major)			
LCT 92: Plateau Outliers	Not Significant (Moderate)	Significant (major)			
LCT 90: Dissected Plateau Moorland	Not Significant (Slight to Slight / Negligible)	Significant (moderate) within the Moorfoot unit up to 7km, reducing to Not significant (minor) in the Pentland Hills unit and Not significant (negligible) elsewhere.			

<sup>&</sup>lt;sup>7</sup> The Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, 3rd Edition. Routledge.

-

 $<sup>^8</sup>$  Partnership for Renewables on behalf of Cloich Wind Farm LLP (October 2012) Cloich Forest Wind Farm Environmental Statement, Volume 1 – Written Statement, Chapter 7 Landscape and Visual Effects



Receptor	Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)
LCT 93: Southern Uplands with Scattered Forest – Scottish Borders	Not Significant (Slight (combined with LCT 95))	Not significant (minor)
LCT 95: Southern Uplands - Borders	Not Significant (Slight (combined with LCT 93))	Not significant (minor)
LCT 99: Rolling Farmland - Borders	Not Significant (Slight/Negligible)	Significant (moderate)
LCT 102: Upland Fringe with Prominent Hills	Not Significant (Slight/negligible)	Not significant (minor)
LCT 104: Upland Fringe Rough Grassland	Not Significant (Slight/negligible)	Significant (moderate)
LCT 113: Upland Valley with Pastoral Floor	Not Significant (Slight to slight/negligible)	Not significant (minor)
LCT 114: Pastoral Upland Valley	Not Significant (Slight to slight/negligible)	Significant (moderate) in Eddleston unit, but no effect in other units.
LCT 116: Upland Valley with Woodland	Not Significant (Slight)	Not significant (minor) to the north of Peebles, reducing to Not significant (negligible) elsewhere.
LCT 210: Undulating Farmland and Hills	* not assessed	Not significant (minor)
LCT 212: Moorland Hills – Glasgow & Clyde Valley	* not assessed	Not significant (minor)
LCT 266: Plateau Moorlands - Lothians	Not Significant (Slight to slight/negligible)	Not significant (minor)
LCT 268: Upland Hills - Lothians	Not Significant (Slight to slight/negligible)	Not significant (minor)
LCT 269: Upland Fringes - Lothians	Not Significant (Slight/negligible)	<b>Significant (moderate)</b> between 5-10km within this LCT, not significant (negligible) elsewhere.
LCT 270: Lowland River Valleys - Lothians	* not assessed	Not significant (minor)
Operational Effects of	n Views and Visual Amenity	
VP1: Cross Borders Drove Road (west)	Significant (Substantial to Very Substantial)	Significant (major)
VP2: Cross Borders Drove Road (east)	Significant (Moderate / Substantial to Substantial)	Significant (major)
VP3: Old Post Road Core Path (east of Observatory)	Significant (Moderate / Substantial to Substantial)	Significant (major)
VP4: Black Meldon	White Meldon: Significant (Moderate / Substantial)	Significant (major)



Receptor	Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)
VP5: Meldon Valley	* not assessed	Not significant (negligible)
VP6: Core Path 154 near Eddleston	Significant (Moderate / Substantial to Substantial)	Significant (major)
VP7: Minor Road near Spylaw and Wester Deans	Not Significant (Moderate)	Significant (moderate)
VP8: B7059 between Boghouse/Kaimhouse	Not Significant (Slight / Negligible)	Not significant (minor)
VP9: Portmore House	* not assessed	Significant (moderate)
VP10: A701 Mountain Cross	Not Significant (No view) A701 at Bordlands Farm: Not Significant (Slight / Negligible)	Not significant (minor)
VP11: A703 near Langside Farm (North of Peebles)	Not Significant (Moderate)	Not significant (minor)
VP12: A702, approach to West Linton	West Linton, Robinsland Farm: Not Significant (Slight to Moderate)	Not significant (minor)
VP13: A703 Lay-by	Not Significant (Moderate)	Not significant (minor)
VP14: B712 / Stobo Road	B712 near Beggarpath Bridge: Not Significant (no view)	Not significant (negligible)
VP15: Path near * not assessed Wester Happrew Burn		Not significant (minor)
VP16: Haswellskyes	Not Significant (Moderate)	Significant (moderate)
VP17: Glentress Forest, Makeness Kipps	Significant (Moderate to Moderate / Substantial)	Significant (moderate)
VP18: A702, Dolphinton	Dolphinton: Not Significant (Moderate)	Not significant (minor)
VP19: Cademuir Hill Fort	Not Significant (Moderate)	Significant (moderate)
VP20: Blackhope Scar	* not assessed	Not significant (minor)
VP21: Gladhouse Reservoir	Not Significant (Moderate)	Not significant (minor)
VP22: Carnethy Hill	Not Significant (Moderate)	Not significant (minor)
VP23: Stob Law	Not Significant (Moderate)	Not significant (minor)
VP24: Bleak Law	* not assessed	Not significant (minor)
VP25: Lee Pen	Not Significant (Slight to Moderate)	Not significant (minor)
VP26: B7007 (northern edge of Moorfoot Hills)	* not assessed	Not significant (minor)
Operational Effects of	n Settlements	
Eddleston	Not Significant (No View to Slight)	Significant (moderate)
Romannobridge	Not Significant (Slight)	Not significant (minor)



Receptor	Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)
West Linton	Not Significant (Slight to Moderate)	Not significant (minor)
Dolphinton	* not assessed	Not significant (minor)
Peebles	Not Significant (No view)	Not significant (minor)
Operational Effects of	on Routes	
A701	Not Significant (No view to Slight)	Not significant (minor) between Mountain Cross and Leadburn, reducing to Not significant (negligible) elsewhere.
A702	Not Significant (No view to Slight)	Not significant (minor) between Dolphinton and West Linton, reducing to Not significant (negligible) elsewhere.
A703	Not Significant (No view to Moderate)	<b>Significant (moderate)</b> , reducing to Not significant (negligible) further north.
B7059	Not Significant (No view to Slight)	Not significant (minor) in the eastern extents, Not significant (negligible) elsewhere.
B712	Not Significant (No view)	Not significant (negligible) closer to the Site, and no effect elsewhere.
Meldons Road	Significant (No view to Moderate/Substantial)	<b>Significant (moderate)</b> , reducing to no effect within the Upper Tweeddale NSA.
Cross Borders Drove Road	Significant (No view to Very Substantial)	<b>Significant (major)</b> within 4 km of the Site, reducing to Not significant (minor) between 4-15 km and no effect elsewhere.
John Buchan Way	Not Significant (No view to moderate)	<b>Significant (moderate)</b> to the south of the Site between 8-10 km, reducing to no effect elsewhere.
Operational Effects of	on Designated Landscapes	
Upper Tweeddale NSA	Not Significant (Slight to moderate)	The special quality which describes "expansive, open hills with panoramic views" will be affected by the Development. A significant (moderate) level of effect is recorded for this special quality, with other special qualities experiencing effects which are Not Significant. It is not considered that the Development will significantly affect the integrity of the NSA given the broad context of the elevated views, but the adverse impact on one special quality is noted.

<sup>&</sup>lt;sup>9</sup> SNH (2010) The special qualities of the National Scenic Areas. Commissioned Report No. 374 [online] Available at: https://www.nature.scot/naturescot-commissioned-report-374-special-qualities-national-scenic-areas (Accessed 30/09/2020) (pg. 54)



Receptor	Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)
Tweed Valley SLA	Not Significant (Slight)	<b>Significant (moderate)</b> in the Meldon area, reducing to Not significant (minor) elsewhere.
Tweedsmuir Uplands SLA	Not Significant (Slight)	Not significant (minor)
Gladhouse Reservoir and Moorfoot Scarp SLA	* not assessed	Not significant (minor)
Pentland Hills SLA	Not Significant (Slight)	Not significant (minor)
Pentland Hills and Black Mount SLA	* not assessed	Not significant (minor).



#### 3.1.2 Analysis of Predicted Landscape and Visual Effects

#### 3.1.2.1 Effects on Landscape Character

A comparative ZTV is provided in Appendix 1; this illustrates the areas from which the Development would introduce visibility, as compared with the ZTV for the Consented Scheme.

The comparative ZTV indicates that the geographical extent of the area with theoretical visibility of the Development would be largely similar to that with theoretical visibility of the Consented Scheme, across each of the Landscape Character Types (LCTs). However, the Development would introduce some visibility to areas which previously did not experience visibility. Visibility will be introduced to slightly less elevated areas on sitefacing slopes, particularly in upland locations.

The significance of effect has increased for several LCTs in the Study Area as a result of the Development, when compared to the findings for the Consented Scheme. In some instances, this is due to methodological differences (advances and new guidance since 2014 as well as terminology differences) or because current practice requires greater scrutiny, rather than because of the changes in the scheme. Effects have increased for:

- LCT92: Plateau Outliers The larger scale of the turbines will change the magnitude of change for this LCT from 'zero to very large' (for the Consented Scheme) to 'high' (for the Development). This would increase the significance of effect from 'not significant' ('moderate') to 'significant' ('major'). The footprint within the host LCT is broadly the same for both the Consented Scheme and for the Development. It is considered that should the Consented Scheme be reassessed today, the effects on the host LCT would also have been significant. The difference in assessment conclusions is broadly reflective of slightly different approaches to assessment.
- LCT90: Dissected Plateau Moorland The larger scale of the turbines will change the magnitude of change for this LCT from 'small to negligible' (for the Consented Scheme) to 'medium' (for the Development), however there would be very limited visibility introduced across this LCT. Overall, the amendment to the magnitude of change will increase the significance of effect from 'not significant' ('slight to slight/negligible') to 'significant' ('moderate'). However, it is noted the significant effect will only occur within approximately 7km of the Development. Beyond this distance, the effect will reduce to 'not significant' ('minor' or 'negligible').
- LCT99: Rolling Farmland Borders The larger scale of the turbines will introduce more visibility in the lower-lying areas in the south-east of this LCT. Furthermore, the larger scale of turbines will increase visibility from elsewhere within the LCT. Therefore, the magnitude of change for this LCT will increase from 'negligible' (for the Consented Scheme) to 'medium' (for the Development). This would increase the significance of effect from 'not significant' ('slight/negligible') to 'significant' ('moderate').
- **LCT 104: Upland Fringe Rough Grassland** The larger scale of the turbine will change the magnitude of change for this LCT, which is located approximately 1 km to the north-east of the Site, from 'negligible' (for the Consented Scheme) to 'medium' (for the Development). There is widespread theoretical visibility from this LCT for both the Consented Scheme and the Development. This would increase the significance of effect from 'not significant' ('slight/negligible') to 'significant' ('moderate').
- **LCT114: Pastoral Upland Valley -** The larger scale of the turbines will increase visibility from within the Eddleston Water unit of the LCT. However, limited areas



of visibility will be introduced, when compared to the Consented Scheme. In particular, the larger turbines are more likely to adversely influence the surrounding uplands which help define the character of this LCT. Therefore, the magnitude of change for this LCT will increase from 'small to negligible' (for the Consented Scheme) to 'high' (for the Development). This would increase the significance of effect from 'not significant' ('slight/negligible') to 'significant' ('moderate') in the Eddleston Water unit which is closest to the Site, with no effect in other units of the LCT.



