6 LANDSCAPE AND VISUAL

6.1 INTRODUCTION

This Chapter of the Environmental Impact Assessment Report (EIA Report) evaluates the effects of the Development on the landscape and visual resource. The Development (up to 14 turbines at up to 180m to tip) represents a revised proposal to that of the consented Heathland Wind Farm (17 turbines at 132m to tip). A comparison between the effects identified for the consented scheme and Development assessed here is provided in the Planning Statement.

This assessment was undertaken by LUC on behalf of Arcus Consultancy Services Limited (Arcus). This Chapter of the EIA Report is supported by the following Technical Appendix documents provided in Volume 3 Technical Appendices:

- Appendix A6.1 – Landscape and Visual Assessment Methodology;
- Appendix A6.2 – Visualisation Methodology;
- Appendix A6.3 – Residential Visual Amenity Assessment; and
- Appendix A6.4 – Aviation Lighting Assessment.

This chapter includes the following elements:

- Legislation, Policy and Guidance;
- Consultation;
- Assessment Methodology and Significance Criteria;
- Landscape Baseline Conditions;
- Visual Baseline Conditions;
- Assessment of Potential Effects;
- Mitigation and Residual Effects;
- Cumulative Effect Assessment;
- Summary of Effects;
- Statement of Significance; and
- Glossary.

Volume 2 of the EIA Report contains the EIA Report Figures. This chapter is supported by Volume 2b LVIA Figures and Volume 2c LVIA Visualisations.

6.2 LEGISLATION, POLICY AND GUIDANCE

The following guidance, legislation and information sources have been considered in carrying out this assessment:

6.2.1 Legislation and Assessment Guidance

- Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- Landscape Institute and the Institute of Environmental Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3);
- Scottish Natural Heritage[1] (SNH) (2012) Assessing the cumulative impact of onshore wind energy developments;
- SNH (2018) A Handbook on Environmental Impact Assessment, Appendix 2: Landscape and Visual Impact Assessment, Version 5;
- SNH (2017) Visual Representation of Wind Farms, Version 2.2; and

[1] SNH have changed name to NatureScot in August 2020, during drafting of LVIA. Many reference documents and consultation responses were published prior to this name change. Where these have been published prior to the name change SNH is referred to.

- Landscape Institute (2019) Advice Note 06/19 Visual Representation of development proposals.

6.2.2 Design and Locational Guidance

- SNH (2017) Siting and Designing Wind Farms in the Landscape, Version 3;
- SNH (2015) Spatial Planning for Onshore Wind Turbines – natural heritage considerations, Guidance;
- SNH (2015) Constructed Tracks in the Scottish Uplands, 2nd Edition;
- SNH (2019) Good Practice During Windfarm Construction, Version 4;
- Scottish Government (2014) Scottish Planning Policy;
- Scottish Government (2017) Scottish Energy Strategy: The future of energy in Scotland;
- Scottish Government (2017) Onshore Wind Policy Statement; and
- Scottish Government (2003) Planning Advice Note (PAN) 68: Design Statements.

6.2.3 Local Development Plans and Supplementary Planning Guidance

- Ironside Farrar on behalf of South Lanarkshire Council (2019) Tall Wind Turbines; Landscape Capacity, Siting and Design Guidance;
- Ironside Farrar (2016) South Lanarkshire Landscape Capacity Study for Wind Energy;
- South Lanarkshire Council (2015) Supplementary Guidance 10: Renewable Energy; and
- West Lothian Council and SNH (2011) Landscape Capacity Study for Wind Energy Development in West Lothian.

Full details of the policy context is provided in Chapter 4: Energy and Planning Policy.

6.3 CONSULTATION

6.3.1 Scoping Responses and Consultations

Consultation for this EIA Report topic was undertaken with the organisations shown in Table 6.1.

Table 6.1 Consultation Responses

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
SNH (now NatureScot)	Scoping Response, 31/01/20	Requested one additional viewpoint at the summit of West Cairn Hill within the Pentland Hills.	Additional viewpoint included within assessment.
West Lothian Council	Scoping Response, 14/02/20	Requested three additional viewpoints – one located on the A70 at Maidenhill; one located at the summit of West Cairn Hill within the Pentland Hills; and one located on the B8084 south of Armadale. Requested a night time viewpoint from Longridge.	All three additional viewpoints included within assessment. Night time viewpoint request from Longridge included within assessment.
South Lanarkshire Council	Scoping Response, 07/02/20	No additional viewpoint requests made.	N/a

Consultee	Type and Date	Summary of Consultation Response	Response to Consultee
West Lothian Council	Viewpoint Consultation Response, 06/07/20	Satisfied with additional viewpoint inclusion.	N/a
SNH (now NatureScot)	Viewpoint and Cumulative Consultation Response, 25/06/20	Cumulative impacts will be one of the key issues at this site due to the large number of wind farm applications that have been made in both the local area and the region. We note there are proposed variations to increase the height of both Tormywheel Extension and Longhill Burn, and these schemes should be illustrated using the proposed heights. Requested a night time viewpoint from West Cairn Hill to illustrate effects of aviation lighting on views from the Pentland Hills Regional Park.	Undetermined application for Longhill Burn has been withdrawn as of 9th September 2020. WLC subsequently confirmed that consented Longhill Burn to be included in cumulative visuals. Increased (and consented) tip height for Tormywheel Extension included. Night time viewpoint request from West Cairn Hill not included within assessment due to the distance to the Development; existing lighting within the view including within the settlements of Whitburn and Bathgate; no reference to dark skies within statement of significance for Pentland Hills Regional Park; and the likelihood of recreational receptors frequenting the hill during the hours of darkness.
West Lothian Council	Cumulative Consultation Response, 06/07/20	Highlighted undetermined applications for tip height increase at consented Camilty and Longhill Burn Wind Farms.	Undetermined application for Camilty included within the cumulative assessment (but noting this revised scheme has been withdrawn after the cumulative cut-off date). Undetermined application for Longhill Burn has been withdrawn as of 9th September 2020. WLC subsequently confirmed that consented Longhill Burn to be included in cumulative visuals.
South Lanarkshire Council	Cumulative Consultation Response, 02/07/20	No further comments on proposed approach.	N/a

6.4 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

The LVIA methodology was prepared in accordance with the principles contained within GLVIA3 and is described in detail in Appendix A6.1. Appendix A6.1 should be referred to whilst reviewing the findings of this assessment in order to gain a clear understanding of how findings of significance have been informed.

The key steps in the methodology for assessing both landscape and visual effects are as follows:

- the area from which the Development may theoretically be visible was established through creation of a Zone of Theoretical Visibility (ZTV) map covering a distance of

up to 45km from the outermost wind turbines of the Development, refer to Figure 6.1.2a for blade tip ZTV;
- the landscape of the Study Area was analysed, and landscape receptors identified;
- the visual baseline was recorded in terms of the places where people will be affected by views of the Development, and the nature of views and visual amenity, seen by different groups of people;
- viewpoints were selected (including representative viewpoints, specific viewpoints and illustrative viewpoints), in consultation with the Councils and NatureScot; and
- likely effects on landscape and visual resources were identified.

6.4.1 Study Area / Survey Area

The Study Area for the assessment is defined as 45km from the outermost turbines of the Development in all directions, as recommended in SNH (now NatureScot) good practice guidance[2] for turbines of >150m to blade tip height. The location of the Study Area is shown on Figure 6.1.1. The consideration of landscape and visual effects, including cumulative effects, on particular receptors is dealt with in the sections which follow, with specific reference to the distance within which the potential for significant effects is considered likely for both landscape and visual receptors.

To consider cumulative effects of the Development in relation to other schemes in the wider area, wind farms within 45km of the outermost turbines of the Development have been included for the purposes of modelling and detailed assessment, as agreed with NatureScot and the Councils. A review of patterns of development is also provided for wind farms in the wider area as required, following guidance from SNH[3]. Wind farms within 45km of the outermost turbines of the Development are shown on Figure 6.1.8.

A ZTV map was generated, illustrating areas from where the proposed wind turbines may be visible in the Study Area. The ZTV was based on bare earth topography and therefore does not take account of potential screening by vegetation or buildings. The ZTV is used as a tool for understanding where significant visual effects may occur. Receptors which are outside the ZTV will not have visibility of the Development and are not considered further in this Landscape and Visual Impact Assessment (LVIA). The ZTV to blade tip height (150m for T1-T3 and 180m for T4-T14) is shown at A3 scale on Figure 6.1.2a and A1 scale on Figure 6.1.2b and the ZTV to hub height (83.5m for T1-T3 and 101m for T4-T14) is shown at A3 scale on Figure 6.1.3a and A1 scale on Figure 6.1.3b.

6.4.2 Scope of Assessment

The key issues for the assessment of potential landscape and visual effects relating to the Development are listed below. The following effects have been assessed in accordance with the principles contained within GLVIA3:

- Effects on the physical landscape of the Application Site ('the Site');
- Effects on the perceived landscape character of Landscape Character Types (LCT) within a 15km radius from the outermost wind turbines of the Development;
- Effects which could be of relevance to the reasons for designation as described by the key characteristics/special qualities of nationally and locally designated landscapes within the Study Area, as well as the overall integrity of nationally designated areas, as required by Scottish Planning Policy (SPP);
- Effects on visual receptors at representative viewpoints;
- Effects on visual receptors at settlements and routes in the Study Area;
- Cumulative landscape and visual effects (including combined, successive and sequential visual effects);

[2] SNH (2017). Visual Representation of Wind Farms, Version 2.2.
[3] SNH (2012). Assessing the Cumulative Impacts of Onshore Wind Energy Developments.

- Effects on residential visual amenity for properties within 2km of the Development. Further information is provided in Appendix A6.3; and
- Night-time effects due to the requirement for aviation lighting. Further information is provided in Appendix A6.4.

6.4.3 Elements Scoped Out of Assessment

On the basis of the desk based and survey work undertaken, the professional judgement and experience of the assessment team, experience from other relevant projects, feedback received from consultees and policy guidance or standards, the following potential effects have been scoped out of the assessment:

- Effects on visual receptors beyond a 45km radius from the outermost wind turbines of the Development, where it is judged that potential significant effects are unlikely to occur;
- Effects on landscape and visual receptors that have minimal or no theoretical visibility (as predicted by the ZTV) and are therefore unlikely to be subject to significant effects;
- Effects on landscape character beyond a 15km radius from the outermost wind turbines of the Development and where the potential for significant effects on landscape character is limited, unless otherwise stated;
- Effects on designated landscapes beyond a 15km radius from the outermost wind turbines of the Development and from where it is judged that potential significant effects on key characteristics and/or special qualities are judged unlikely to occur;
- Effects on views from routes and settlements beyond a 15km radius from the outermost wind turbines of the Development and where the potential for significant visual and sequential effects is limited, unless otherwise stated; and
- Cumulative effects in relation to turbines under 50m to blade tip height and single turbines beyond 5km from the outermost wind turbines of the Development (except where otherwise stated).

6.4.4 Design Parameters

Potential landscape and visual effects associated with the Development have been a key consideration in the design evolution, to be balanced against on-site constraints (including deeper areas of peat) and maximising wind yield. Landscape and visual objectives have included the consideration of effects on residential visual amenity from nearby properties and how the Development interacts with nearby operational and consented/ proposed wind farms including Tormywheel and its Extension (to the immediate east) and the consented Longhill Burn (noting that this scheme is also subject to an application for 200m to tip, see Section 6.7.2 below).

Micrositing of turbines (up to 100m as specified in Chapter 3: The Development) is considered unlikely to result in changes to predicted landscape or visual effects, and therefore will not materially alter the findings of this assessment.

Further information on the design process is included in Chapter 2: Site Selection and Design.

6.4.5 Baseline Survey Methodology

Field survey work was carried out during several visits under differing weather conditions between October 2019 and September 2020, and records were made in the form of field notes and photographs. Field survey work included visits to the site, viewpoints, designated landscapes, and extensive travel around the Study Area to consider potential effects on landscape character and on experiences of views seen from designated landscapes, settlements and routes.

6.4.5.1 Desk Based Research and Data Sources

The following data sources have informed the baseline and assessment:

Landscape Character and Landscape Capacity

- West Lothian Council (2014), West Lothian Landscape Character Classification;
- Ironside Farrar (2010), South Lanarkshire Landscape Character Assessment; and
- SNH (2019), Scottish Landscape Character Types Map and Descriptions[4].

Designated Areas

- Scottish Natural Heritage (2010), The special qualities of the National Scenic Areas. SNH Commissioned Report No.374;
- Ironside Farrar (2010), South Lanarkshire: Validating Local Landscape Designations;
- LUC (2013), West Lothian Local Landscape Designation Review; and
- Landscape designations as identified in Structure and Local Plans covering the Study Area (see Chapter 4: Energy and Planning Policy).

Data Sources

- Ordnance Survey (OS) Landranger 1:50,000 scale and Pathfinder 1:25,000 scale maps; and
- Online map search engines.

Modelling

- OS Terrain® 5 height data (DTM);
- OS Terrain® 50 height data (DTM);
- Raster Data at 1:50,000 (to show surface details such as roads, forest and settlement detail equivalent to the 1:50,000 scale Landranger maps); and
- Raster Data at 1:250,000 (to provide a more general location map).

Cumulative Assessment

- Data from other wind farm applications[5].

6.4.6 Methodology for the Assessment of Effects

The significance of the potential effects of the Development has been determined by professional consideration of the sensitivity of the receptor and the magnitude of the potential effect.

6.4.6.1 Sensitivity of Receptors

The sensitivity of the baseline conditions, including the importance of environmental features on or near to the Site or the sensitivity of potentially affected receptors, has been assessed in line with best practice guidance, legislation, statutory designations and professional judgement.

Judgements regarding the sensitivity of landscape or visual receptors require consideration of both the susceptibility of the receptor to the type of development proposed and the value attached to the landscape or visual resource. Judgements have been recorded as high, medium, low or negligible. Detailed information about the approach to assessment of sensitivity is provided in Appendix A6.1.

[4] Available at: https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions. Accessed on: 23 March 2020.
[5] A cut-off date of 30th June 2020 was applied for the inclusion of developments within the cumulative assessment.

6.4.6.2 Magnitude of Effect

The magnitude of potential effects has been identified through consideration of the degree of change to baseline conditions predicted as a result of the Development, the duration and reversibility of an effect. This professional judgement has been made in line with best practice guidance and legislation.

Judgements regarding the magnitude of landscape or visual change have been recorded as high, medium, low or negligible and combine an assessment of the scale and geographical extent of the landscape or visual effect, its duration and reversibility. Detailed information about the approach to assessment of magnitude is provided in Appendix A6.1.

6.4.6.3 Significance of Effect

The sensitivity of the landscape or visual receptor and the magnitude of the predicted effects has been used as a guide, informed by professional judgement, to predict the significance of the likely effects.

Appendix A6.1 provides full details of the criteria considered in judging the identified aspects of sensitivity (susceptibility and value) and magnitude of change (size/scale, geographical extent, duration and reversibility), and the grades used to describe each.

Although a numerical or formal weighting system has not been applied, consideration of the relative importance of each aspect has been made to feed into the overall decision. Levels of effect have been identified as **negligible, minor, moderate** or **major** where moderate and major effects are considered significant in the context of the EIA Regulations.

This determination requires the application of professional judgement and experience to take on board the many different variables which need to be considered, and which are given different weight according to site-specific and location-specific considerations in every instance. Judgements have been made on a case by case basis, guided by the principles set out in Diagram 1 in Appendix A6.1.

In terms of the direction of effects (positive or adverse) there is a wide spectrum of opinion with regard to wind energy development. Taking a precautionary stance, effects are assumed to be adverse, unless stated otherwise.

6.4.7 Assessment Limitations

No substantial information gaps have been identified during the preparation of baseline information or undertaking of the assessment, and it is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant effects on landscape, views and visual amenity.

6.4.8 Embedded Mitigation

Landscape and visual effects have been reduced by the embedded mitigation measures described in Chapter 2: Site Selection & Design and Chapter 3: The Development.

6.4.9 Visualisation Methodology

The methodology for production of the visualisations was based on current good practice guidance as set out by SNH (now NatureScot)[6]. Detailed information about the approach to viewpoint photography, ZTV and visualisation production is provided in Appendix A6.2.

[6] SNH (2017). Visual Representation of Wind Farms, Version 2.2

6.5 LANDSCAPE BASELINE CONDITIONS

6.5.1 Introduction

This section presents an overview of the landscape baseline covering current landscape character (including constituent landscape elements), landscape condition and any designations attached to the landscape.

6.5.2 The Site and Context

The Site context is described in Chapter 2: Site Selection & Design and detailed information on the Development is provided in Chapter 4: The Development and shown on Figure 3.1.

The centre of the Site is located approximately 4km to the north-east of Forth, as shown on Figure 6.1.1. The Site is partly located within the boundaries of South Lanarkshire Council (SLC) and partly within West Lothian Council (WLC).

The Site is located within the upland plateaux to the south of the main transport corridor between Glasgow and Edinburgh and forms a high point within the surrounding landscape. The landform of the Site comprises a shallow ridge running east to west through its centre, which falls away to the north and south. At the highest point the ground level reaches 362m above ordnance datum (AOD). There are a number of burns and watercourses which cross the Site: the Mouse Water drains from the Site in the south-west, and the Wormlaw Burn drains from the Site to the south-east.

The landscape surrounding the Site has previously been influenced by quarrying to the west and opencast workings to the north-east. Coniferous forestry and wind farm development now influence the character of the surrounding landscape. The current land use of the Site is commercial coniferous forestry. The system of clear felling has resulted in geometric blocks of bare ground and coupes of forestry at different ages.

A network of vehicular access tracks runs throughout the Site, with the main access leading from the A706 which borders the Site to the west. Additional access tracks run into the Site from the A704 to the north, and from minor roads to the south. The closest settlement to the Site is Wilsontown, approximately 1.5km south-west of the nearest wind turbine. Breich is located approximately 2km to the north of the nearest wind turbine. The larger settlement of Forth is located approximately 2.5km to the south-west of the nearest wind turbine. There are a number of individual properties and small clusters of properties located within close proximity. These properties are mainly focussed along the minor road to the south of the Site.

Four core paths (CL/3164/1 – CL/3167/1) form one continuous route through the Site from north to south, and form part of the Core Path network linking Tormywheel to the north of the Site with Wilsontown to the south. There are also three rights of way within the Site: the SL160 connects Tashieburn road to the core path network within the Site; the SL159 follows the same alignment as the central section of the core path network; and the third path forms part of the Wider Network, crossing the Site from north-east to south-west.

6.5.3 Landscape of the Study Area

The Study Area, shown on Figure 6.1.1, extends to a 45km radius from the outermost turbines of the Development in all directions, and includes land within West Lothian, South Lanarkshire, North Lanarkshire, Scottish Borders, Midlothian, East Lothian, City of Edinburgh, Fife, Falkirk, Glasgow City, East Dunbartonshire, East Renfrewshire, Renfrewshire, Stirling, Clackmannanshire, Perth and Kinross, East Ayrshire and Dumfries and Galloway.

The Study Area reaches from the Ochil Hills in the north to the Tweed Valley Forest Park in the east, the northern edge of the Southern Uplands in the south and Glasgow in the west. The landscape character of the Study Area is very varied and includes open areas of rolling plateau farmland, upland hills, lowland river valleys and urban centres. The Firth of Forth is located in the north-east of the Study Area.

Within the more immediate Study Area, coniferous forestry is a prominent feature on the surrounding low-lying hills. Large blocks of forestry extend to the east and west of the Site, and there are more scattered patches of forestry to the north and south.

There are a number of residential properties within 2km of the proposed turbines and small settlements within 5km of the Site, including Forth, Breich and Woolfords Cottages. Across the Study Area more broadly, settlement is generally focussed along key transport routes to the north including the A71 and the M8, which runs east and west between Glasgow and Edinburgh.

The closest commercial scale wind farm to the Site is the operational Tormywheel Wind Farm, situated to the immediate north-west, which also has an undetermined application for a small extension. The consented Longhill Burn Wind Farm is located to the immediate north-east of the Site. The relationship of the Development with consented and application stage wind farms is considered in more detail in the cumulative assessment. The operational Pates Hill Wind Farm is located within 2km to the north-east.

There are also a number of large scale wind farms across the Study Area, as shown on Figure 6.1.8. Within the more immediate context, these include Harburnhead and Pearie Law (both operational) within and just beyond 5km to the north-east; Muirhall and its extensions (operational) within 5km to the south-east (referred to within the assessment as the Muirhall Group); and Black Law Wind Farm and its extensions (operational) approximately 2.5km to the west (referred to within the assessment as the Black Law Group). Refer to Table 6.7 for further detail of wind farms in the Study Area.

6.5.4 Landscape Character Types

This section provides a description of landscape character (including constituent landscape elements), drawing on published studies, supplemented with project specific research and field work where relevant.

In 2019 SNH (now NatureScot) made available via their website an updated national Landscape Character Assessment (LCA) for Scotland[7]. SLC has published a detailed LCA for South Lanarkshire[8]. The finer grain South Lanarkshire LCA has been used to inform this assessment where relevant; elsewhere the SNH national LCA has been used.

The southern part of the Site lies within the area covered by the South Lanarkshire LCA and classified as Plateau Moorland Landscape Character Type (LCT) and Plateau Moorland Forestry LCT subtype. The northern part of the site, located within WLC, is classified as Upland Fringes LCT within the SNH national LCA.