#### 3.1.2.2 Effects on Views and Visual Amenity

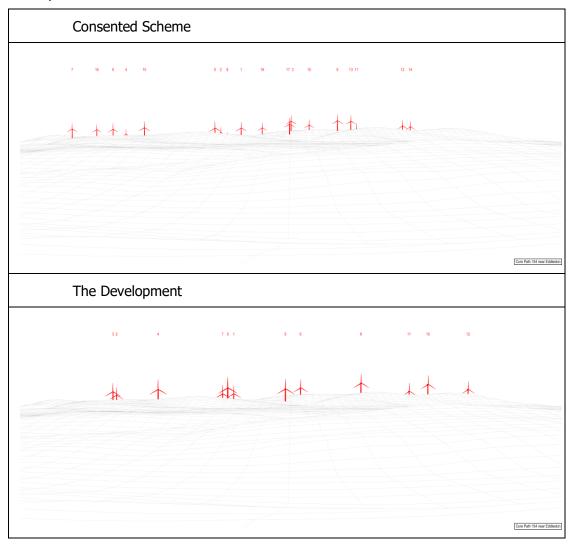
Comparative wirelines are provided for the following viewpoints, which illustrate a range of viewing directions and distances to the Site:

- Viewpoint 6: Core Path 154 near Eddleston;
- Viewpoint 7: Minor Road near Spylaw and Wester Deans;
- Viewpoint 11: A703 near Langside Farm (North of Peebles);
- Viewpoint 12: A702, Approach to West Linton;
- Viewpoint 18: A702, Dolphinton; and
- Viewpoint 22: Carnethy Hill.

Wireframes are illustrated at a 53.5° horizontal field of view. Brief commentary on each of the comparative wireframes is provided in the section below.

In addition, comparative wireframes are provided from LVIA viewpoints within the Upper Tweeddale NSA (see Section 3.1.2.5).

Viewpoint 6: Core Path 154 near Eddleston

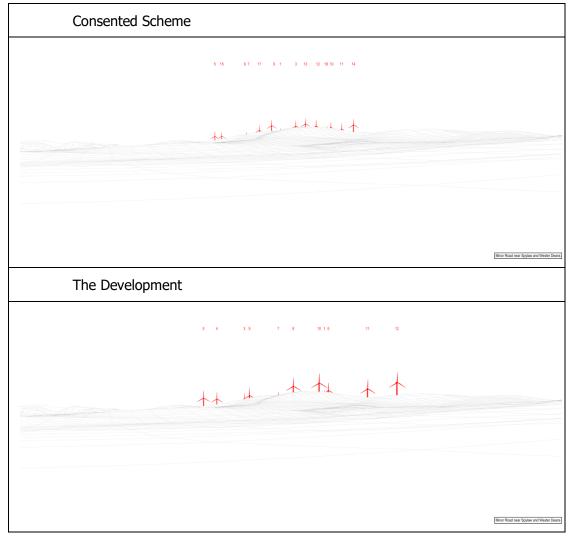


The Development will affect a similar horizontal extent of view in comparison with the Consented Scheme. The Development will reduce the number of turbines visible when compared with the Consented Scheme. There will be increased visibility of the towers of T6 and T9 due to the felling of forestry associated with the ongoing management of the forest although this forestry will be replanted, providing screening in the longer term.



However, this would have also been the case with the Consented Scheme. In addition, one crane hardstanding will be visible by T9. No other ancillary infrastructure will be visible. The increased scale of the turbines in the Development will help reduce the appearance of the noticeable gap between turbines T5 and T15 of the Consented Scheme. Whilst the turbines will appear of a larger scale than those in the Consented Scheme, the overall magnitude of change will remain the same. Therefore, there will be no change to the level of significance for the Development in comparison to the Consented Scheme. A significant effect has been identified for recreational receptors at this viewpoint in both the EIA Report for the Development and in the 2014 SEI for the Consented Scheme.

Viewpoint 7: Minor Road near Spylaw and Wester Deans

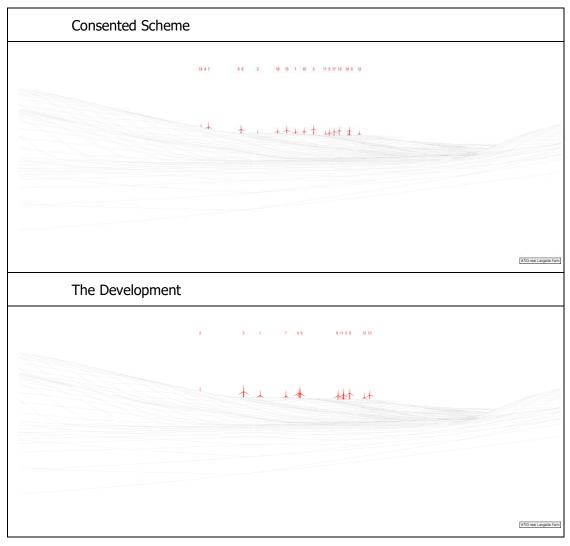


The Development will affect a larger horizontal extent of view in comparison to the Consented Scheme. This is due to the position of turbines T11 and T12, in the north of the Site, as shown in Figure 5.2.7. The Development will look similar in terms of layout, albeit with fewer, larger turbines, when compared to the Consented Scheme. Felling as part of the ongoing management of the forest will increase the proportion of the T12 tower visible, although this forestry will be replanted and additional screening is provided by an intervening shelterbelt in the spring and summer months. In addition, the substation compound and access track in the north of the Site will be visible. The magnitude of change for the Development will increase from 'medium' to 'high' when compared with the Consented Scheme. This change will increase the level of effect from



'not significant' to 'significant' at this viewpoint, which represents local residents and road users.

Viewpoint 11: A703 near Langside Farm (North of Peebles)

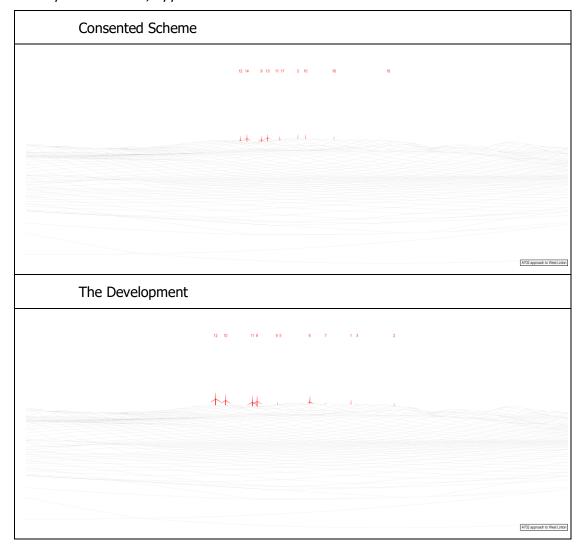


The Development will affect a similar horizontal extent of view in comparison to the Consented Scheme. Compared to the Consented Scheme, the Development will feature fewer turbines of a larger scale. Both layouts have some stacking; for the Development this is between turbines T4 and T6, as well as turbines T5 and T11, as shown in Figure 5.2.11, and for the Consented Scheme this is between turbines T9 and T14. Additionally, the turbines of the Development are less evenly spaced than those of the Consented Scheme, with a noticeable gap between T6 and T9.

The magnitude of change for the Development will remain the same as the Consented Scheme, and the overall level of significance will remain the same as that previously identified. The level of effect will remain 'not significant' for road users at this viewpoint.



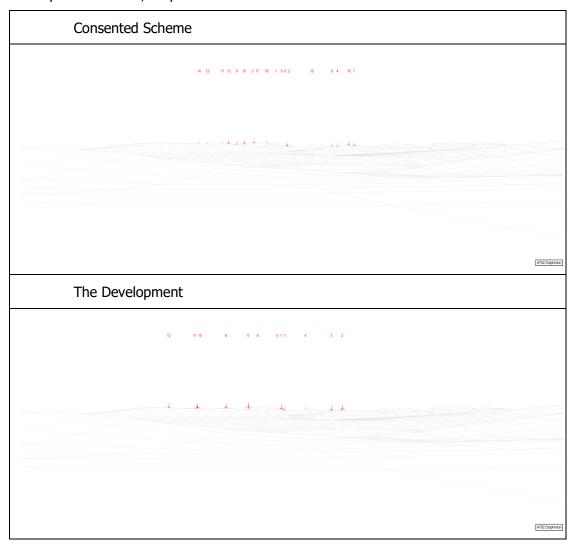
Viewpoint 12: A702, Approach to West Linton



The Development will affect a similar horizontal field of view in comparison to the Consented Scheme. As with the Consented Scheme, most of the turbines will be partially screened by the intervening landform of Hag Law and Wether Law. Turbines in the north of the Site (T8, 10, 11 and 12 of the Development) will be more visible above the landform, as shown in Figure 5.2.12. However, this was also the case with the Consented Scheme for turbines in the north of the Site. Although the Development introduces larger-scale turbines which will appear more visible than those in the Consented Scheme, the view will remain similar in composition. Given the increased visibility of turbines in the north, and the distance and sensitivity of the receptor, the magnitude of change for the Development will increase slightly from 'negligible to small' to 'low' when compared with the Consented Scheme. However, this slight change in magnitude will not affect the significance of the effect. The level of effect will remain not significant for road users at this viewpoint.



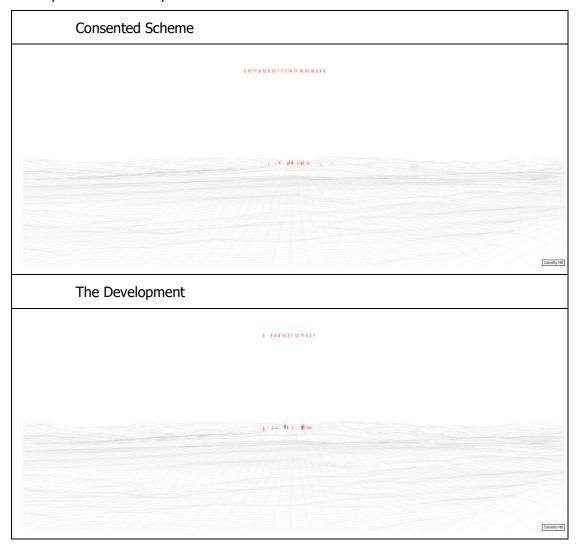
#### Viewpoint 18: A702, Dolphinton



From this viewpoint, the Development will affect a similar horizontal field of view when compared with the Consented Scheme. Overall, the Development is similar in appearance and composition to the Consented Scheme. However, compared to the Consented Scheme, the Development will feature fewer, taller turbines. Although the larger scale of the turbines will slightly increase the proportion of the turbine visible above the intervening landform, at a distance of 9.4km, the view towards the Development will remain similar to that for the Consented Scheme. As with the Consented Scheme, the Development will be partially screened by intervening landform, as shown in Figure 5.2.18. Therefore, there will be no change to the magnitude of change, or level of significance for the Development in comparison to the Consented Scheme. The level of effect will remain 'not significant' for local residents and road users at this viewpoint.



Viewpoint 22: Carnethy Hill



From this viewpoint, the Development will affect a slightly smaller horizontal field of view when compared with the Consented Scheme. Overall, the Development is similar in appearance to the Consented Scheme, albeit featuring slightly more stacking. In addition to reducing the horizontal field of view, the Development will also reduce the number of turbines visible, compared to the Consented Scheme. Although there will be an increase in turbine height, at a distance of 13.0km, the scale change will not be very noticeable. As with the Consented Scheme, the Development will sit predominantly below the skyline, as shown in Figure 5.2.22. Therefore, there will be no change to the magnitude of change, or level of significance for the Development in comparison to the Consented Scheme. The level of effect will remain 'not significant' for recreational receptors at this viewpoint.



#### 3.1.2.3 Effects on Settlements

Several settlements within the Study Area were considered within both the LVIA for the Consented Scheme and the LVIA for the Development. These settlements include:

- Eddleston;
- Romannobridge;
- · West Linton; and
- Peebles.

In addition, the SEI for the Consented Scheme also considered views from Blyth Bridge, Leadburn, Carlops, Waterheads and Mountain Cross, however these were scoped out of the LVIA for the Development due to distance and/or limited visibility. The LVIA for the Development also considers the effect from the settlement of Dolphinton, which was not previously assessed.

Overall, the effects identified in relation to Romannobridge and West Linton, both of which are to the west of the Site, will remain largely similar. Although the Development will introduce fewer but larger turbines when compared to the Consented Scheme, intervening landform to the west of the Site will screen the majority of the Development.