The LCTs within the Study Area are illustrated on Figure 6.1.4. Consideration of the key characteristics; influence of existing operational wind farms; and potential relationship with the Development (including the extent of the ZTV coverage and actual visibility) is used as a means of identifying which LCTs require further assessment, and which LCTs can be scoped out because they are unlikely to experience significant effects arising from the Development. LCTs beyond 15km from the Site, and those with limited actual

[7] SNH (2019). Scottish Landscape Character Types Map and Descriptions. Available at: https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions. Accessed on: 23rd March 2020.
[8] Ironside Farrar on behalf of South Lanarkshire Council (2010). South Lanarkshire Landscape Character Assessment. South Lanarkshire Council.

visibility within 15km of the Site, are not considered further within the assessment. Details are provided in Table 6.2, with LCTs to be included shown in bold.

Table 6.1 Landscape Character Types

LCT	Theoretical visibility of Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
South Lanarkshire Council	
1, Urban Fringe Farmland	Limited theoretical visibility across parts within 15km – **not considered further**
2, Incised River Valley (and subtype)	Very limited theoretical visibility within 15km – **not considered further**
4, Rolling Farmland (and subtype)	Theoretical visibility across parts approximately 10km from the Development; woodland cover surrounding the Mouse Water will further limit actual visibility; operational wind farms to the north already influence character – **not considered further**
5, Plateau Farmland (and subtypes)	Widespread theoretical visibility within 15km – **considered further**
6, Plateau Moorland (and subtypes)	Within Site – widespread theoretical visibility within 15km – **considered further**
9, Broad Valley Upland	Theoretical visibility across parts beyond 10km; operational wind farms in direct key views north from parts of the valley landforms have already influenced character – **not considered further**
11, Prominent Isolated Hills	Theoretical visibility across parts approximately 15km from Development; Development will be seen in the context of existing large scale views which include operational wind farms – **not considered further**
12, Old Red Sandstone Hills	Widespread theoretical visibility across parts within 15km – **considered further**
SNH (now NatureScot) National LCT	
90: Dissected Plateau Moorland	Limited theoretical visibility within 15km – **not considered further**
99: Rolling Farmland – Borders	Very limited theoretical visibility within 15km – **not considered further**
151: Lowland Plateaux – Central	Theoretical visibility across parts within 15km; actual visibility reduced by woodland; existing wind farm development within this LCT has already influenced character– **not considered further**
201: Plateau Farmland – Glasgow & Clyde Valley	Widespread theoretical visibility within 15km – **considered further**
204: Incised River Valleys	Theoretical visibility across parts within 15km; actual visibility reduced by buildings and woodland – **not considered further**
213: Plateau Moorlands – Glasgow & Clyde Valley	Widespread theoretical visibility within 15km – **considered further**
268: Upland Hills – Lothians	Widespread theoretical visibility within 15km – **considered further**
269: Upland Fringes - Lothians	Within Site – widespread theoretical visibility within 15km – **considered further**

LCT	Theoretical visibility of Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
271: Lowland River Corridors – Lothians	Widespread theoretical visibility within 15km however woodland cover in the southern valley of the Linhouse Water will reduce actual visibility. Where visible, the Development is likely to be seen in the context of operational wind farms to the south-west which already influence character – **not considered further**
272: Lowland Hills and Ridges - Lothians	Visibility contained to southern site facing hill flanks where (beyond 10km) and from where Development will be seen in context of views of operational wind farms to south – **not considered further**
273: Lowland Plateaux - Lothians	Widespread theoretical visibility within 15km – **considered further**
274: Lowland Plain	Limited theoretical visibility across parts within 15km and highly developed nature will further limit actual visibility – **not considered further**
276: Lowland Hill Fringes – Lothians	Theoretical visibility within 15km, but actual visibility likely to be reduced by areas of industry/ commerce with large warehouses to the immediate south and vegetation cover; where visible Development will be seen in middle distance views in the context of operational wind farms to the south – **not considered further**

6.5.5 Designated Landscapes

The Site is not covered by any landscape designations although there are several landscape designations within the 45km Study Area including the Upper Tweeddale National Scenic Area (NSA) and a number of local landscape designations. These are shown on Figure 6.1.6 and are listed in Table 6.2 below.

Consideration of the special qualities/ reasons for designation; influence of existing operational wind farms; and potential relationship with the Development (including the extent of the ZTV coverage and actual visibility) are used as means of identifying which designated landscapes require further assessment.

The Upper Tweeddale NSA is located beyond 20km from the Site and theoretical visibility is limited to the north-western hill flanks (refer to Figure 6.1.7). Where visible the Development will be apparent in large scale and longer distance views in which operational wind farms and the influence of human activity is apparent. As such, this NSA is not considered further.

In terms of local level landscape designations, the following table sets out which require further consideration. Those beyond 15km from the Site, and those with limited actual visibility within 15km of the Site, are not considered further within the assessment.

Table 6.2 Designated Landscapes

Designation	Theoretical visibility of Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
Pentland Hills Regional Park	Widespread theoretical visibility within 15km – **considered further as part of the overall effects**

Designation	Theoretical visibility of Development (ZTV coverage) and other considerations to determine if LCT carried forward for detailed assessment
	on the Pentland Hills locally designated landscape area
West Lothian	
Pentland Hills Special Landscape Area (SLA)	Widespread theoretical visibility within 15km – **considered further as part of the overall effects on the Pentland Hills locally designated landscape area**
Bathgate Hills SLA	Limited theoretical visibility across southern hill flank beyond 10km from the site; Development will be seen in context of existing views of operational wind farms – **not considered further**
Almond and Linhouse Valleys SLA	Theoretical visibility beyond 10km; woodland on valley slopes will further limit visibility of the Development from parts of the SLA – **not considered further**
Blackridge Heights SLA	Widespread theoretical visibility within 15km – **considered further**
Avon Valley SLA	Largely beyond 15km with very limited theoretical visibility from upper northern valley side – **not considered further**
South Lanarkshire	
Pentland Hills and Black Mount SLA	Widespread theoretical visibility across parts within 15km – **considered further as part of the overall effects on the Pentland Hills locally designated landscape area**
Upper Clyde Valley and Tinto SLA	Widespread theoretical visibility within 15km – **considered further**
Middle Clyde Valley SLA	Limited theoretical visibility within 15km – **not considered further**
Scottish Borders	
Pentland Hills SLA	Limited theoretical visibility within 15km – **considered further as part of the overall effects on the Pentland Hills locally designated landscape area**

6.5.6 Wild Land

Wild Land Areas (WLA) are not designated but are identified and mapped, with accompanying WLA descriptions published by SNH in January 2017[9], and are considered sensitive to development. They are afforded '*areas of significant protection'* status within Scottish Planning Policy (SPP) (Table 1, Page 39, SPP) which states that development proposed within these areas should '*demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation'.*

There is one area of Wild Land located within the Study Area, as shown on Figure 6.1.6, Talla Hart Fell (WLA 02). Theoretical visibility from Talla Hart Fell, as illustrated by Figure

[9] SNH (2017) Wild Land Area descriptions. Available at: https://www.nature.scot/wild-land-area-descriptions. Access on: 23 March 2020.

6.1.7, is very limited, with localised areas of high elevation experiencing theoretical visibility at a distance of beyond 40km. Limited and long distance views of further wind farm development outwith the area is unlikely to compromise the special qualities of the WLA. As such, it is not considered further within this assessment.

6.5.7 Gardens and Designed Landscapes

There are no Gardens and Designed Landscapes (GDL) within the Site. However, there are several within the 45km Study Area as shown on Figure 6.1.6. The closest GDL is Harburn House, an early 19th century landscaped park which lies approximately 6km to the north-east and is partly within the ZTV. Other designed landscapes within 20km include The Falls of Clyde, an incised valley with mature woodland with limited opportunity for outward views.

Effects on the settings of GDL are considered further in Chapter 7: Archaeology and Cultural Heritage.

6.6 VISUAL BASELINE CONDITIONS

6.6.1 Introduction

This section identifies the extent of potential visibility of the Development and identifies visual receptors that are assessed as part of the LVIA. This section also introduces the viewpoints that are used as representative points from which to assess effects on visual receptors (people) and particular views, including reasons for their selection.

6.6.2 Analysis of Visibility of the Development

Figure 6.1.2a and Figure 6.1.3a show the theoretical visibility of the Development to maximum wind turbine blade tip height (150m for T1-T3 and 180m for T4 – T14) and hub height (83.5m for T1-T3 and 101m for T4-T14) respectively. The ZTV indicates that across the Study Area theoretical visibility of the Development is more widespread within 10km. Beyond this, theoretical visibility is focussed to higher ground to the south-west of the Study Area; the southern hills flanks of the Kilsyth Hills to the north-east; and north of the Firth of Forth to the north.

6.6.3 Key Visual Receptors

Potential visual receptors include:

- Residents, including views from isolated properties or settlements;
- Road users (including tourists);
- Those engaged in recreational activities (e.g. hill walkers and cyclists); and
- People at their place of work, including agricultural workers.

6.6.4 Selection of Viewpoints for Assessment

This section sets out the viewpoints that are used to represent and assess the visual effects of the Development. The viewpoint list is a representative selection of locations agreed with the statutory consultees; it is not an exhaustive list of locations from which the Development will be visible.

A total of 18 viewpoints were selected across the 45km Study Area through desk study, site work and discussions with statutory consultees. They have largely been informed by the viewpoint list used for the consented Heathland Wind Farm, with some refinements to take account of the increased tip height and the different layout of the Development. These viewpoints are all publicly accessible as advocated by GLVIA3 and include:

- Locations selected to represent the experience of different types of receptor;

- Locations at different distances to provide a representative range of viewing angles and distances (i.e. short, medium and long distance views);
- Locations which illustrate key cumulative interactions with other existing, consented and/or proposed wind farms (either in combination or succession);
- Locations which represent a range of viewing experiences (i.e. static views and points along sequential routes);
- Specific viewpoints selected because they represent promoted views or viewpoints within the landscape; and
- Illustrative viewpoints chosen specifically to demonstrate a particular visual effect or specific issue (which could include restricted visibility in particular locations).

The viewpoints are listed in Table 6.3 and shown alongside the blade tip height ZTV on Figure 6.1.2a.

Table 6.3 Viewpoint Locations

No.	Location	Reason for Selection	Grid Reference	Approx. Distance (km)[10]
1	A704/A706 Junction	Representative of views for road users along the A704 and A706.	295531 658247	0.96
2	Minor road near Haywood and Bughtknowes	Representative of views for road users and residents of properties along the minor road to the south of the site.	297260 655170	1.73
3	Breich	Representative of residential views from the settlement of Breich.	296458 660560	1.93
4	Minor road at Woolfords Cottages	Representative of views for road users and residents of properties along the minor road east of the site. A night time assessment, with supporting visualisation, has been prepared from this location (refer to Appendix A6.4).	300461 656769	2.41
5	Forth	Representative of residential views and views experienced by recreational users of the community centre park within Forth. A night time assessment, with supporting visualisation, has been prepared from this location (refer to Appendix A6.4).	294665 654190	2.67
6	Fauldhouse	Representative of residential views within Fauldhouse.	294426 660773	3.02
7	Longridge	Representative of residential views within Longridge. A night time assessment, with supporting visualisation, has been prepared from this location (refer to Appendix A6.4) at the request of WLC.	295193 662202	3.88
8	West Calder	Representative of views for road users along the A71.	300798 662528	5.28
9	B7016 at Braehead	Representative of views for road users along the B7016.	295450 650962	5.69

[10] Distance between viewpoint and the nearest wind turbine of the Development.

No.	Location	Reason for Selection	Grid Reference	Approx. Distance (km)[10]
10	A71 south of Stane	Representative of views for road users along the A71.	289401 658283	6.03
11	A70 Maidenhill	Representative of views for road users along the A70.	304281 655815	6.34
12	B8084 south of Armadale	Representative of views for road users along the B8084.	294577 665916	7.61
13	Harrows Law	Representative of recreational views for walkers to the summit of Harrows Law and views from the Pentland Hills (locally designated landscape).	305485 653046	8.46
14	Carnwath (A70)	Representative of views for road users along the A70, and residential receptors with open views in Carnwath.	298343 646685	10.18
15	Eastcraigs Hill	Representative of recreational views for walkers to the summit of Eastcraigs Hill (and Blackridge Heights SLA).	290353 668015	11.27
16	A70 (Harperrig Reservoir)	Representative of views for road users along the A70 and visitors to Harperrig Reservoir, within the Pentland Hills.	309181 661723	11.70
17	West Cairn Hill	Representative of recreational views for walkers to the summit of West Cairn Hill and views from the Pentland Hills (locally designated landscape).	310730 658397	12.55
18	Tinto Hills	Representative of views for recreational walkers to hills in the Upper Clyde Valley and Tinto SLA.	295321 634367	22.28

6.6.5 Settlements

Settlements are those defined as such within the South Lanarkshire Local Development Plan (2015)[11], West Lothian Local Development Plan (2018)[12] and North Lanarkshire Local Development Plan (2012)[13]. The settlement pattern across the Study Area is highly varied, with a range of settlements of different sizes and differing levels of population density. Glasgow and Edinburgh fall within the Study Area, to the north-west and north-east of the Site respectively, and form the largest urban centres. There are also a number of towns across the northern half of the Study Area, including Dunfermline, Falkirk and Stirling. To the south of the Site, population density is much reduced, and the settlement pattern is more scattered, with smaller towns and villages set within lower lying valleys.

Within the vicinity of the Site, settlement is focussed to the north, surrounding the main transport corridor between Glasgow and Edinburgh. Within 15km, the settlements of Livingston, Bathgate, Whitburn and Shotts form some of the largest settlements along this generally low-lying stretch. There are also a smaller number of settlements within 15km to the south and south-west, including Forth, Lanark and Carluke.

In order to focus on potentially significant effects, settlements from which there is no theoretical visibility are not considered further in this assessment. Furthermore, settlements with limited theoretical visibility; longer distance views i.e. beyond 15km from

[13] South Lanarkshire Council (2015). South Lanarkshire Local Development Plan.
[14] West Lothian Council (2018). West Lothian Local Development Plan.
[13] North Lanarkshire Council (2012). North Lanarkshire Local Plan Policy Document.

the Development; or where views of the surrounding landscape (including the Site) are not important to setting, and where it is unlikely that significant effects could occur, are not considered further in the assessment. Settlements beyond 15km have not been included in the following table.

Table 6.4 Settlements

Settlement	Theoretical Visibility of Development (ZTV coverage)
Within 5km	
Addiewell and Loganlea	Widespread theoretical visibility; actual visibility reduced by railway line on embankment to the south – **not considered further**
Auchengray	Widespread theoretical visibility – **considered further**
Breich and Longridge	Both settlements are located to the north of the Site. Whilst buildings within the settlements somewhat limits potential for open views to the south, both settlements offer more open views from the southern edge - **considered further**
Fauldhouse	Widespread theoretical visibility however, actual visibility from core of the settlement is limited by buildings and views towards the site tend to be infrequent and glimpsed between buildings. Views from edge of settlement represented by Viewpoint 6 - **not considered further**
Forth	Widespread theoretical visibility however, actual visibility from the core of the settlement limited by buildings. Views from open recreational ground/ limited properties on eastern edge of the settlement represented by Viewpoint 5 – **not considered further**
Stoneyburn / Bents	Widespread theoretical visibility – **considered further**
Tarbrax	Widespread theoretical visibility – **considered further**
Wilsontown	Widespread theoretical visibility and within 2km – **considered further within RVAA, refer to Appendix A6.3**
Woolfords	Widespread theoretical visibility – **considered further**
Within 10km	
Blackburn	Widespread theoretical visibility; actual visibility reduced by vegetation to the south of the settlement and buildings within – **not considered further**
Braehead	Widespread theoretical visibility – **considered further**
East Whitburn	Widespread theoretical visibility; actual visibility reduced by vegetation to the south of the settlement and buildings within – **not considered further**
Polbeth	Widespread theoretical visibility; actual visibility reduced by vegetation and buildings within Polbeth and West Calder – **not considered further**
Seafield	Widespread theoretical visibility; actual visibility reduced by buildings within settlement. Glimpsed longer distance views to south occasionally available however, longer distance views of wind farms already influence settlement – **not considered further**
Whitburn	Theoretical visibility across parts; actual visibility reduced by buildings within the settlement and vegetation to the south – **not considered further**
West Calder and Harburn	Widespread theoretical visibility; actual visibility reduced by vegetation and buildings within settlement – **not considered further**
Yieldshields	Limited theoretical visibility as on fringes of ZTV; actual visibility further reduced by woodland to the north – **not considered further**
Allanton	Widespread theoretical visibility; actual visibility reduced by buildings and vegetation to the east – **not considered further**

Settlement	Theoretical Visibility of Development (ZTV coverage)
Harthill	Theoretical visibility across parts. However, actual visibility reduced by buildings within settlement. Views from core of settlement limited. Occasionally glimpsed medium distance views of further wind farm development to south unlikely to result in significant effects on the settlement as a whole – **not considered further**
Shotts	Widespread theoretical visibility; actual visibility reduced by buildings within Shotts and Torbothie – **not considered further**
Within 15km	
Armadale	Theoretical visibility across parts; actual visibility reduced by buildings and vegetation – **not considered further**
Bathgate	Widespread theoretical visibility; actual visibility restricted to parts of the southern edge by buildings, vegetation and industrial development – **not considered further**
Blackridge	Widespread theoretical visibility. Actual visibility limited by buildings and vegetation. Occasional glimpsed views to south available, and represented by Viewpoint 13. Occasional medium distance views of further wind farm development to south unlikely to result in significant effects on the settlement as a whole – **not considered further**
Braidwood	Very limited theoretical visibility – **not considered further**
Bridgehouse and Bridgecastle	Theoretical visibility across parts; actual visibility reduced by vegetation – **not considered further**
Carluke	Very limited theoretical visibility – **not considered further**
Carnwath	Widespread theoretical visibility however, actual visibility reduced by buildings. Limited number of properties with open views oriented north towards the Site. Buildings will screen views along majority of Main Street. From limited areas with visibility viewing distance (just over 10km) and views of operation wind farms will limit potential for significant visual effects – **not considered further**
Carstairs	Widespread theoretical visibility; actual visibility reduced by buildings and vegetation – **not considered further**
Cartland	Very limited theoretical visibility – **not considered further**
Dechmont & Bangour	Limited theoretical visibility across parts; actual visibility reduced by vegetation along M8 corridor – **not considered further**
Dunsyre	Very limited theoretical visibility – **not considered further**
Lanark	Limited theoretical visibility across parts; actual visibility reduced by buildings and vegetation – **not considered further**
Law	Widespread theoretical visibility; actual visibility reduced by vegetation along the West Coast Main Line railway and restricted to north-eastern settlement edge. From limited areas with visibility the development will be visible beyond Blacklaw Wind Farm. This is unlikely to result in significant effects on the settlement as a whole – **not considered further**
Libberton	Widespread theoretical visibility. Key orientation of properties looking east/ west with Development located to north. Longer distance views of further wind farm development to north unlikely to result in significant effects on the settlement as a whole – **not considered further**
Livingston, Pumpherston	Widespread theoretical visibility; actual visibility reduced by buildings within the settlement and by vegetation and industrial development on the western settlement edge – **not considered further**
Kilncadzow	Very limited theoretical visibility – **not considered further**
Mid Calder	Widespread theoretical visibility; actual visibility reduced by buildings within Livingston – **not considered further**

Settlement	Theoretical Visibility of Development (ZTV coverage)
Newbigging	Widespread theoretical visibility; actual visibility reduced by local variations in topography – **not considered further**
Torpichen	Theoretical visibility across parts; actual visibility reduced by vegetation to the south – **not considered further**
Pettinain	Widespread theoretical visibility; actual visibility [from residences] reduced by vegetation within gardens – **not considered further**
Uphall Station	Limited theoretical visibility; actual visibility reduced by built from within Livingston – **not considered further**
Walston	Widespread theoretical visibility. Small cluster of properties with potential for more open views from rear of properties to the north of the minor road. Views from key thoroughfare often restricted by buildings and vegetation within the settlement. Glimpsed longer distance views of further wind farm development to the north-west unlikely to result in significant effects on the settlement as a whole – **not considered further**
West End	Limited theoretical visibility; actual visibility reduced by vegetation to the north – **not considered further**
Westfield	Very limited theoretical visibility – **not considered further**
Morningside	Widespread theoretical visibility; actual visibility reduced by vegetation to the east – **not considered further**
Newmains	Widespread theoretical visibility; actual visibility reduced by vegetation to the east – **not considered further**
Salsburgh	Limited theoretical visibility; actual visibility reduced by buildings and vegetation – **not considered further**
Wishaw	Widespread theoretical visibility in parts within 15km; actual visibility limited by buildings and vegetation – **not considered further**

6.6.6 Residential Visual Amenity Assessment

An examination of effects on views form residential properties within 2km of the nearest wind turbine of the Development has been undertaken as part of a Residential Visual Amenity Assessment (RVAA). The RVAA is presented in Appendix A.6.3.

6.6.7 Routes

Visibility from a route is not uniform along its entire length. This is because views of the surrounding landscape change as one moves along the route depending on the surrounding topography, buildings, structures, tree cover and vegetation along the route. Theoretical visibility of the Development from routes across the Study Area is illustrated by Figure 6.1.2a. The routes include a hierarchy of roads, railways and recreational routes (promoted long distance footpaths, core paths and cycle routes). Road and rail routes tend to use low lying areas or valleys and passes, but walking routes are more variable and can pass over hills and along ridges.