Views from Romannobridge will be limited to blades, and would be further screened by intervening vegetation within the settlement. Likewise, views of the Development from West Linton will also be afforded some screening by the intervening landform of Hag Law and Wether Law. In addition, vegetation and built development within West Linton itself largely limits long-distance views towards the Site. However, some areas within West Linton, including the approach from the A702 in the north and the south-eastern fringes of the settlement will have more visibility. Overall, the Development will not result in a change to the magnitude or level of effect when compared with the Consented Scheme.

Similarly, Peebles to the south-east of the Site, is afforded screening of the Site and the Development by built development and intervening vegetation within the settlement. Due to this, views of the larger-scale turbines of the Development will only be experienced from the northern extents of Peebles, as people travel out of the settlement. The introduction of fewer, larger turbines compared to the Consented Scheme will not result in increased visibility from within the settlement. Although the 'zero' magnitude of change identified in relation to the Consented Scheme will increase to 'low' for the Development. The level of effect will remain 'not significant' for local residents within the settlement.

Compared to the findings of the LVIA for the Consented Scheme, the Development will have a greater magnitude of change for residents in the settlement of Eddleston. Most of the settlement within the valley will have limited visibility of the Development due to mature vegetation and built development screening views. However, the LVIA assessment considers that areas of the settlement on the more elevated slopes of the valley will have greater visibility of the Development. Therefore, the 'slight' magnitude of change previously identified in relation to the consented scheme will increase to 'medium' for the Development. Subsequently, the significance of effect will increase from 'not significant' to 'significant'.



#### 3.1.2.4 Effects on Routes

Several routes within the Study Area were considered within both the LVIA for the Consented Scheme and the LVIA for the Development. These routes include:

- A701;
- A702;
- A703;
- B7059;
- B712;
- Meldons Road;
- Cross Borders Drove Road; and
- John Buchan Way.

In addition, the SEI for the Consented Scheme also considered views from the A72, B7062, the minor roads from Whim Hall to Shiplaw and West Linton to Romannobridge, however these were scoped out of the LVIA for the Development due to distance and/or limited visibility.

Although the Development will introduce fewer turbines than the Consented Scheme, visibility will still be experienced from the Meldons Road which runs to the east and south of the Site. Therefore, the localised significant effects identified in relation to the Meldons Road for the Consented Scheme will remain the same for the Development.

The overall effects identified in relation to the A701, A702 and B7059 for the Consented Scheme were not significant, with varying levels of visibility from 'no view' to 'slight'. These previously identified effects will remain the same for the Development, with negligible to minor changes in the view expected. Whilst the magnitude of change for the B712 is expected to increase from 'zero' for the Consented Scheme to low for the Development, the overall significance of effect will remain unaffected ('not significant').

Likewise, the overall effect identified for the Cross Borders Drove Road for the Consented Scheme was 'significant', although the level of effect varied from 'no view' to 'very substantial'. The overall significance of effect will remain the same for the Development within and nearby the Development, although this will reduce to not significant further away from the Development, as identified in the previous LVIA.

The significance of effect on views from the A703 is expected to increase from 'not significant' as previously identified in relation to the Consented Scheme, to 'significant' for the Development due to the larger scale of the turbines. However, the significant effect will only be in relation to the section of the A703 to the east of the Development between the northern edge of Peebles and Leadburn, and will reduce to a 'not significant effect beyond these points.

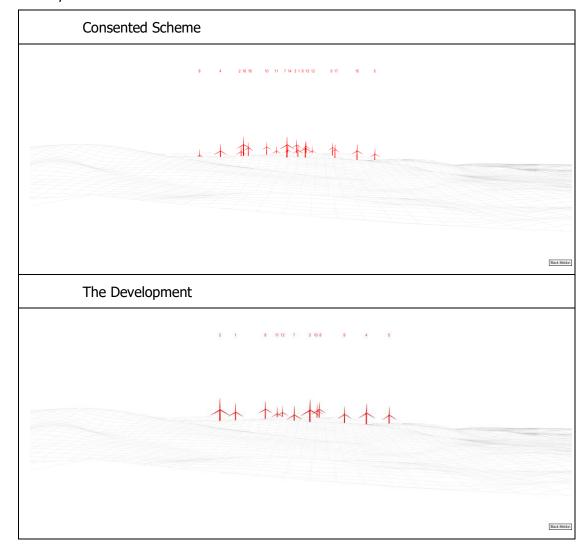
The significance of effect on views from the John Buchan Way is expected to increase from 'not significant' as previously identified in relation to the Consented Scheme, to 'significant' for the Development. This is predominantly due to the larger size of the turbines increasing the magnitude of change from sections of the route with visibility, notably Cademuir Hill Fort (VP 19). However, the significant effect will only be in relation to the localised sections of the route with visibility of the Development and will reduce to 'not significant' effects elsewhere.



#### 3.1.2.5 Effects on Designated Landscapes

Upper Tweeddale NSA

Viewpoint 4: Black Meldon

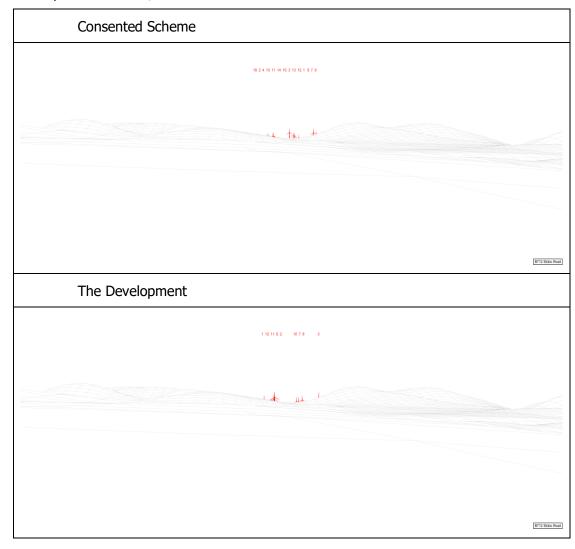


The Development will affect a similar horizontal extent of view in comparison to the Consented Scheme. When compared to the Consented Scheme, the Development will introduce fewer, larger-scale turbines in views from this viewpoint, and the Development will appear more balanced in composition, with less stacking and more regular spacing between turbines. This will improve the appearance of the Development from this viewpoint. Some tracks within the Development will be visible from this viewpoint, and forestry felling associated with ongoing forest management will increase the proportion of the towers visible for T8-T12, although this forestry will be replanted, providing some screening in the longer term. Given the close (3.5km) and elevated nature of the view, the Development will form a prominent feature in views, as shown in Figure 5.2.4. However, this was also the case with the Consented Scheme. Black Meldon was not selected as a viewpoint within the SEI for the Consented Scheme, however it is a similar distance and direction from the Site as White Meldon which was included as a viewpoint. Therefore, it is considered that the two are comparable for this purpose. A 'medium' magnitude of change was identified from White Meldon in relation to the Consented Scheme. However, a 'high' magnitude of change is identified in relation to the Development due to the larger scale of the turbines. Despite the increase in magnitude



of change, there would be no change to the level of significance for the Development in comparison to the Consented Scheme (both 'significant').

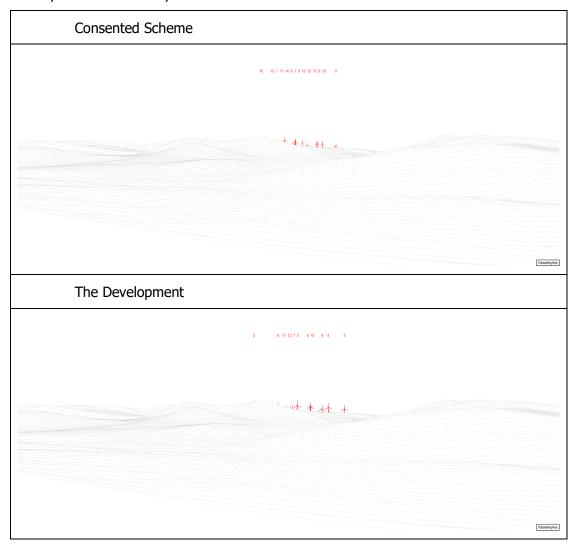
Viewpoint 14: B712 / Stobo Road



The Development will affect a similar horizontal extent of view to that of the Consented Scheme. As with the Consented Scheme, the turbines appear to sit in the topographical low point on the horizon between Hamildean Hill and Black Meldon, which will provide partial screening of the turbines. The Development will introduce larger-scale turbines than those of the Consented Scheme, however there will be fewer turbines visible. The view will remain largely similar, albeit with the turbines appearing more irregularly spaced with some stacking present in both layouts. A shelter belt of woodland will completely screen the Development in views from this viewpoint, as shown in Figure 5.2.14, however glimpsed views could be experienced from other localised sections of the road. Overall, the magnitude of change would change from 'zero' to 'low'. This would not affect the significance of the effect previously identified in relation to the Consented Scheme (both 'not significant').



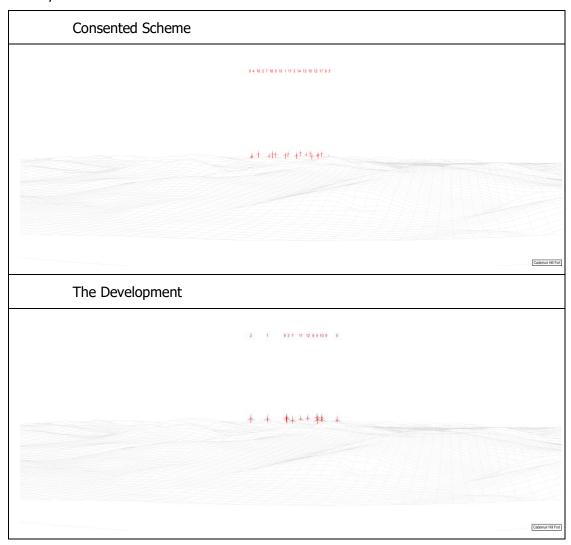
Viewpoint 16: Haswellsykes



The Development will affect a slightly larger horizontal field of view in comparison to the Consented Scheme. As with the Consented Scheme, the turbines in the south-western and western parts of the Site will be partially screened by intervening landform, with only blades being visible, as shown in Figure 5.2.16. Turbines in the east of the Site will be more visible, however will appear to sit within the topographical lower part of the horizon, as with the Consented Scheme. Although the Development will introduce larger-scale turbines than the Consented Scheme, the overall appearance of the Development will remain largely similar. However, due to the introduction of larger-scale turbines, the magnitude of change will increase from 'small' to 'medium'. This will increase the level of significance for the Development to 'significant' in comparison to the Consented Scheme which was identified as 'not significant'.



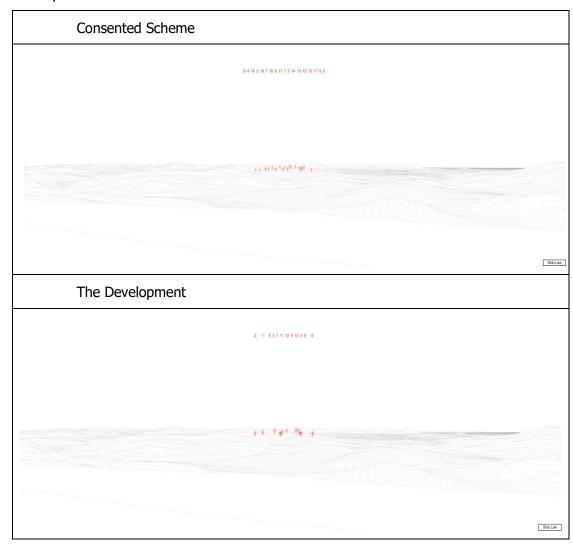
Viewpoint 19: Cademuir Hill Fort



The Development will affect a similar horizontal extent of view as the Consented Scheme. Whilst the Development will reduce the number of turbines, compared to the Consented Scheme, their larger scale will be notable from this viewpoint. In addition, the Development will feature some stacking of turbines, as shown in Figure 5.2.19. Although stacking was previously present, it was less noticeable given the smaller turbine size. As such, the magnitude of change for the Development will increase from 'small' to 'medium', compared with the Consented Scheme. This change in magnitude will increase the overall level of effect from 'not significant' to 'significant'.