Based on an analysis of theoretical visibility and potential views Table 6.5 provides information on which routes have been carried forward for detailed assessment. Due to their lower receptor susceptibility, roads and railways beyond 10km from the Site have been scoped out from this table. Due to the higher susceptibility of receptors using promoted long distance footpaths and cycle routes, these have been included up to 15km from the Site. Short-distance footpaths and rights of way outside the Site Boundary have been scoped out. Where there is limited theoretical visibility, or where actual visibility from a route is likely to be limited due to localised screening, these routes are not

considered further in this LVIA, as the likelihood for significant sequential effects is limited.

Table 6.5 Routes

Route	Theoretical Visibility of Development (ZTV coverage)
Major roads	
M8	Widespread theoretical visibility within 10km; actual visibility reduced by roadside vegetation and buildings within settlements of Blackburn and Whitburn – **not considered further**
A70	Widespread theoretical and actual visibility within 10km – **considered further**
A71	Widespread theoretical and actual visibility within 10km – **considered further**
A704	Widespread theoretical and actual visibility within 10km – **considered further**
A705	Theoretical visibility along parts within 10km; actual visibility reduced by roadside vegetation and buildings along parts – **not considered further**
A706	Widespread theoretical visibility within 10km; actual visibility reduced by roadside coniferous woodland along parts – **considered further**
Railways	
Helensburgh – Edinburgh via Bathgate	Widespread theoretical visibility within 10km; actual visibility reduced by lineside vegetation and buildings within Bathgate and Armadale – **not considered further**
Glasgow – Edinburgh via Shotts	Widespread theoretical visibility within 10km; actual visibility reduced by cuttings, lineside vegetation and buildings, with some actual visibility along a short stretch of line west of West Calder – **not considered further**
West Coast Main Line	Widespread theoretical and actual visibility within 10km – **considered further**
Recreational Routes	
Core paths and rights of way within Site	Widespread theoretical visibility – **considered further**
NCN 75	Widespread theoretical visibility within 15km. Actual visibility is reduced by vegetation, coniferous woodland, and buildings within Bathgate and Blackburn. The route follows the Glasgow – Edinburgh via Bathgate railway line along much of its length in the west of the Study Area and is therefore subject to near-distance views of railway infrastructure – **not considered further**

6.7 OTHER WIND FARM DEVELOPMENT

6.7.1 Existing Wind Farm Development

There are a number of operational wind farms and wind farms under construction located across the Study Area, as listed in Table 6.6 and shown on Figure 6.1.8. Operational wind farms and those under construction, as listed in Table 6.6 below, are included as part of the baseline for the LVIA and considered as part of the primary LVIA assessment.

6.7.2 Identification of Developments to be included in the CLVIA

In accordance with SNH (now NatureScot) guidance[14], the scope for the assessment of cumulative landscape and visual effects included wind farms and wind farm proposals within an initial 60km radius search area from the Development, to identify the distribution of wind energy development in the wider area.

The assessment of effects focuses on developments that are likely to give rise to significant cumulative effects, and concentrates on the relationship between the proposed Development with other operational, consented and proposed developments (i.e. developments with a valid application or awaiting determination following appeal/public inquiry). In this instance it was not considered necessary to include other developments located beyond the 45km Study Area, because of the limited scope for significant cumulative effects, which are more likely to be focused to wind farms within the more immediate landscape context. Proposals that have not yet progressed beyond scoping stage are not considered within the assessment.

Single turbines within 5km of the outermost turbines of the Development were given consideration where it was judged that potential interactions with the Development may give rise to significant cumulative effects. Single turbines over 5km are not considered.

Wind energy developments located within the 45km radius Study Area, which are considered likely to give rise to significant cumulative effects and therefore included in the CLVIA have been selected as follows:

- Single wind turbines of ≥50m blade tip height within a 5km radius of the proposed outermost wind turbines; and
- Wind farms (e.g. clusters of 2 or more wind turbines) with wind turbines of ≥50m blade tip height within a 45km radius of the proposed outermost wind turbines.

Consented wind farms and wind farms currently in the planning system, are considered as part of the assessment of potential future cumulative effects and included in the CLVIA.

A cut-off date of 30th June 2020 was applied for the inclusion of developments within the cumulative assessment and the final list was agreed with statutory consultees (see Table 6.1 for details). These developments are listed in Table 6.6 below and shown on Figure 6.1.8. The exception to this is for Longhill Burn (to the immediate east of the Development) which had an application withdrawn (8 turbines at 200m to tip) on the 9th September 2020. The cumulative assessment therefore considers the consented Longhill Burn scheme (8 turbines at 180m to tip) and this was agreed through consultation with West Lothian Council on the 24th September 2020. However, a new application for a revised version of this scheme has subsequently been submitted for 8 turbines at 200m to tip height. This scheme has not therefore been considered. However, the layout for Longhill Burn has not changed and the 20m tip height increase is not considered likely to result in a material alteration to the findings of the cumulative assessment. Some further changes to application stage wind farms after the cut-off date, for wind farms within 20km of the Development, are noted in the table below.

Table 6.6 Other Wind Farm Developments

Distance (km)[15]	Name	Status	Blade Tip Height (m)	Number of Wind Turbines
Operational and Under Construction				
1.65	Tormywheel	Operational	102.0	15

[14] SNH (2012). Assessing the cumulative impact of onshore wind energy developments.
[15] Approximate distance between the centre point of the proposed Development and the centre point of the wind energy development listed.

Distance (km)[15]	Name	Status	Blade Tip Height (m)	Number of Wind Turbines
1.94	Upper Haywood Farm	Operational	66.0	1
3.09	Pates Hill	Operational	107.0	7
3.45	Heathland Single Turbine	Operational	99.0	1
4.02	Climpy	Operational	99.0	1
4.41	Muldron Farm	Operational	79.0	1
5.73	Pearie Law	Operational	125.0	6
5.76	Black Law Extension Phase 1	Operational	126.5	23
6.07	Muirhall	Operational	125.0	6
6.83	Harburnhead	Operational	126.0	22
7.19	Muirhall Extension	Operational	147.0	2
7.84	Black Law Extension Phase 2	Operational	126.5	11
7.89	Muirhall South	Operational	147.0	3
7.99	Black Law	Operational	115.1	54
9.69	Torrance Farm Extension	Operational	125	2
10.33	Torrance Farm	Operational	125.0	3
11.01	Standhill Farm	Operational	84.0	2
12.16	Burnhouse - Carnwrath	Operational	64.0	2
13.98	Drumduff	Operational	120.0	3
14.55	Burnhead	Operational	127.0	13
20.07	Greendykeside	Operational	100.0	2
21.52	Lochhead	Operational	100.0	3
24.71	Ladehead Farm	Operational	74.0	3
29	Todhill Farm	Operational	125.0	4
29.2	Auchrobert	Operational	132.0	12
29.93	Blantyre Muir	Operational	115.0	6
30.46	Rosehill Farm	Operational	99.5	3
30.87	Hazelside Farm	Operational	74.0	2
31.37	Kype Muir	Operational	132.0	26
31.56	Nutberry	Operational	115.0	6
31.75	Glenkerie	Operational	120.0	11
31.99	Hagshaw Hill Extension	Operational	80.0	20
32.14	Hagshaw Hill	Operational	55.5	26

Distance (km)[15]	Name	Status	Blade Tip Height (m)	Number of Wind Turbines
33.28	Galawhistle (Section 36)	Operational	121.0	22
33.84	Bowbeat	Operational	80.0	24
34.19	Middle Muir	Operational	149.9	15
34.53	Andershaw	Operational	140.0	11
35.74	Dungavel	Operational	120.0	13
34.99	Clyde Extension	Operational	142.0	54
37.78	Craigengelt	Operational	125.0	8
38.16	Mossmorran	Operational	100.0	2
38.96	Linburn Farm	Operational	67.0	2
39.16	Calder Water	Operational	145.0	13
39.46	Carcant	Operational	99.7	3
39.64	Bankend Rig	Operational	76.0	11
39.74	Over Enoch and Ardoch	Operational	110.0	5
40.37	Clyde	Operational	125.0	152
40.83	Whitelee	Operational	110.0	140
38.59	West Browncastle	Operational	126.5	12
40.44	Little Raith	Operational	126.0	9
41.28	Myres Hill	Operational	87.0	2
41.56	Earlsburn	Operational	110.0	15
42.71	Gevens Wind Cluster	Operational	99.5	3
43.52	Kingsburn	Operational	115.0	9
44.89	Whitelee Extension Phase 2	Operational	140.0	39
44.08	Whitelee Extension Phase 1	Operational	140.0	36
45.65	Rhodders	Operational	102.0	6
45.79	Burnfoot Hill	Operational	102.0	13
46.02	Burnfoot East	Under Construction	135.0	3
46.46	Sneddon Law	Under Construction	130.0	15
Consented				
1.81	Upper Haywood Farm Extension	Consented	66.0	1
1.89	Longhill Burn (note: this scheme is also subject to an application to increase the maximum blade tip	Consented	180.0	8

Distance (km)[15]	Name	Status	Blade Tip Height (m)	Number of Wind Turbines
	height to 200m, see Section 6.7.2 above)			
2.33	Tormywheel Extension	Consented	149.9	2
2.6	Burnfoot Poultry Farm	Consented	77.0	1
11.82	Watsonhead Farm	Consented	150.0	2
13.12	Hartwood	Consented	126.5	7
17.21	Easter Drumclair Wood	Consented	125.0	2
19.95	Greengairs East	Consented	149.9	8
21.11	Greengairs	Consented	125.0	9
22.76	Kittymuir	Consented	77.0	2
24.6	Broken Cross surface mine	Consented	55.7	2
24.83	Birkhill	Consented	99.5	2
25.63	Cloich Forest	Consented	145.0	14
29.73	Dalquhandy	Consented	149.9	15
31.6	Glenkerie Extension	Consented	100.0	6
32.37	Hagshaw Hill Repowering	Consented	200.0	14
33.49	Kype Muir Extension	Consented	220.0	15
39.55	Kennoxhead	Consented	180.0	19
39.75	Whitelaw Brae	Consented	136.5	14
40.61	Bankend Rig Extension	Consented	136.0	3
42.22	Penbreck (SL)	Consented	145.0	6
43.56	Crookedstane	Consented	126.5	4
43.85	Penbreck (EA)	Consented	145.0	3
43.47	Craigton and Spittall Hill	Consented	125.0	7
Proposed and Appeal/ Public Inquiry				
7.99	West Benhar (note: this scheme was consented after the cut-off date; see Section 6.7.2 above)	Application Submitted	149.9	8
9.1	Camilty (note: this scheme was withdrawn after the cumulative cut-off date. This scheme also has consent at 138.5m to tip.)	Application Submitted	149.9	6

Distance (km)[15]	Name	Status	Blade Tip Height (m)	Number of Wind Turbines
9.1	Brownhill Farm (note: this scheme was withdrawn after the cumulative cut-off date)	Application Submitted	150	2
13.35	Forrestfield	Application Submitted	125.0	4
23.48	Broken Cross	Application Submitted	149.9	10
29.3	Douglas West (note: this scheme also has consent at 149.9m to tip)	Application Submitted	200.0	13
30.35	Douglas West Extension	Application Submitted	200.0	13
32.35	Cumberhead	Application Submitted	180.0	14
32.25	Priestgill	Application Submitted	200.0	7
35.08	Hare Craig	Application Submitted	230.0	8
34.63	Junction 2a Dunfermline	Application Submitted	131.0	2
38.93	Kennoxhead Extension	Application Submitted	180.0	8
45.72	Moorshield	Application Submitted	149.9	3
39.56	Wull Muir	Appeal/Public Inquiry	130.0	8
45.1	North Lowther Energy Initiative (NLEI)	Appeal/Public Inquiry	149.0	30

It should be noted that the baseline situation to the cumulative assessment is constantly evolving, and there may be changes to the status or list of wind energy developments considered between carrying out the assessment and the determination of the application. Unless there are substantial changes to proposals that will materially alter the pattern of cumulative development (such as the addition of a large wind farm located within a 10km radius of the Development), it is considered that the cumulative assessment undertaken for the relevant landscape and visual receptors will remain relevant.