Viewpoint 23: Stob Law



From this viewpoint, the Development will affect a similar horizontal field of view when compared with the Consented Scheme. The appearance of the Development will be somewhat similar to that of the Consented Scheme, albeit featuring fewer, larger turbines which are more spaced out. Although there will be an increase in turbine height, given the intervening distance, this would not be a perceptible change when compared to the Consented Scheme. As with the Consented Scheme, the Development will sit below the skyline, as shown in Figure 5.2.23. Therefore, there will be no change to the magnitude of change, or level of significance for the Development in comparison to the Consented Scheme (both 'not significant').

#### Special Landscape Qualities of the NSA

The Development will introduce visibility of larger-scale turbines into views from the Upper Tweeddale NSA when compared to the 115m turbines of the Consented Scheme. Although the turbines will be of a larger scale, theoretical visibility across the NSA will be mostly affect the same area, although greater visibility of more turbines will be experienced from slightly less elevated levels on site-facing slopes, as shown in Figure 1 of Appendix 1.

Additional visibility may be experienced from some areas within the valleys of the NSA, including the section of the River Tweed Valley which runs adjacent to the B712 road. However, as previously mentioned, valleys within the NSA (e.g., along the B712) feature mature vegetation which often screens views, and limits visibility to localised areas and



glimpsed views. The interlocking landform of distant hills also reduces visibility of the Development. Therefore, the Development is unlikely to have significant effects on or affect the integrity of the 'green, intimate pastoral valleys' Special Landscape Quality (SLQ) for which the NSA was designated. The Consented Scheme was not identified as having a significant effect on this quality.

As with the Consented Scheme, the SLQ relating to 'diverse scenery of great charm and soft beauty' is unlikely to be significantly affected by the Development. Although theoretical visibility will be introduced on lower slopes and within valleys, the Development will be largely screened by intervening landform and vegetation. From more elevated viewpoints, the Development will be seen in the context of other wind farms, as was the case with the Consented Scheme, however, will feature less turbines. Given that existing wind farms, including Bowbeat Wind Farm and Glenkerie Wind Farm, are already present in views from the NSA, and as there will be no direct effects on key landscape features, it is considered that the Development will not significantly affect the integrity of the NSA by adversely impacting on this special quality for which it was designated.

Where visible, the Development will appear as a simple group of turbines, in the distant landscape of Cloich Forest, beyond the NSA boundary to the north. As with the Consented Scheme, from lower-lying areas such as valleys, the Development will be partially screened by intervening landform and appear to sit in a topographical lower part of the horizon. Visibility of the Development will be more open from hill summits within the NSA; however, this was also the case for the Consented Scheme. The increased scale of the turbines may be more apparent from elevated hilltop locations within the NSA than those of the Consented Scheme. Therefore, as for the Consented Scheme the Development may detract from the vast openness of the landscape and scale of the hills. Subsequently, the effect on the special landscape quality relating to the *'expansive, open hills with panoramic views'*, as a result of the Development, will be 'moderate' and 'significant' in the northern fringes (e.g., Black Meldon area), reducing to 'minor' and 'not significant' elsewhere.

The findings for the Consented Scheme did not identify any significant effects in relation to this special landscape quality. It was explained that the scheme will not detract from the 'landmark topography' of the Meldons, given the landmark will remain in place. Greater attention was given to Black Meldon as a visible landmark, than to its importance as a destination for hill walkers. The latter has now also been considered.

#### Other Designated Landscapes

In addition to the Upper Tweeddale NSA, several Special Landscape Areas (SLAs) were also considered in both the LVIA for the Consented Scheme, and the LVIA for the Development. These include:

- Tweed Valley SLA;
- Tweedsmuir Uplands SLA; and
- Pentland Hills SLA.

In addition, the SEI for the Consented Scheme also considered views from the Pentland Hills and Moorfoot Hills Areas of Great Landscape Value, however these designations have since been replaced by SLAs. The LVIA for the Development also considers the effects from the Gladhouse Reservoir and Moorfoot Scarp SLA and Pentland Hills and Black Mount SLA, which were not previously assessed in the SEI for the Consented Scheme.

The Development will introduce a smaller number of larger-scale turbines into views from within the Tweed Valley SLA, when compared with the Consented Scheme. As with the Consented Scheme, the Development will be most perceptible in the western extents of the SLA, most notably the area comprising the Meldons. However, the increased scale of



the Development will not increase theoretical visibility throughout the rest of the SLA. This is due to screening provided by intervening hills on the boundary of the SLA.

Compared to the SEI findings for the Consented Scheme, the Development is likely to increase the significance of effect on the Tweed Valley SLA from not significant ('slight') to significant ('moderate'). However, this increase in significance would only be experienced in the Meldons area. The remainder of the SLA will experience not significant ('minor') effects, in line with the findings for the Consented Scheme. The Development will not significantly affect the integrity of the SLA by adversely impacting on the qualities for which it was designated.

The effects previously identified in relation to the Tweedsmuir Uplands SLA and Pentland Hills SLA will remain the same, despite an increase in turbine height compared to the Consented Scheme. The Development will not significantly affect the integrity of the SLAs by adversely impacting on the qualities for which they were designated.

#### 3.1.2.6 Effects on Residential Visual Amenity

The Residential Visual Amenity Assessment (RVAA) for the Consented Scheme identified 5 properties within 5km of the Site where residents would experience 'significant' effects, however it was concluded that the living standards or conditions of these properties would not be affected. The properties previously identified as having significant effects were Nether Stewarton, Stewarton House, Observatory (Earlyburn), Hope Cottage and Boreland. The RVAA for the Development focusses on properties and property groups within approximately 2km of the Development, and therefore does not include Hope Cottage and Boreland (both over 3km from the Development), which were previously identified as having a 'significant' effect.

In comparison to the Consented Scheme, the Development will introduce fewer, but larger turbines into views from nearby properties, their curtilage and driveways. Overall, the findings of the RVAA for the Development do not differ significantly from those of the Consented Scheme, and the Development will not breach the residential visual amenity threshold for any property.

A summary of the changes to the RVAA findings between the Consented Scheme and the Development is provided below:

- Harehope Steading, Old Harehope and Harehope Cottage The greater scale of the turbines will increase the magnitude of change from these properties from 'negligible' (for the Consented Scheme) to 'medium' (for the Development).
- **Harehope Farmhouse -** The greater scale of the turbines will increase the magnitude of change from this property from 'small' (for the Consented Scheme) to 'medium' (for the Development).
- **Upper Stewarton** Due to the increased scale of the turbines, the magnitude of change from Upper Stewarton will increase from 'small' (as previously identified for the Consented Scheme) to 'medium' (for the Development).
- **Nether Stewarton** The greater scale of the turbines will increase the magnitude of change from this property from 'small' (for the Consented Scheme) to 'high' (for the Development).
- Stewarton House No change in effect. The magnitude of change previously identified will remain the same ('medium').
- **Stewarton Toll** The greater scale of the turbines will increase the magnitude of change from this property from 'small' (for the Consented Scheme) to 'high' (for the Development).
- **Stewarton Lodge -** The findings from the previous RVAA (Consented Scheme) will remain the same for the Development ('barely perceptible').



- Cloich Farm The greater scale of the turbines will increase the magnitude of change from this property from 'small' (for the Consented Scheme) to 'high' (for the Development).
- **Earlyburn** No change in effect. The magnitude of change previously identified will remain the same ('high').

#### 3.1.2.7 Cumulative Landscape and Visual Effects

The majority of significant cumulative effects identified in relation to the Consented Scheme arose from interactions with the adjacent Hag Law Wind Farm which was at preapplication stage at the time. The Hag Law scheme was refused following appeal in 2016, and therefore is not included in the cumulative assessment for the Development. There are no schemes at application stage within the 20km cumulative study area for the Development, and all consented schemes are more than 17km from the Development. Therefore, the Development is not expected to result in any 'significant' landscape and visual cumulative effects. This is similar to the findings of the LVIA for the Consented Scheme (excluding Hag Law).

#### 3.1.3 Summary of LVIA changes in effect

The Development will introduce theoretical visibility to very few areas within the Study Area, when compared to the theoretical visibility for the Consented Scheme. Where visibility will be introduced, this will largely occur at slightly lower elevations on site-facing slopes. Although the area of theoretical visibility of the Development is largely the same as that for the Consented Scheme, some LCTs within the Study Area will experience a significant effect as a result of the larger scale of the turbines increasing the perception of the Development from within these LCTs.

In terms of the visual impact, the Development will affect a similar horizontal field of view to that of the Consented Scheme when considered from the majority of viewpoints. In many cases, the reduced number of larger turbines forming the Development will provide a more balanced layout when compared to the Consented Scheme. Whilst the magnitude of change previously identified in relation to the Consented Scheme has changed for receptors at several viewpoints, the significance of these effects will not change. The only change to significance is in relation to Viewpoint 7: Minor Road near Spylaw and Wester Deans, Viewpoint 16: Haswellsykes, and Viewpoint 19: Cademuir Hill Fort, which each increase from 'not significant' to 'significant', in part due to the differences in the methodology and terminology applied since the original assessment in 2014. In the case of Viewpoint 7, this is due to a slight increase in the horizontal field of view and more noticeable change in the scale of turbines. For Viewpoint 16 and 19 it is due to the larger scale of turbines, and also more noticeable stacking of turbines from Viewpoint 19.

The Development is not expected to result in any 'significant' cumulative landscape and visual effects, which is similar to the overall findings of the LVIA for the Consented Scheme (excluding Hag Law).



#### 4 ARCHAEOLOGY AND CULTURAL HERITAGE EFFECTS COMPARISON

The Cultural Heritage and Archaeology Assessment for the Development is set out in Volume 1, Chapter 6 of the EIA Report, with supporting figures in Volume 2a and supporting visualisations in Volume 2c. The Cultural Heritage and Archaeology Assessment includes the following technical appendices:

- Appendix A6.1: Desk-Based Assessment (DBA);
- Appendix A6.2: Pre-Application Consultation and Responses; and
- Appendix A6.3: Setting Assessment.

The assessment methodology has been developed primarily in accordance with the principles contained within the EIA Handbook<sup>10</sup> and guidance on setting<sup>11</sup> whereas consideration is given to how changes in setting affect cultural significance. The assessment conclusions are informed by professional judgement.

The full assessment of effects is provided in Appendix A6.3 and summarised in Section 6.5 of the EIA Report.

# 4.1 Comparison of Predicted Archaeology and Cultural Heritage Effects

Table 4.1 provides a comparison of predicted effects as set out in the archaeology and cultural heritage assessment for the Development, and the assessment for the Consented Scheme (18 turbines, 115 m height to tip) contained within the 2014 SEI. Note that the assessment for the original application (18 turbines, 132 m height to tip)<sup>12</sup> was superseded by that for the Consented Scheme presented in the SEI. **Significant effects** are in **bold**.

For both assessments, the significance of the potential effect is broadly determined by correlating the sensitivity of the asset against the magnitude of the expected change to arrive at the significance of effect. Since the SEI was submitted for the Consented Scheme, there have been changes to the guidance, most notably the EIA Handbook<sup>13</sup> published in 2018 which correlates changes in setting to the effect upon the cultural significance. Additionally, different terminology is used for levels of effects based on the prevailing setting guidance at the time of writing.

Table 4.1: Comparison of Predicted Cultural Heritage Effects

Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)			
Construction Effects						
Known archaeology		Not Significant	Not Significant			
Potential unknown archaeology		Not Significant	Not Significant			
Operational Effects on Designated Heritage Assets						
SM2755	Whaup Law Cairn	Moderate and Significant	Moderate and Significant			

<sup>&</sup>lt;sup>10</sup> SNH and HES (May 2018). EIA Handbook. Available at <a href="https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0">https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0</a> (Accessed 21/06/2021)

<sup>&</sup>lt;sup>11</sup> Historic Environment Scotland, 2016 Updated 2020, Managing Change in the Historic Environment: Setting [Online] Available at: <a href="https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549">https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549</a> (Accessed on 1/06/2021)

 $<sup>^{12}</sup>$  Partnership for Renewables on behalf of Cloich Wind Farm LLP (October 2012) Cloich Forest Wind Farm Environmental Statement, Volume 1 – Written Statement, Chapter 7 Landscape and Visual Effects

<sup>&</sup>lt;sup>13</sup> SNH and HES (May 2018). EIA Handbook. Available at https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0 (Accessed 21/06/2021)



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
SM2756	Ring enclosures 550m and 595m WNW of Kilrubie Hill	No Effect and Not Significant	Minor and Not Significant	
SM3998	Nether Stewarton, settlement 850m W of	No Effect and Not Significant	Negligible and Not Significant	
SM114	Cairn and hill fort, White Meldon	Moderate and Significant	Moderate and Significant	
SM3075	Upper Kidston, fort & settlement NNW of	Slight (Minor) and Not Significant	Moderate and Significant	
SM2711	White Meldon, platform settlement 640m NW of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2712	White Meldon, platform settlement 730m NNW of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM3165	White Meldon, enclosures W of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM731	Northshield Rings, fort, The Camps	Slight (Minor) and Not Significant	Minor and Not Significant	
SM1492	Lyne, Roman fort, annexes and fortlet	Not Included in assessment	Negligible and Not Significant	
SM1493	Easter Happrew, Roman fort	Slight (Minor) and Not Significant	Negligible and Not Significant	
SM1494	Lyne, Roman temporary camp	Not Included in assessment	Negligible and Not Significant	
SM1495	Drochil Castle	Not Included in assessment	Negligible and Not Significant	
SM2393	Terrace Wood, cultivation terraces	Not Included in assessment	Negligible and Not Significant	
SM2416	Milkieston Rings, fort	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2677	Harehope Rings, fort, Harehope Hill	No Effect and Not Significant	Minor and Not Significant	
SM2759	Harehope, palisaded settlement 730m NNE of	No Effect and Not Significant	Minor and Not Significant	
SM3237	Harehope, earthwork SW of	No Effect and Not Significant	Minor and Not Significant	
SM3790	Harehope, earthwork 550m NNE of	No Effect and Not Significant	Minor and Not Significant	
SM2678	Old Deepsykehead, enclosed cremation cemetery 270m SSE of	Not Included in assessment	Negligible and Not Significant	
SM4624	Upper Whitfield, enclosures 375m SE and 350m ESE of	Not Included in assessment	Negligible and Not Significant	
SM2789	Old Deepsykehead long cairn	Not Included in assessment	Negligible and Not Significant	
SM2703	Black Meldon, fort	Moderate and Significant	Moderate and Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
SM2737	Black Meldon, settlement and scooped homestead 550m E of	Slight (Minor) and Not Significant	Negligible and Not Significant	
SM2713	South Hill Head, homestead	No Effect and Not Significant	Minor and Not Significant	
SM3212	South Hill Head, settlement WNW of	Moderate and Significant	Minor and Not Significant	
SM2718	Sheriff Muir Cottages, standing stones 520m W of	Not Included in assessment	Negligible and Not Significant	
SM3171	Sheriff Muir, cairn	Not Included in assessment	Negligible and Not Significant	
SM2728	Romanno Mains, two barrows 550m SE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2730	Romanno Mains, barrow 910m SE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2732	Drum Maw, settlement 780m SE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2733	Romanno Hope, barrow & enclosures S of	Not Included in assessment	Minor and Not Significant	
SM2734	Green Knowe, two ring enclosures & barrow 550m SSE of	Moderate and Significant	Moderate and Significant	
SM2735	Whiteside Hill, ring enclosures 820m SE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2821	Flemington, ring enclosures 840m NE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2955	Whiteside Hill, fort & enclosure	Moderate and Significant	Moderate and Significant	
SM2736	Hamildean, homestead 1140m NE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2957	Hamildean Hill, fort	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2738	Wether Law, cairn	Slight (Minor) and Not Significant	Moderate and Significant	
SM2760	Green Knowe, platform settlement	No Effect and Not Significant	Minor and Not Significant	
SM2912	Harehope, cairn 1510m ESE of	No Effect and Not Significant	Minor and Not Significant	
SM3158	Green Knowe, cairn NE of	No Effect and Not Significant	Minor and Not Significant	
SM2774	Cavarra Hill, settlement	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2777	Dundreich, cairn	Not Included in assessment	Minor and Not Significant	
SM3527	Jeffries Corse, cairn	Not Included in assessment	Minor and Not Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
SM2840	Henderland Hill,fort	Moderate and Significant	Negligible and Not Significant	
SM3010	Bordland Rings, fort, Bordlands Hill	No Effect and Not Significant	Negligible and Not Significant	
SM2940	Wormiston, cairn 360m NNW of	No Effect and Not Significant	Negligible and Not Significant	
SM3027	Tor Hill, fort 600m WNW of Torbank	Slight (Minor) and Not Significant	Minor and Not Significant	
SM2944	Wester Happrew, fort 360m NW of	Not Included in assessment	Minor and Not Significant	
SM2956	Drochil Castle, fort & enclosure 1190m NNW of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM3074	Earthwork S of Callands House	Slight (Minor) and Not Significant	Minor and Not Significant	
SM3071	Newlands Church and graveyard, 50m SW of Newlands House	Not Included in assessment	Negligible and Not Significant	
SM3269	Pit alignment 250m W of Meldon Bridge,	Not Included in assessment	Negligible and Not Significant	
SM6065	Bents Quarry, lime kilns and quarry	Slight (Minor) and Not Significant	Negligible and Not Significant	
SM1157	The Gowk Stane	Not Included in assessment	Negligible and Not Significant	
SM1163	Camp Hill Fort	Not Included in assessment	Negligible and Not Significant	
SM2441	Upper Cademuir Hillfort	Slight (Minor) and Not Significant	Moderate and Significant	
SM2715	Lower Cademuir Hillfort	Moderate and Significant	Moderate and Significant	
SM3044	Kirkton Manor, enclosures 550m SE of	Slight (Minor) and Not Significant	Minor and Not Significant	
SM3045	Bellanrig settlement, fort & enclosures	Not Assessed, Assumed Mis- Numbered and has been inadvertently included as SM3166 in SEI which was assessed as Moderate and Significant	Moderate and Significant	
SM3166	Settlement SE of Bellanrig,	Believe to be Mis- Numbered in SEI and this is SM3045 as above	Minor and Not Significant	
SM2681	Horsburgh Castle Farm, settlement 930m NNW of Castle Hill	Not Included in assessment	Negligible and Not Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
SM3028	Janet's Brae, fort 750m E of Peebles	Not Included in assessment	Negligible and Not Significant	
SM3029	Janet's Brae, fort 550m E of Peebles	Not Included in assessment	Negligible and Not Significant	
SM3061	Tor Hill, fort	Not Included in assessment	Negligible and Not Significant	
SM2787	Castlehill Tower	Not Included in assessment	Minor and Not Significant	
SM2959	Fort 250m WSW of Castlehill	Not Included in assessment	Minor and Not Significant	
SM3170	Scooped homestead WSW of Canada Hill	Not Included in assessment	Minor and Not Significant	
SM2905	Blyth cairn	Not Included in assessment	Minor and Not Significant	
SM2990	Blyth Hillfort	Slight (Minor) and Not Significant	Minor and Not Significant	
SM3069	Enclosures SW of Newmill	Not Included in assessment	Minor and Not Significant	
SM3236	Shaw Hill, cairn	Not Included in assessment	Minor and Not Significant	
SM3256	Enclosure 200 m NE of West Mains	Not Included in assessment	Minor and Not Significant	
SM2950	Easter Dawyck, fort & settlement	Moderate and Significant	Minor and Not Significant	
SM3059	Kerr's Knowe Fort	Not Included in assessment	Minor and Not Significant	
SM3068	Syke Hill fort	Not Included in assessment	Minor and Not Significant	
SM3039	Venlaw Castle Hotel settlement	Not Included in assessment	Negligible and Not Significant	
SM3051	Woodhouse, Hill Fort	Moderate and Significant	Moderate and Significant	
SM3056	Wood Hill, fort & enclosure	Not Included in assessment	Negligible and Not Significant	
SM3247	Cock Rig to Linton Muir Roman road	Not Included in assessment	Negligible and Not Significant	
SM3263	Hardgatehead Roman road and turnpike road	Not Included in assessment	Negligible and Not Significant	
SM5742	South Slipperfield, barrows	Not Included in assessment	Negligible and Not Significant	
GDL00318	Portmore Garden GDL	Slight (Minor) and Not Significant	Minor and Not Significant	
LB2037 Category A	Listed Portmore House	Slight (Minor) and Not Significant	Localised Moderate and Significant (in one view)	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
LB2038 Category C	Listed Entrance Gateway and Lodge, Portmore	Slight (Minor) and Not Significant	Minor and Not Significant	
LB157 Category C	The Horse Shoe Inn, Eddleston	No Effect and Not Significant	Minor and Not Significant	
LB2020 Category B	Eddleston Parish Church And Graveyard	Slight (Minor) and Not Significant	Minor and Not Significant	
LB2021 Category B	Moredun, And Adjoining 2 Cottages (Glen Nevis and Old School House)	No Effect and Not Significant	Minor and Not Significant	
LB2022 Category B	Eddleston Village Nos. 1-23 And 2-22. Station Road	Slight (Minor) and Not Significant	Minor and Not Significant	
LB2023 Category C	Eddleston Bridge Eddleston	Slight (Minor) and Not Significant	Minor and Not Significant	
LB2035 Category B	Cringletie House, Including Lodges, Walled Garden, Sundial And Dovecot	Not Included in assessment	Negligible and Not Significant	
LB2039 Category B	Old Harehope	Not Included in assessment	Minor and Not Significant	
LB2040 Category B	Black Barony Hotel	No Effect and Not Significant	Negligible and Not Significant	
LB2041 Category B	Ice House, Black Barony.	No Effect and Not Significant	Negligible and Not Significant	
LB2042 Category B	Summerhouse, Black Barony	No Effect and Not Significant	Negligible and Not Significant	
LB2043 Category C	Bellevue Temple In Former Policies of Black Barony.	Not Included in assessment	Negligible and Not Significant	
LB51957 Category B	Barony Castle Hotel, The Great Polish Map of Scotland	Not Included in assessment	Negligible and Not Significant	
LB8334 Category C	Paulswell Farmhouse and Steading	Not Included in assessment	Minor and Not Significant	
LB8361 Category A	Spitalhaugh House Including Stable and Bridge	Moderate and Significant	Minor and Not Significant	
LB51628 Category C	Spitalhaugh, Doocot House	Not Included in assessment	Minor and Not Significant	
LB8337 Category B	Castlecraig, Entrance Gates and Twin Lodges.	Not Included in assessment	Negligible and Not Significant	
LB15169 Category B	Scotstoun House	Not Included in assessment	Negligible and Not Significant	
LB15170 Category C	Stable Square, Scotstoun	Not Included in assessment	Negligible and Not Significant	
LB13862 Category B	Newlands Parish Church	Not Included in assessment	Negligible and Not Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
LB15136 Category B	Newlands Manse	Not Included in assessment	Negligible and Not Significant	
LB15137	Newlands Old Kirk	Not Included in assessment	Negligible and Not Significant	
LB15138 Category B	Mackay Of Scotstoun Tomb in Kirkyard	Not Included in assessment	Negligible and Not Significant	
LB15139 Category B	Bridgend Cottage and Camitswalls	Not Included in assessment	Negligible and Not Significant	
LB15140 Category B	Newlands Bridge	Not Included in assessment	Negligible and Not Significant	
LB13896 Category B	Hallyne House	Not Included in assessment	Negligible and Not Significant	
LB15357 Category B	Lyne Parish Church	Not Included in assessment	Negligible and Not Significant	
LB15358 Category B	The Beggar Path Bridge	Not Included in assessment	Negligible and Not Significant	
LB19742 Category B	Five Mile Bridge	Not Included in assessment	Negligible and Not Significant	
LB13898 Category C	Smithy Cottages, Near Whim	Not Included in assessment	Minor and Not Significant	
LB15150 Category C	Cistern, In Policies of Whim House	No Effect and Not Significant	Minor and Not Significant	
LB15151 Category B	Cowden Lodge at Drive Entrance to Whim House	No Effect and Not Significant	Minor and Not Significant	
LB15180 Category B	Whim House (Now the White House Hotel)	No Effect and Not Significant	Minor and Not Significant	
LB15181 Category B	Ice House, In Policies of Whim House	No Effect and Not Significant	Minor and Not Significant	
LB15182 Category C	Dovecot, Whim House	No Effect and Not Significant	Minor and Not Significant	
LB19724 Category A	Court Of Offices, Whim House	No Effect and Not Significant	Minor and Not Significant	
LB15141 Category B	Old Romanno Bridge Over the Lynne Water	Not Included in assessment	Minor and Not Significant	
LB15166 Category B	Romanno Bridge Hotel and Adjoining House and Two Cottages	Not Included in assessment	Minor and Not Significant	
LB19717 Category B	Romanno Toll	Not Included in assessment	Minor and Not Significant	
LB19722 Category B	Romanno Post Office and Adjoining Range	Not Included in assessment	Minor and Not Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
LB15152 Category B	Flemington Tower	Not Included in assessment	Minor and Not Significant	
LB15171 Category C	Drochil Castle Farm House	Not Included in assessment	Negligible and Not Significant	
LB15172 Category C	Tarth Bridge Over Tarth Water	Not Included in assessment	Negligible and Not Significant	
LB15173 Category B	Macbiehill Gateway And Lodge	Not Included in assessment	Negligible and Not Significant	
LB15174 Category C	Beresford Burial Vault	Not Included in assessment	Negligible and Not Significant	
LB15175 Category C	Lower Grange	Not Included in assessment	Negligible and Not Significant	
LB15176 Category B	Lamancha	Not Included in assessment	Negligible and Not Significant	
LB15177 Category A	Sundial, Lamancha	Not Included in assessment	Negligible and Not Significant	
LB15178 Category B	Entrance Gateway, Lamancha	Not Included in assessment	Negligible and Not Significant	
LB15179 Category C	Madrisa Farmhouse and Steading, Lamancha	Not Included in assessment	Negligible and Not Significant	
LB15208 Category C	Edston Toll (Also Known as Lyne Toll)	Not Included in assessment	Negligible and Not Significant	
LB19665 Category B	Lyne Viaduct	Not Included in assessment	Negligible and Not Significant	
LB19741 Category B	Lynesmill Bridge	Not Included in assessment	Negligible and Not Significant	
LB15209 Category B	Rosetta House	Not Included in assessment	Negligible and Not Significant	
LB15210 Category C	Rosetta, Walled Garden and Garden Building	Not Included in assessment	Negligible and Not Significant	
LB19728 Category B	Rosetta Stables	Not Included in assessment	Negligible and Not Significant	
LB48932 Category C	Standalane Cottage	Not Included in assessment	Negligible and Not Significant	
LB15211 Category B	Chapelhill Farmhouse and Courtyard Farm Buildings	Slight (Minor) and Not Significant	Negligible and Not Significant	
LB15212 Category B	Chapel Hill Bridge	Not Included in assessment	Negligible and Not Significant	
LB15213 Category B	Winkston Farm House	Not Included in assessment	Negligible and Not Significant	