Although all of these wind farms are considered in the cumulative assessment, the assessment focuses on the relationship of the Development with the closest wind farms or groups of wind farms. For the cumulative assessment, these expanded wind farm groupings include:

- The East Wind Farm Group (refer to Figure 6.1.9a and b) which includes the consented Longhill Burn and Camilty both within 10km to the east;

- The South-east Wind Farm Group (refer to Figure 6.1.10) which includes two smaller consented single turbines to the south-west;
- The West Wind Farm Group (refer to Figure 6.1.11a and b), which includes a small consented extension to the operational Tormywheel and a further two turbine application stage wind farm, west of the Black Law Group, within 15km to the west; and
- The North-west Wind Farm group (refer to Figure 6.1.12a and b), which includes further discrete consented and planning stage wind farms, between 5km and 20km from the Site, located in areas of moorland either side of the M8 transport corridor and to the north-east of greater Glasgow.

Given the varied status, and therefore certainty, associated with un-built wind farms across the Study Area the CLVIA is structured so as to report on two potential development scenarios:

- **Scenario 1**: Higher level of certainty: the addition of the Development to a landscape with operational, under construction **and consented wind farms**; and
- **Scenario 2**: Lower level of certainty: the addition of the Development to a landscape with operational, under construction, consented **and undetermined valid applications**.

The CLVIA has focused on the assessment of 'additional' cumulative effects, i.e. the effect of adding the Development to a baseline of other built or unbuilt wind farms. Where 'total' cumulative effects (i.e. assessment which considers the effects if all current, past and future proposals are deemed present, including the Development) are considered to be significant, then reference is also made to these.

Combined ZTVs (Figures 6.1.9a to 6.1.12b) for other wind farms have been prepared to show where ZTVs overlap and where cumulative views may occur. This includes combined views – two wind farms seen at the same time in a similar direction - and successive views - two wind farms seen from the same location but in different directions.

6.7.3 General Observations – Current Baseline (Operational and Under Construction Developments)

Figure 6.1.8 illustrates the distribution and status of wind energy developments with the 45km Study Area. General observations on the location, pattern and scale of existing wind energy development across the Study Area are summarised below:

- Within the more immediate Site context there are large emerging groups of wind farm focused along a west to east band in the undulating plateau of forested and moorland areas to the south of the M8 transport corridor.
- Within 20km of the Site there are also discrete larger wind farms at Muirhall (and its Extensions) to the west of the Pentlands, and north of Harthill, to the north-west. The Pentland Hills and lower lying more densely populated area are free of larger wind farm development.
- Within the wider study area large wind farms are focused to upland moorlands and hill ranges to the south-west (including Whitelee, Clyde and large emerging groups in South Lanarkshire south-west of the M74), east in the Moorfoot Hills, and to the north in higher, less densely populated areas between Glasgow, Edinburgh and Stirling.

6.7.4 General Observations – Consented Developments (Existing, plus Consented Developments)

General observations on the location, pattern and scale of existing and consented wind energy development across the Study Area are summarised below:

- The consented Longhill Burn will increase the west to east band of operational and consented wind farms across the centre of the Study Area, in the undulating plateau of forest and moorland to the south of the M8.
- Beyond Longhill Burn and within the more immediate landscape context consented wind farm development is limited to single turbines to the south of the Site and a small extension to the operational Tormywheel. Discrete consented schemes to the north-west, within around 20km, will also increase the influence of wind farms within the central belt in this direction.
- In the wider context consented schemes typically extend existing operational wind farm groups, particularly in South Lanarkshire to the south-west with a further grouping around Kennoxhead, in the hill range to the south of the River Ayr.
- Cloich Forest introduces a further discrete wind farm, east of the Pentlands.

6.7.5 General Observations – Proposed Developments at Application

General observations on the location, pattern and scale of existing, consented and proposed wind energy development across the Study Area are summarised below:

- The application stage Camilty (note an earlier scheme for 6 turbines at 138.5m to tip has consent; this revised application has been withdrawn after the cumulative cut-off date) will intensify and increase the west to east band of operational and consented wind farms across the centre of the Study Area, in the undulating plateau of forest and moorland to the south of the M8.
- West Benhar (consented after cumulative cut-off) will result in a further discrete wind farm, to the south of the M8 within 10km north-west of the Site.
- Planned schemes will further extend existing and emerging wind farm groups in the wider context, particularly in South Lanarkshire to the south-west and in upland areas north and south of the River Ayr/ Water of Douglas.

6.8 THE 'DO NOTHING' SCENARIO

The Site has consent for 17 turbines at 132 m to tip. This development would be built if consent for the Development, considered in this assessment, is not forthcoming. Nevertheless, and in the absence of wind farm development at the Site, it is likely that the land will continue under the same land use, and the character of the Site is unlikely to change notably. However, the landscape and visual amenity of the Study Area is likely to be influenced by a number of 'forces for change' including further wind energy development.

Forces for change are those factors affecting the evolution of the landscape and which may, consequently, affect the perception of the Study Area in the near or distant future. Although prediction of these is necessarily speculative, those of particular relevance are discussed briefly below.

Wind farm development is a clear force for change within this area of central Scotland and is likely to continue with further wind energy proposals emerging. Figure 6.1.8 illustrates the location and extent of operational, consented and proposed wind farms within the wider Study Area. In addition, there are an increasing number of operational, consented and proposed domestic wind turbines of varying heights and rotor diameters, located within the surrounding landscape. As farmers diversify income and seek opportunities to generate energy for domestic and commercial use, interest in this type of development may continue.

Agriculture is expected to continue within the Study Area, including pastoral grazing and some arable farming. The expansion of woodland, including commercial forestry plantations, is also likely to remain an important land use. Given the nature of the Study

Area, which includes the highly developed corridor between Edinburgh and Glasgow, the area will likely continue to be under pressure for development including residential, retail, infrastructure and mineral extraction.

6.9 ASSESSMENT OF POTENTIAL LANDSCAPE AND VISUAL EFFECTS

The assessment of landscape and visual effects follows the methodology presented in this chapter and detailed in Appendix A6.1 and is based upon the project description outlined in Chapter 3: The Development. The LVIA reports on construction and operational effects separately.

Landscape and visual effects associated with decommissioning will be similar in nature to construction stage effects, although essentially in reverse.

6.9.1 Construction Effects

Sources of Effects during Construction

During the proposed 18 month construction phase, there will be potential short-term landscape and visual effects arising from the presence of partially constructed infrastructure and undertaking of construction activities on the Site (as described in Chapter 3: The Development). Effects occurring during the construction phase are considered to be reversible unless otherwise stated (e.g. creation of new landform which remains as a permanent feature beyond the lifespan of the operational phase (30 years) of the Development).

The changes arising from the construction of the Development will be primarily associated with:

- Up to 14 turbines with a maximum blade tip height of 180m;
- Associated turbine transformers;
- Permanent meteorological (met) mast;
- New site access (from the A706 to the west), internal access tracks and areas of hardstanding;
- On site substation and control building;
- Temporary construction compound;
- Borrow pits; and
- Forestry clearance associated with key holing for turbine hard standings and the removal of other areas to accommodate infrastructure, as shown on Figure 15.3.

The majority of the effects which will occur during the construction phase will be **short-term** and largely **reversible**, limited to the Site and the immediate surrounding vicinity from which construction activities may be perceptible. The main exception to this is construction of the proposed turbines. However, landscape and visual effects arising from the presence of partially constructed turbines will be comparable to the operational effects (although arguably to a lesser degree as construction-related effects will be of a shorter duration and transient in nature). Therefore, effects arising from the introduction of partially constructed turbines are not anticipated to be greater than operational effects.

Landscape Effects during Construction

Potential effects on the landscape character and resources of the Site are considered in the table below.

Table 6.7 Landscape Effects on the Site during Construction

The Site
Location and baseline description: The Site is described in detail in Section 6.5 under 'The Site and Context'.

The Site
Sensitivity: The Site is largely contained within the Plateau Moorland Forestry (6A) and Upland Fringes – Lothians (269) LCTs. Access to the Site will be via the A706, to the west of the Site. Large parts of the Site area in which the proposed turbines will be located are forested with single species coniferous forest, and the undulating landform contributes to gently rolling skylines from the surrounding valleys. The influence of human activity is apparent at the Site through coniferous forest cover and forest operations. The adjacent operational Tormywheel Wind Farm (15 turbines at 111m to tip) also increases the influence of human activity across the site, where breaks in forest cover allow open views of this wind farm to the north-west. The South Lanarkshire Tall Wind Turbines: Landscape Capacity, Siting and Design Guidance (2016) identifies the Site as having high underlying landscape capacity for wind turbines between 150m and 250m to tip. Overall, the susceptibility of the Site to wind energy development is considered to be low. The Site is not designated, and similar upland areas with coniferous forestry and moorland landscape are widespread across Scotland. This is a larger scale, simple landscape where human activity is apparent through coniferous forestry and nearby wind farms. Considering the present condition of the Site, and the influence of wind farm development on the surrounding landscape, overall the landscape value is judged to be low. Taking account of the judgements of susceptibility and value, overall sensitivity is considered to be **low.**
Magnitude of Change and Significance of Landscape Effects: Construction activities will result in direct landscape effects on the Site. Changes primarily relate to forest clearance activity; excavations and track construction; the presence of tall cranes and partially built towers whilst turbines are being erected; and construction activity including the movement of construction vehicles, plant and construction compounds and storage areas. There will therefore be large scale changes to the Site relating to construction activity including the removal/ clearance of features and disturbance to landcover (coniferous forest and moorland cover); introduction of new features (turbines and infrastructure); additional movement and activity of construction vehicles and plant; as well as a perceived change from a largely forested site to a construction site. The geographic extent of these changes will be at the site level (small) with areas of retained forestry across the Site helping to reduce effects associated with lower level construction activity. The construction works are expected to last approximately 18 months, so will be temporary and short term. The level of reversibility will be varied, from fully reversible changes associated with ground disturbances (albeit that vegetation will take some time to recover) to longer lasting effects associated with infrastructure that forms part of the operational scheme. The overall magnitude of change is considered to be large. Overall, the effects of construction on the Site are judged to be **Significant (Major).** These effects will be temporary and largely contained within the geographical extent of the Site.