Receptor		Residual Effect (2014 SEI for the Consented Scheme)	Residual Effect (the Development - 2021)	
LB15214 Category B	Winkston Tower House	Not Included in assessment	Negligible and Not Significant	
LB15215 Category B	Redscarhead, George Meikle Kemp Memorial (At Moy Hall)	Not Included in assessment	Negligible and Not Significant	
LB15375 Category C	Brownsland	Not Included in assessment	Negligible and Not Significant	
LB19744 Category C	Wester Happrew	Not Included in assessment	Negligible and Not Significant	
LB19723 Category B	Halmyre House	Not Included in assessment	Negligible and Not Significant	
LB13857 Category A	Neidpath Castle, Entrance Gateway To Courtyard, Courtyard Buildings (South Range), Walled Garden	Not Included in assessment	Negligible and Not Significant	
LB15348 Category B	Haswellsykes	Not Included in assessment	Negligible and Not Significant	
LB15359 Category C	Kirkton Manor, Manor Parish Church	Not Included in assessment	Negligible and Not Significant	
LB15361 Category B	Barns House	Not Included in assessment	Negligible and Not Significant	
LB15363 Category B	Barns Tower	Not Included in assessment	Negligible and Not Significant	
LB15368 Category B	Hallyards	Not Included in assessment	Negligible and Not Significant	
LB15369 Category B	Hallyards, Sundial	Not Included in assessment	Negligible and Not Significant	
LB15370 Category B	Hallyards, Statue	Not Included in assessment	Negligible and Not Significant	
LB19729 Category B	Peebles, Edinburgh Road, Venlaw Castle Hotel	Not Included in assessment	Negligible and Not Significant	
	Eddleston Conservation Area	Slight (Minor) and Not Significant	Minor and Not Significant	
	Peebles Conservation Area	Not Included in assessment	Negligible and Not Significant	
	West Linton Conservation Area	Not Included in assessment	Negligible and Not Significant	
	Howgate Conservation Area	Not Included in assessment	Negligible and Not Significant	
	Carlops Conservation Area	Not Included in assessment	Negligible and Not Significant	
	Penicuik Conservation Area	Not Included in assessment	Negligible and Not Significant	



#### 4.2 Analysis of Predicted Significant Heritage Effects Between Consented Scheme and the Development

Table 4.2 provides a comparison of the significant effects identified for the Consented Scheme and the Development with comparative wirelines provided in Appendix 2. Where there are differences in significance of effect, a summary of the change in findings is provided.

Table 4.2 Comparison of Significant Effects

Reference	Name	Residual Effect (2014 SEI for the Consented Scheme)  Residual Effect (the Development - 2021)			pment - 2021)	Summary of Change in Effect		
		Sensitivity	Magnitude of Change	Significance of Effect	Sensitivity	Magnitude of Change	Significance of Effect	
SM114	Cairn and hill fort, White Meldon	High	Small	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM2441	Upper Cademuir Hillfort	High	Small	Slight and Not Significant	High	Moderate	Moderate and Significant	Turbines will be visible behind the White Meldon (SM114) as shown on Figure 5.2.19. As this appears in a direct sightline between the forts important to understanding the cultural significance of intervisibility of hill forts, the effect is moderate/significant and not slight.
SM2703	Black Meldon,fort	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM2715	Lower Cademuir Hillfort	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM2734	Green Knowe,two ring enclosures & barrow 550m SSE of	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM2738	Wether Law Cairn	High	Small	Slight and Not Significant	High	Moderate	Moderate and Significant	Due to the proximity of the turbines to the cairn and their visual dominance, the effect is moderate/significant and not slight/not significant.



Reference	Name	Residual Effect (2014 SEI for the Consented Scheme)			Residual Effect (the Development - 2021)			Summary of Change in Effect
		Sensitivity	Magnitude of Change	Significance of Effect	Sensitivity	Magnitude of Change	Significance of Effect	
SM2755	Whaup Law, cairn	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM2840	Henderland Hill, Fort	High	Medium	Moderate and Significant	High	Negligible	Negligible and Not Significant	Very little of the Development is visible from the asset as it is hidden behind the higher elevation of Whiteside Hill with no tips visible above Whiteside Hill. As turbines do not appear in a direct sightline between the forts important to understanding the cultural significance of intervisibility of hill forts, the effect is negligible/not significant and not moderate/significant.
SM2950	Easter Dawyck, fort & settlement	High	Medium	Moderate and Significant	High	Slight	Minor and Not Significant	Whilst turbines are visible as shown on Figure 6.6a, they are not in the direct line of sight of Black Meldon (SM2703) and White Meldon (SM114) forts so that this key aspect of cultural significance relating to the intervisibility of forts is still readily apparent and a slight/not significant rather than moderate/significant change.
SM2955	Whiteside Hill,fort & enclosure	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change



Reference	Name	Residual Effect (2014 SEI for the Consented Scheme)			Residual Effe	ct (the Develo	pment - 2021)	Summary of Change in Effect
		Sensitivity	Magnitude of Change	Significance of Effect	Sensitivity	Magnitude of Change	Significance of Effect	
SM3045 (believe to be assessed as SM3166 in SEI)	SM3045 Bellanrig, settlement, fort & enclosures 870m SE of	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM3051	Woodhouse, Hill Fort	High	Medium	Moderate and Significant	High	Moderate	Moderate and Significant	No Change
SM3075	Upper Kidston,fort & settlement NNW of	High	Small	Slight and Not Significant	High	Moderate	Moderate and Significant	Due to the proximity of the turbines to the fort and their visual dominance, the change is moderate/significant and not slight/not significant.
SM3212	South Hill Head, settlement WNW of	High	Medium	Moderate and Significant	High	Slight	Minor and Not Significant	The relationship of the settlement to Homestead Fort (SM2713) is not affected by the Development, though the turbines would be visible above the Cloich Hills in views northwards up the Meldon Valley. This would not be readily visible when trees are present and would not overly dominate the sightline due to the settlement remains being at lower elevations. This is a slight/not significant effect rather than a moderate/significant effect.



Reference	Name	Residual Effect (2014 SEI for the Consented Scheme)			Residual Effect (the Development - 2021)			Summary of Change in Effect
		Sensitivity	Magnitude of Change	Significance of Effect	Sensitivity	Magnitude of Change	Significance of Effect	
LB2037	Category A Listed Portmore House	High	Small	Slight and Not Significant	High	Moderate (localised at one viewpoint)	Moderate and Significant	In most views from and towards the house, the effect is slight; however, in one localised view across the house as shown on Figure 5.2.9 this is a localised moderate/significant change.
LB8361	Category A Listed Spitalhaugh House	High	Medium	Moderate and Significant	High	Slight	Minor and Not Significant	The setting of the house is the lowland settled landscape along the Lyne Water Valley and whilst turbines tips are visible above the ridgeline they do not overly dominant the viewshed from the house and gardens, a minor/not significant effect rather than a moderate/significant effect.



#### 4.3 Summary of Heritage Changes in Effect

The Development will introduce theoretical visibility to very few new areas within the Study Areas, when compared to the theoretical visibility for the Consented Scheme. Although the area of theoretical visibility of the Development is largely the same as that for the Consented Scheme, there are some marginal differences between the density of turbines with the smaller scaled Consented Scheme and the fewer but taller turbines associated with the Development (see comparative wirelines in Appendix 2). There are also some minor differences between the assessment of effects for the Consented Scheme and the Development, largely relating to changes in setting and EIA guidance from HES which now correlates setting to how it contributes to the cultural significance of the monument to arrive at the overall significance of effect. Notably, simple intervisibility with the Development is not necessarily considered to be detrimental, unless this affects the cultural significance of the heritage asset so as to diminish its understanding, appreciation or experience.

In terms of the changes to setting, the majority of the effects relate to the introduction of the turbines to the Cloich Hills as there is little elevated modern infrastructure in this area. Where the turbines occur in direct sightlines (e.g., in key views between hill forts), a significant effect upon cultural significance has been identified for the Development.

The Development is not expected to result in any 'significant' cumulative heritage effects, which is similar to the overall findings of the assessment for the Consented Scheme (excluding Hag Law).