Landscape and Visual Effects during Construction

In terms of wider landscape and visual effects during the construction phase these will largely relate to views of tall cranes and turbine construction with associated effects on landscape character and views. These effects will be transient and change throughout the construction period as wind turbines are gradually constructed in sections. As such, wider landscape and visual effects during the construction phase are unlikely to exceed the level of effect associated with operational visual effects.

Proposed Mitigation

Measures such as arrangements for vegetation and soil removal, storage and replacement and the restoration of disturbed areas after construction will be detailed in a Construction Environmental Management Plan, which will be agreed with the relevant statutory bodies including SEPA, NatureScot and the Councils prior to commencement of

construction as detailed in Chapter 3 – The Development. Appropriate soil handling will allow disturbed areas of ground to recover faster and reflect the surrounding undisturbed areas of ground.

Residual Construction Effects

Re-establishment of vegetation will take approximately three to five years, depending on the vegetation and soils, and levels of effect will decline over this period.

There will be no significant landscape or visual effects associated with temporary ground disturbance during the construction phase after restoration works have been completed, and vegetation has regenerated.

Decommissioning

Decommissioning of the Development is expected to take approximately 8 months. Due to the similar activities involved in both the construction and dismantling of a wind farm site, a similar level of effect is predicted on the landscape and visual amenity of the Site and wider Study Area over a shorter period.

6.9.2 Operational Effects

Sources of Effects during Operation

The main effects of the Development on landscape and visual amenity once operational will arise from the presence of the wind turbines, met mast, turbine transformers and ancillary infrastructure including access tracks, on-site substation and site access track as described in Chapter 3: The Development and shown on Figure 3.1.

6.9.3 Landscape Assessment: Operational Effects

This section describes the operational effects resulting from the Development on the landscape fabric of the Site, and the LCTs and designated landscapes which have been identified as requiring detailed consideration in Table 6.1 and Table 6.2 above. Further information on key characteristics of each LCT and relevant designated landscapes is provided in the tables below.

All operational effects are considered to be long-term, reversible and adverse unless stated otherwise.

Table 6.8 Operational effects on the Site

Operational Effects on the Site
Location and baseline description: The Site is described in detail in Table 6.7 above.
Sensitivity: See Table 6.7 above. Overall sensitivity is considered to be **low**.
Magnitude of Change and Significance of Landscape Effects: There will be large scale changes to the Site relating to the physical loss of features (forest and some moorland cover) and introduction of new features (turbines and infrastructure), as well as a perceived change from a largely forested site to an active energy generating site. The geographical extent of changes will be small. The overall magnitude of change is judged to be **high**. Overall, the effects of the wind farm on the Site will be **Significant (Major).**
Cumulative Effects: At the Site level cumulative interactions will largely relate to the increased presence of turbines in the more immediate surrounding landscape, through the introduction of the consented single turbines at Upper Haywood Farm Extension and Burnfoot Poultry Farm (to the south of the Site) and the

Operational Effects on the Site
consented Longhill Burn (8 turbines at 180m to tip, and noting this scheme is now subject to a revised application for 8 turbines at 200m to tip). At the Site level, retained coupes of coniferous forest cover will play a role in screening and limiting influence on the character of the Site of further wind farms (noting the influence of existing operational schemes) in the more immediate surrounding landscape. The introduction of turbines on the Site, through the Development, will be the key change and this is recognised in the primary LVIA through significant effects. Further turbines outwith the Site under either cumulative scenario and the introduction of the Development **is unlikely to result in any additional significant cumulative effects, at the Site level.**

6.9.3.1 Operational Effects on Landscape Character

LCTs within 45km of the Development are illustrated on Figure 6.1.4, with theoretical visibility from the LCTs indicated by the ZTV shown on Figure 6.1.5. The assessment describes the potential effects on landscape character resulting from the operational phase of the Development. Cumulative interactions with operational and under construction wind farms are also considered in coming to overall judgements on landscape effects. The assessment is limited to those LCTs where potentially significant effects are considered possible, as detailed in Table 6.2.

Table 6.9 Operational effects on Plateau Farmlands (SLC LCT 5)

SLC (2010) LCT	**5. Plateau Farmlands (and subtypes)**
Location and baseline description: The Plateau Farmlands (5) LCT and its associated subtypes comprise flatter to slightly undulating agricultural land, covering a number of areas to the south of the Development, including a large area approximately 1.5km to the south of the Site boundary, and an area surrounding the M74 transport corridor to the south-west. Key characteristics include: • *"Extensive, gently undulating landform;* • *Dominance of pastoral farming, but with some mosses surviving;* • *Limited and declining tree cover;* • *Visually prominent settlements and activities such as mineral working; and* • *The rural character of the Plateau Farmlands has suffered as tree cover has declined and the visual influence of windfarms, settlements, transport infrastructure and mineral working has increased."*[16] A number of smaller scale wind farms and single wind turbines are located within this LCT, many of them located to the south of the Development or around the M74 corridor.	
Sensitivity: This is a medium scale landscape, which lacks strong topographical variety, where the influence of human activity is readily apparent, and which does not contribute to distinctive skylines. Whilst key characteristics such as the highly settled nature, pastoral farmland and tree cover indicate a higher susceptibility, on balance other characteristics such as the scale, human influence and simpler landform indicate a lower susceptibility to wind energy development. The Pentland Hills and Black Mount SLA extends into a small part of this LCT to the south-east of the Development, indicating a higher value. However, the majority of this LCT across the Study Area is undesignated, indicating a lower value. Overall value is considered to be medium. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium-low.**	
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT. Within 15km, the Development will theoretically be visible from parts of the LCT to the south of the Site and around Libberton to the south-east. Actual visibility will be somewhat reduced by tree cover (where this remains in place across the LCT) and buildings within scattered settlements across this reasonably well settled LCT.	

[16] Ironside Farrar on behalf of South Lanarkshire Council (2010). South Lanarkshire Landscape Character Assessment, pg. 26.

SLC (2010) LCT	5. Plateau Farmlands (and subtypes)
Where views are available, these will be more expansive views which have already been altered by wind farm development seen on simple horizons, including turbines within the Black Law and Muirhall Groups and Tormywheel Wind Farm, which are seen in closer views from much of this LCT. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is considered to be **low**. Overall the effect of the Development on this LCT is judged to be **Not Significant (Minor)**.	
Cumulative Effects The single consented turbine at Burnfoot Poultry Farm is on the northern fringes of this LCT. In terms of wider cumulative interactions Tormywheel Extension (consented), the single turbine at Upper Haywood Farm Extension (consented) and Longhill Burn (consented but noting this scheme is now subject to a revised application for 8 turbines at 200m to tip) will add further turbines in more open, medium distance views north. When visible the Development will likely be read as part of one larger wind farm (including Tormywheel and its consented extension and Longhill Burn), seen on the gently undulating forested horizon in views north with associated effects on landscape character. These views have already been altered by operational wind farm development beyond the LCT, so this change is **unlikely to result in additional significant cumulative effects on landscape character, under either cumulative scenario.**	

Table 6.10 Operational effects on Plateau Moorlands (SLC LCT 6)

SLC (2010) LCT	6. Plateau Moorlands (and subtypes)
Location and baseline description: The Plateau Moorland (6) LCT and its associated subtypes comprise predominantly flatter areas of bog, grass and heather moorland, largely concentrated within the Study Area to the southern part of the Site and areas outside the Site boundary to the east and west. There are smaller pockets of this LCT within 15km to the south. The Development is located with a subdivision of the LCT influenced by forestry, and there is an area influenced by wind farms to the west of the Site. Key characteristics include: • *"Distinctive upland character created by the combination of elevation, exposure, smooth, plateau landform, moorland vegetation and, with the exception of windfarms, a comparative lack of modern development;* • *These areas share a sense of apparent openness and exposure which contrasts with the farmed and settled lowlands but do not feel remote; and* • *Increasingly these areas are subject to significant landscape change resulting from extensive large scale windfarm development and associated reduction in area of commercial forestry."*[17] The nearby Black Law Wind Farm (54 turbines at 115m to tip height), Black Law Extension Phase 1 (23 turbines at 126.5m) and Black Law Extension Phase 2 (11 turbines at 126.5m); and Muirhall Wind Farm (6 turbines at 125m), Muirhall Extension (2 turbines at 147m), and Muirhall South (3 turbines at 147m) are located within this LCT. The Black Law Group turbines are located to the west of the Site, while the Muirhall Group turbines are situated to the south-east. Parts of this LCT are identified as having capacity for turbines of 150m – 250m to tip within South Lanarkshire Council (2019)[18]. These include areas of Plateau Moorland with Forestry within the Site boundary and to the south and west, and parts of the Plateau Moorland LCT to the east of the Site.	
Sensitivity: This is a large scale and simple landscape, which lacks topographical variety, does not contribute to distinctive skylines and where the influence of human activity, in the form of wind energy development and commercial forestry, is readily apparent, indicating a low susceptibility to wind energy development.	

[17] Ironside Farrar on behalf of South Lanarkshire Council. South Lanarkshire Landscape Character Assessment, pg. 32.
[18] South Lanarkshire Council (2019). South Lanarkshire Tall Wind Turbines: Landscape Capacity, Siting and Design Guidance, pg. 20.