#### 5 SUMMARY

The PC Report provides a comparison between the principal effects of the Development and the principal effects of the Consented Scheme, in respect of all environmental topics, but both Landscape and Visual and Cultural Heritage are discussed in greater detail. The conclusions of the assessments contained within the EIA Report, and how they should be applied in the planning balance, are discussed in detail in the Planning Statement where a firm conclusion is reached that the Development is acceptable in terms of local and national planning policy.

In respect of the Landscape and Visual effects of the Development, whilst the Consented Scheme is different to the Development in a number of respects, there are notable comparisons in terms of the level of effects.

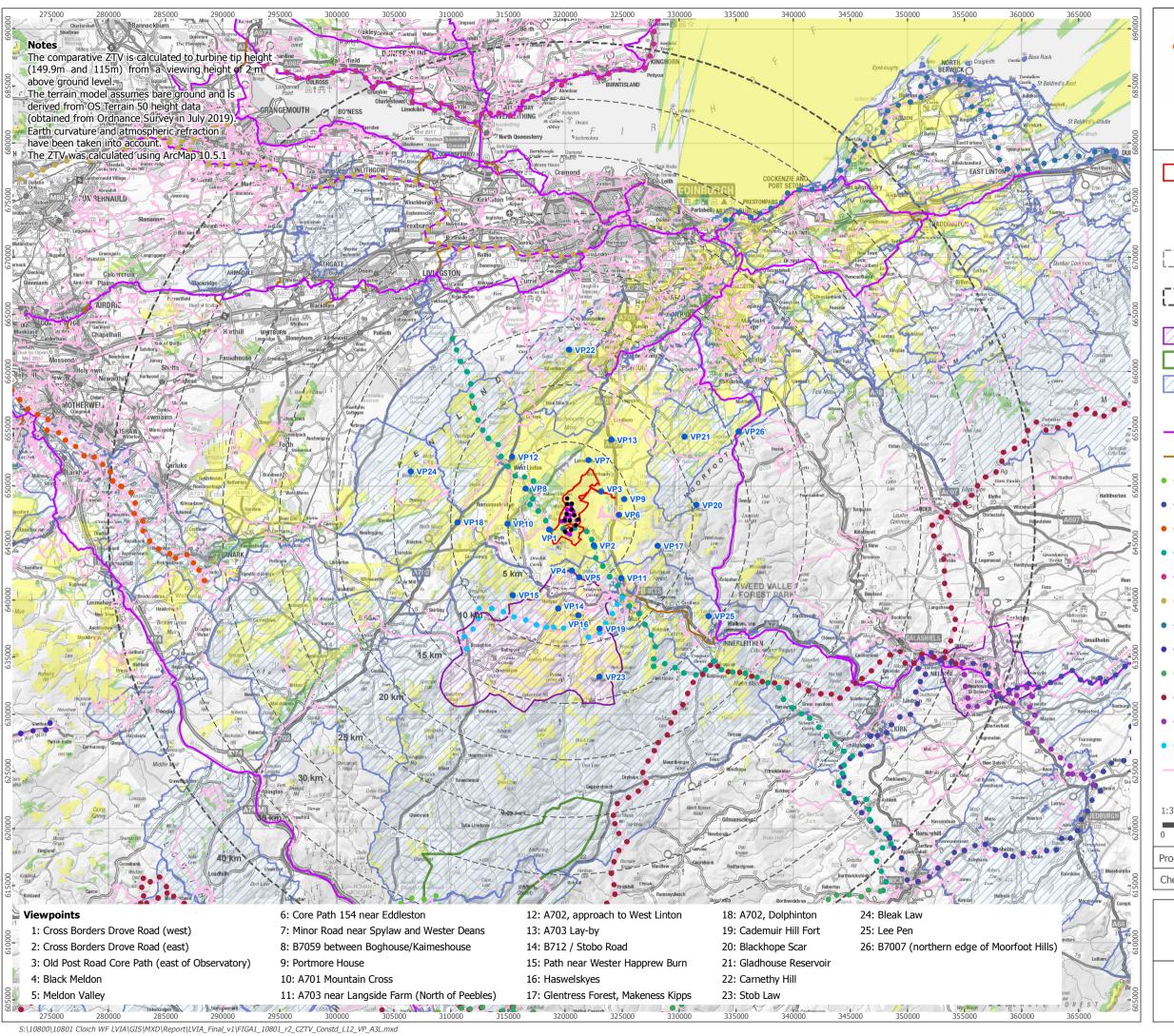
In terms of the visual impact, the reduced number of larger turbines forming the Development will provide a more balanced turbine array when compared to the Consented Scheme, with a similar horizontal extent remaining. Whilst there are some changes in the significance of effects at some viewpoints, these are in part due to differences in assessment methodology used between the 2012 ES/2014SEI and the EIA Report; these changes are slight as described in this Report. These changes are of themselves limited in terms of the overall conclusions of the Landscape and Visual Assessment within the EIA Report.

The PC Report also considers the Archaeological and Cultural Heritage effects of the Consented Scheme and the Development. Whilst there are some differences in the assessed effect as a consequence of the differences between designs, broadly speaking the direct and indirect effects on heritage assets are similar for both. The overall number of assessed significant effects in both cases relate to 12 heritage assets. The fact that there are some differences is unsurprising given that different assessors are involved who may take a different professional view on the levels of effects on individual cultural heritage assets, and changes in technical guidance.

Based on the findings of the PC Report the overall conclusion that is reached is one that the Consented Scheme and the Development would have very similar levels of effects on both the Landscape and Visual and Archaeological/Cultural Heritage resource.



# **APPENDIX 1 – COMPARATIVE ZTV**









- Site boundary
  - Cloich Layout 12 turbine layout
- Consented Cloich Forest turbine layout
- \_\_\_ 5 km intervals from outermost turbines
- 40 km interval from outermost turbine
- National Scenic Area
- Wild Land
  - Local Landscape Designation
- Viewpoint location
- —— National Cycle Network (NCN)
  - NCN Link
- Annandale Way
- Borders Abbeys Way
- Clyde Walkway
- Cross Borders Drove Road
- Fife Coastal Path
- Forth Clyde Canal/Union Canal
- • John Muir Way
- River Ayr Way
- Romans and Reivers Route
- Southern Upland Way
- St Cuthbert's Way
- John Buchan Way
  - Core path (indicative)

1:315,000 Scale @ A3



Produced By: EL Ref: Pr No.-REP-Dr. No.

Checked By: LC Date: 21/05/2021

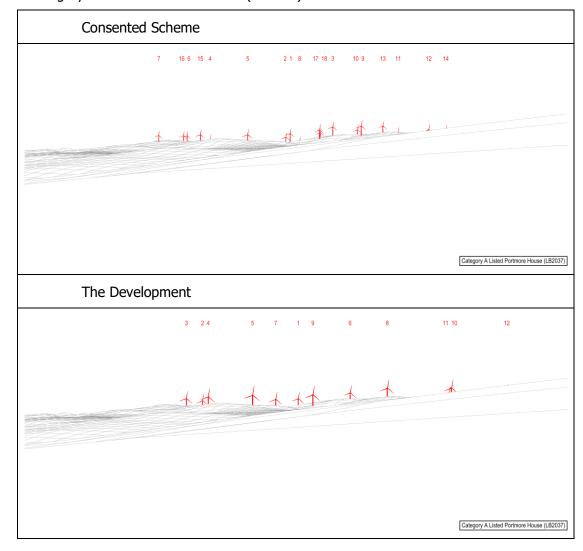
Blade Tip Height Comparative ZTV Figure A1

Cloich Forest Wind Farm EIA Report



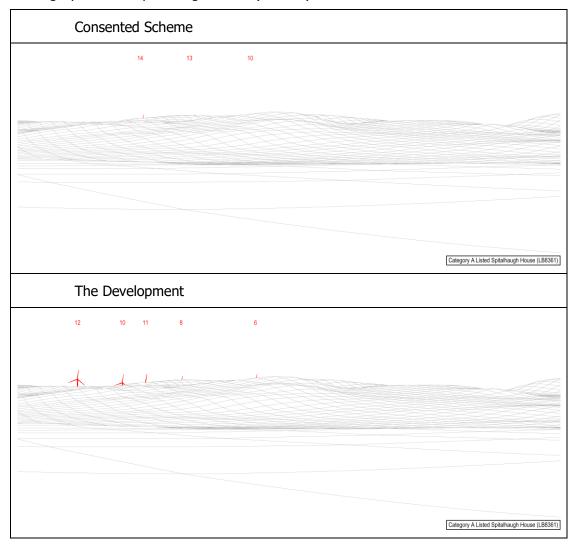
#### **APPENDIX 2 – CULTURAL HERITAGE WIRELINES**

Category A Listed Portmore House (LB2037)



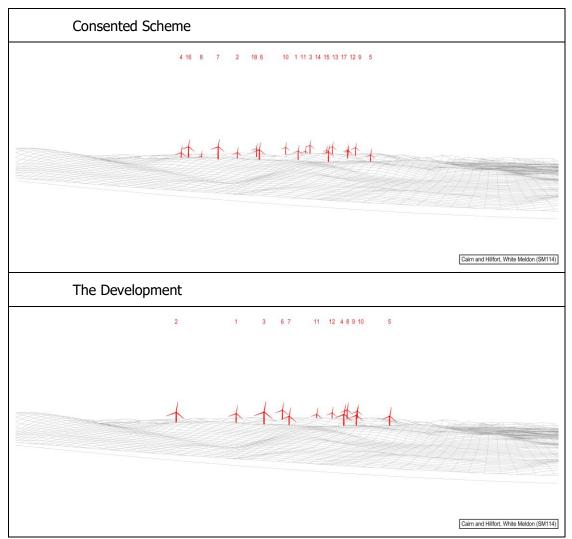


# Category A Listed Spitalhaugh House (LB8361)



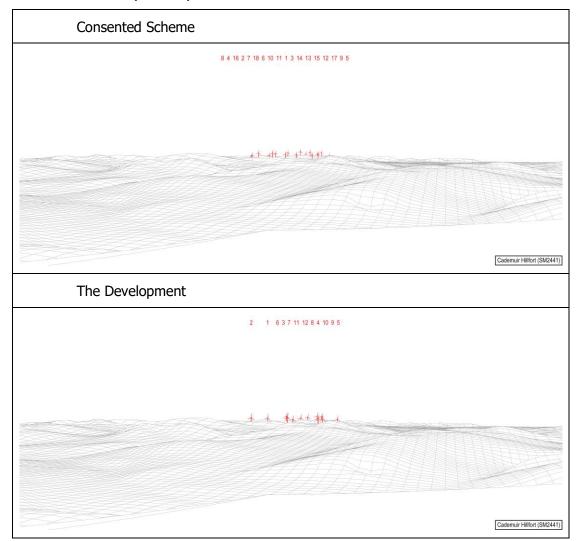


# Cairn and Hillfort, White Meldon (SM114)



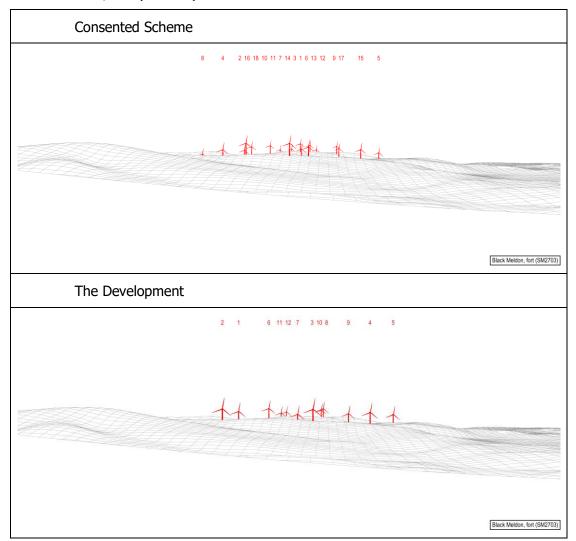


# Cademuir Hillfort (SM2441)



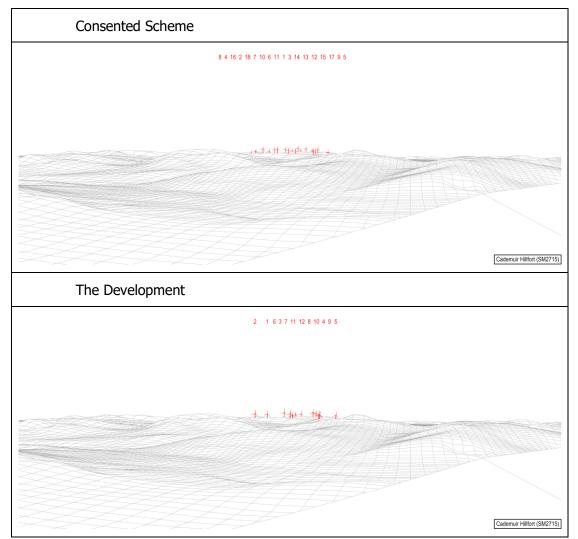


# Black Meldon, fort (SM2703)



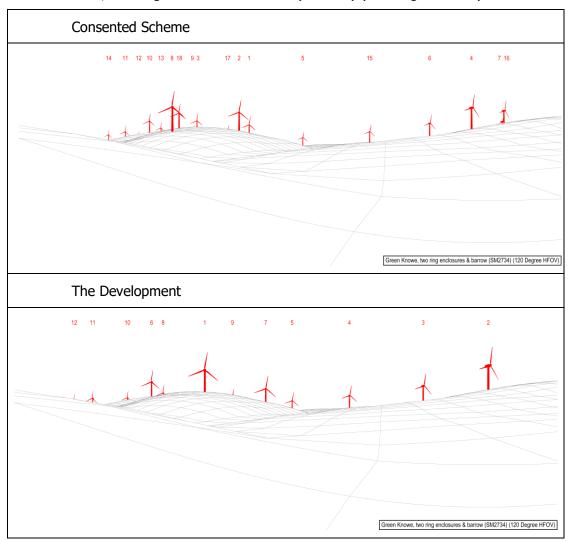


# Cademuir Hillfort (SM2715)



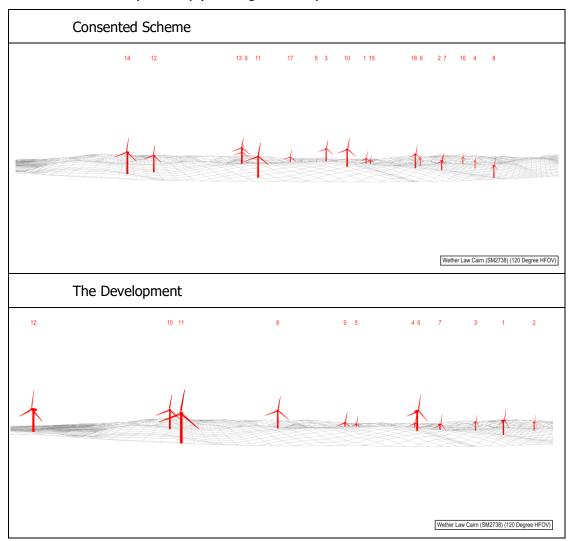


# Green Knowe, two ring enclosures & barrow (SM2734) (120 Degree HFOV)



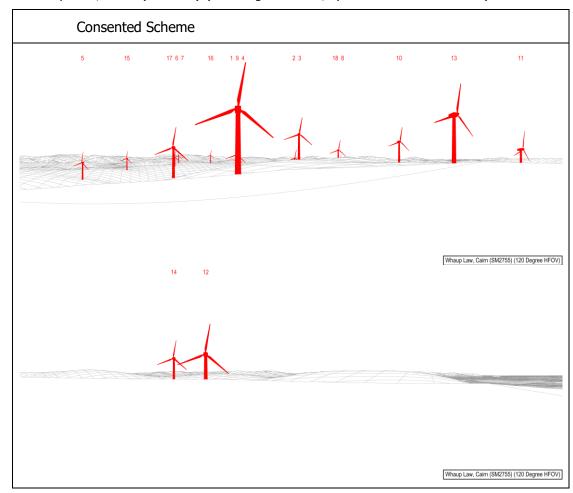


# Wether Law Cairn (SM2738) (120 Degree HFOV)

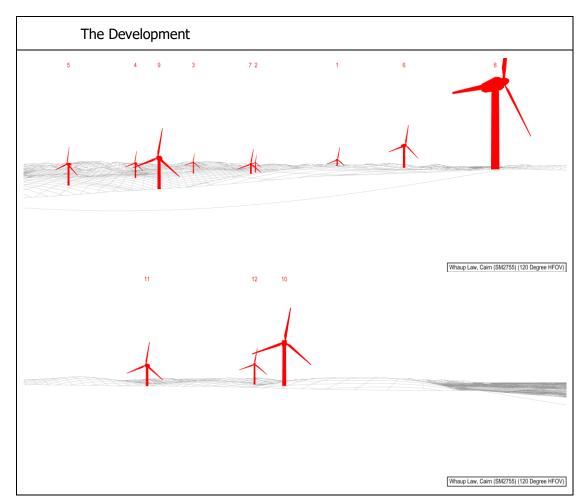




# Whaup Law, Cairn (SM2755) (120 Degree HFOV, split across two wirelines)

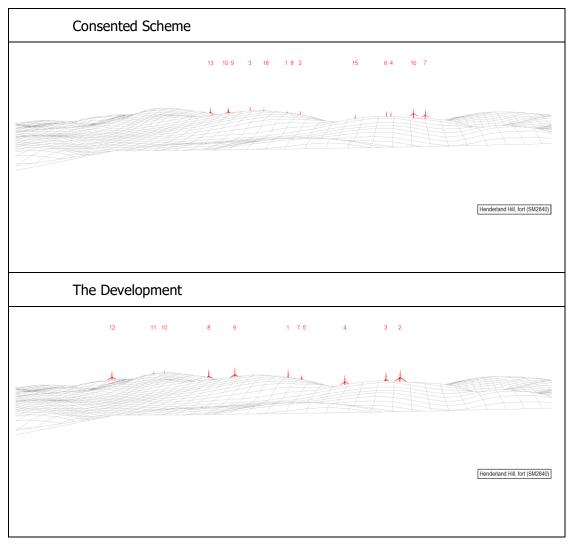






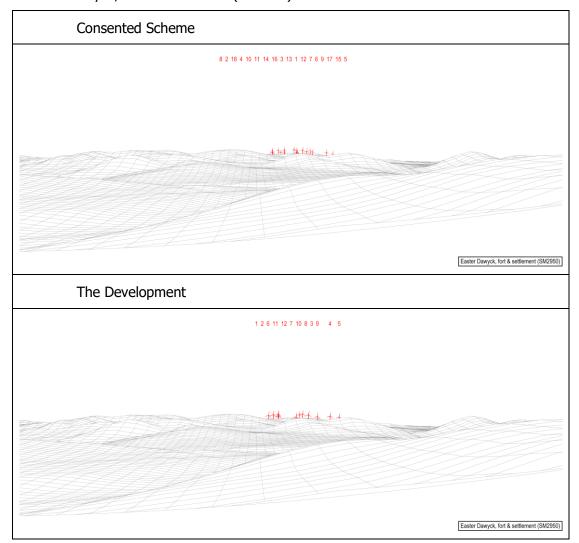


# Henderland Hill, fort (SM2840)



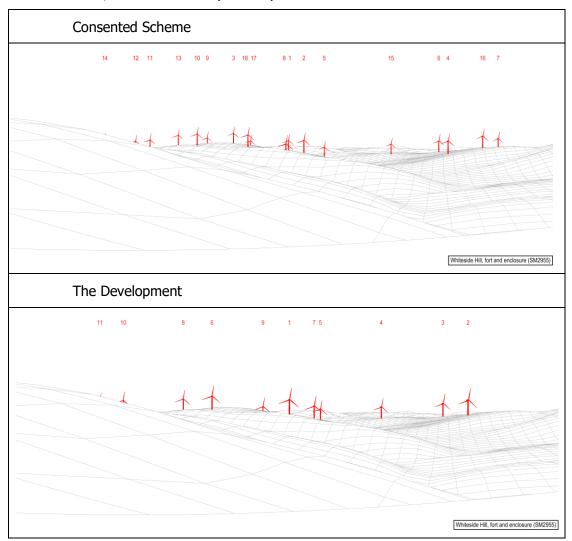


# Easter Dawyck, fort & settlement (SM2950)



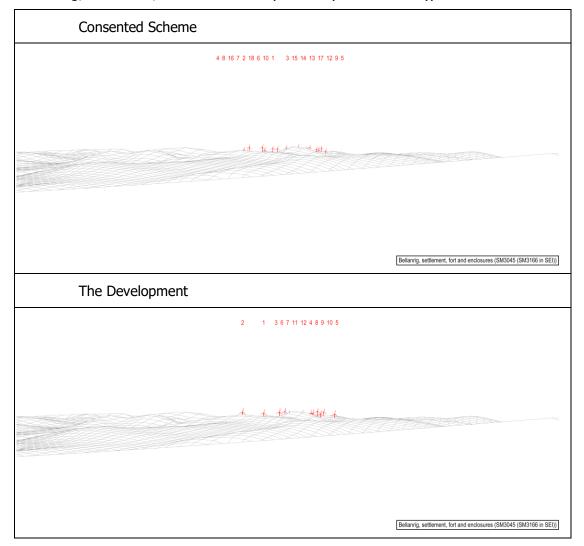


# Whiteside Hill, fort & enclosure (SM2955)



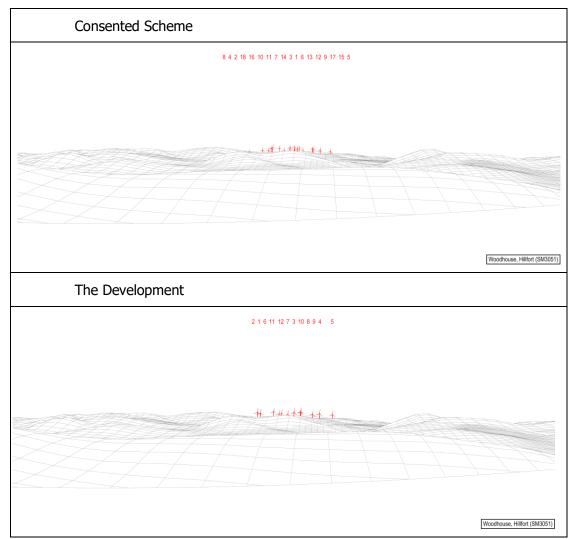


# Bellanrig, settlement, fort & enclosures (SM3045 (SM3166 in SEI))



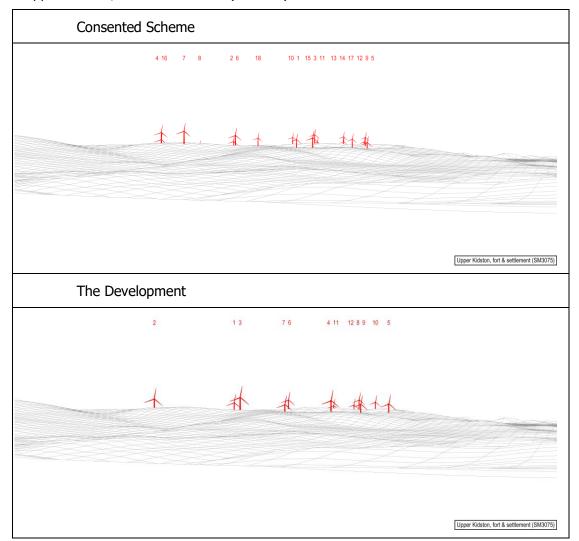


# Woodhouse, Hillfort (SM3051)





# Upper Kidston, fort & settlement (SM3075)





# South Hill Head, settlement (SM3212)