SLC (2010) LCT	6. Plateau Moorlands (and subtypes)
The Pentland Hills and Black Mount SLA extends into a small part of this LCT to the south-east of the Development, indicating a higher value. However, the majority of this LCT across the Study Area is undesignated, indicating a lower value. Overall value is considered to be medium. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **low**.	
Magnitude of Change and Significance of Landscape Effects: The turbines of the Development will be located within the area of the LCT to the north of Forth, within subtype 6A. The Development will theoretically be visible from most parts of this LCT within 15km, so the geographical extent will be large. However, forested areas within subtype 6A will reduce actual visibility. The presence of the Black Law and Muirhall Groups (along with other operational schemes including Tormywheel and Pates Hill on the northern fringes of this LCT) within 15km means that wind turbines have already altered and influenced parts of the LCT, whether directly or indirectly. The Development will introduce turbines into the Site area and will have direct effects on the landscape character of the Site. The Site will change from an area of plateau moorland with forestry to an area of plateau moorland with forestry and wind turbines. Overall, this is judged to be a large scale of change to the LCT within the Site and immediate surrounding areas of this LCT. Within 5km the Development will increase the presence of wind turbines in views from parts of the LCT. From most locations where the Development is visible it will be seen in the context of simple horizons which have already been altered by wind farm development. This LCT is not noted to have a 'remote' character so further wind farm development is unlikely to notably alter perceptual characteristics. The scale of change is judged to be no greater than medium for areas of Plateau Moorland within approximately 5km of the Site. Subtype 6A, where forest cover limits visibility, or 6B where wind farm development has already contributed to a change in character, will not be affected to the same degree. Beyond 5km from the proposed turbines and in smaller areas of the LCT to the south (within 15km) the Development will be seen as a distant group of turbines and in the context of operational wind farms. The scale of change is judged to be small for these areas. The overall magnitude of change is considered to be high for the Site, reducing to medium within 5km for pats of the LCT which are not influenced by existing forest cover or wind farm development, and low for the wider LCT. Overall, the effect of the Development on this LCT is judged to be **Significant (Moderate)** for the Site and within 5km, reducing with distance. For the wider LCT, beyond 5km, effects will be **Not Significant (Minor)**.	
Cumulative Effects The consented single turbine at Upper Haywood Farm Extension and the most southerly consented turbine for Tormywheel Extension are both located in this LCT, in the same forested sub-type area as the Development. Both of these schemes are small extensions to operational schemes, and as such will not notably change the cumulative baseline within this LCT. The consented Longhill Burn (and noting this scheme is subject to a revised application for 8 turbines at 200m to tip) will extend the influence of wind farms along the northern edge and to the north of this LCT. The Development will be seen in front (south) of Longhill Burn. Due to the slight change in the cumulative baseline situation within this LCT, and as operational and consented wind farms already influence the northern edge of this LCT, **no significant additional cumulative effects on landscape character are predicted for this LCT, for either cumulative scenario**.	

Table 6.11 Operational effects on Old Red Sandstone Hills (SLC LCT 12)

SLC (2010) LCT	12. Old Red Sandstone Hills
Location and baseline description: The Old Red Sandstone Hills (12) LCT is located at the western extent of the Pentland Hills, to the east of the Development, and covers the entirety of the Pentland Hills within South Lanarkshire. Key characteristics include:	

SLC (2010) LCT	12. Old Red Sandstone Hills
• *"Western tail of the Pentland Hills, comprising areas of rolling moorland dropping steeply in places to the surrounding lowlands;* • *Dominance of heather and peat moorland and rough grazing with small areas of coniferous plantation; and* • *Largely unsettled and undeveloped landscape although with areas of archaeological interest."*[19] There are no commercial scale wind farm developments within the Old Red Sandstone Hills (12) LCT, although operational turbines within wind farms including Tormywheel and Harburnhead, and the Black Law and Muirhall Groups, form vertical features in views to the north-west from parts of this LCT. Within the South Lanarkshire Tall Wind Turbines: Landscape Capacity, Siting and Design Guidance (2019)[20], the LCT is not identified as having capacity to accommodate wind turbines taller than 120m to tip height.	
Sensitivity: The large scale landform and relatively simple landscape pattern indicate a lower susceptibility. However, the undeveloped nature of the landscape and role it plays in providing a setting in wider views indicates a higher susceptibility. Overall the susceptibility of this LCT to wind energy development is considered to be medium-high. The Pentland Hills and Black Mount SLA covers the whole of this LCT, and extends to the south and north-west. Overall value is considered to be high. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **high**.	
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT. The Development will be theoretically visible from north-western facing hill flanks on the western edge of the LCT including Harrows Law, and from the western-facing slopes of Bleak Law and Mid Hill, as well as other smaller hills, within the centre of the LCT. These expansive views have already been altered by wind farm development, including views of the extensive Black Law Group and Tormywheel Wind Farm which lies just beyond the Site. The Development will be seen beyond a number of operational wind farms including Pates Hill and those within the Muirhall Group in views from this LCT. Judgements: Scale: small; Geographical extent: medium. The overall magnitude of change is considered to be **low**. Overall, the effect of the Development on this LCT is judged to be **Not Significant (Minor).**	
Cumulative Effects: There are no cumulative schemes within this LCT. Consented single turbines, small consented extensions to Tormywheel and the consented Longhill Burn scheme will increase the influence of wind farms and turbines in longer distance, large scale and elevated views north-west from this LCT. The Development will likely be read as part of a larger wind farm in these views. As such, this is **unlikely to result in additional significant cumulative effects on landscape character for this LCT, for either cumulative scenario.**	

Table 6.12 Operational effects on Upland Hills – Lothians (SNH LCT 268)

SNH (2019) LCT	268. Upland Hills – Lothians
Location and baseline description: Within the Study Area, this LCT covers the northern and eastern extents of the Pentland Hills, to the east of the Development, forming a continuation of the Old Red Sandstone Hills (12) LCT, which covers the Pentland Hills within South Lanarkshire.	

[19] Ironside Farrar on behalf of South Lanarkshire Council (2010). South Lanarkshire Landscape Character Assessment, pg. 55.
[20] South Lanarkshire Council (2019). South Lanarkshire Tall Wind Turbines: Landscape Capacity, Siting and Design Guidance, pg. 19.

SNH (2019) LCT	268. Upland Hills – Lothians
Key characteristics include: • *"Visually sensitive north-facing escarpment overlooking Edinburgh and its predominantly flat surrounding area;* • *Two parallel ridge lines separated by a deep internal valley;* • *Visual containment of inner valleys and core areas;* • *Diversity of landcover types, including heather moor, grassland, broadleaf woodland, open water and wetland;* • *Drystone dykes and sheep stells on upper slopes;* • *Rich variety of heritage assets, including cairns, forts and enclosures;* • *Heavily used recreational resource, with network of footpaths and minor tracks linking important access points;* • *Visual importance derived from dominant position within heavily populated lowland area;* • *Forms a distinct and recognisable backdrop from many settlements within adjacent lowlands and* Upland Fringes*; and* • *Panoramic views from summits and ridges."*[21] There are no commercial scale wind farms within the Upland Hills (268) LCT, although turbines within the Muirhall Group, Harburnhead, Pearie Law and Pates Hill Wind Farms form vertical features in views to the west from parts of the LCT.	
Sensitivity: This is a large scale landform with large areas of simpler land cover indicating a lower susceptibility. However, this is a visually sensitive landscape which forms a distinctive backdrop from adjacent lowlands which increases susceptibility. Overall the susceptibility of this LCT to wind energy development is considered to be medium-high. The whole of this LCT is covered by local landscape designations, including the Pentland Hills Regional Park, Pentland Hills SLA within West Lothian, and Pentland Hills SLA within City of Edinburgh. Overall value is considered to be high. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **high**.	
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT or the role this LCT plays in providing a backdrop in views. Theoretical visibility is fairly widespread from this LCT beyond 5km from the Site and concentrated on western facing hills slopes. Actual visibility will be slightly reduced across parts by coniferous forestry located to the east and west of the A70. Where visible, the turbines of the Development will be seen in expansive views which have already been altered by wind farm development, including views of the Muirhall Group, Harburnhead, Pearie Law and Pates Hill Wind Farms, which will all be visible in closer proximity than the turbines of the Development. Judgements: Scale: small; Geographical extent: medium. The overall magnitude of change is considered to be **low**. Overall, the effect of the Development on this LCT is judged to be **Not Significant (Minor).**	
Cumulative Effects: There are no cumulative schemes within this LCT. Consented single turbines, small consented extensions and Camilty will bring wind farm development closer to the Pentlands. This will increase the influence of wind farms and turbines in longer distance, large scale and elevated views west from this LCT. The Development will likely be read as part of a larger wind farm in these views. As such, this is **unlikely to result in additional significant cumulative effects on landscape character for this LCT, for either cumulative scenario.**	

Table 6.13 Operational effects on Upland Fringes – Lothians (SNH LCT 269)

SNH (2019) LCT	269. Upland Fringes – Lothians
Location and baseline description:	

[21] SNH (2019). SNH National Landscape Character Assessment: Upland Hills – Lothians.

SNH (2019) LCT	269. Upland Fringes – Lothians
The Upland Fringes (269) LCT covers the northern part of the Site, extending slightly west of the Site, and east towards to Harelaw Reservoir. Key characteristics include: • *"Broadly undulating, landforms forming a series of smooth rounded hills and slopes, some steep-sided and some gently sloping, shelving gradually from the Uplands northward to merge with rolling farmlands;* • *Occasional hills where underlying geology incorporates harder strata;* • *Varied scale, openness and land use reflecting transitional nature between upland and lowland;* • *Incised watercourses have etched v-shaped valleys into the slopes, often forming deep cleughs;* • *Occasional larger rivers flow through similar, but larger-scale, v-shaped channels;* • *Remnant heather moorland and rough grassland on high ground gives way to improved grassland and then to arable land on the lowest elevations, with a parallel transition from post and wire fence and walls to beech and hawthorn hedges;* • *Some areas of extensive coniferous forest, but tree cover is more frequent in the form of shelterbelts;* • *Deciduous woodland is restricted to steeper land in river channels, though this includes some important ancient woodlands;* • *Dispersed settlement pattern of farmsteads and clusters of cottages, with occasional small villages;* • *Distinctive character of rural road network, dense in places, including local features such as fords and bridges;* • *Quarries, overhead lines and busy A roads which have localised influence in some parts of the landscape;* • *Clearly transitional landscape between lowland and upland characters; and* • *Views across the lowland and to the coast in the east, back by the ridges lines of the hills to the south."*[22] Wind farms including Tormywheel, Pearie Law, Pates Hill and Harburnhead Wind Farms are located within this LCT, within 5km to the north-west and north-east of the Site.	
Sensitivity: The varied scale, land cover and landscape pattern indicate a higher susceptibility, although the man-made influence of quarries, electricity infrastructure and the road network indicate a lower susceptibility. Overall the susceptibility of this LCT to wind energy development is considered to be medium. The Pentland Hills Regional Park, Pentland Hills SLA within City of Edinburgh and Pentland Hills SLA within West Lothian cover parts of this LCT. Overall value is considered to be medium-high. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium**.	
Magnitude of Change and Significance of Landscape Effects: The turbines of the Development will be located within the area of the LCT to the south-east of the A704/A706 junction. The Development will theoretically be visible from most parts of this LCT within 15km, although the forested areas to the east and within the Site boundary will reduce actual visibility. The geographical extent of effects is judged to be large. The presence of Tormywheel, Harburnhead, Pearie Law and Pates Hill Wind Farms within 15km means that wind turbines have already altered and influenced parts of the LCT, both directly and indirectly. The Development will introduce turbines into the Site area and will have direct effects on the landscape character of the Site. There will be some localised direct effects on landscape features such as moorland and forest cover. The Site will change from an area of upland fringe with forestry to an area of upland fringes with forestry and wind turbines. Overall, this is judged to be a **large** scale of change to the Site and immediate surrounding area. Within 5km the Development will increase the presence of wind turbines in views from parts of the LCT, and affect certain rural perceptual aspects of the LCT. The scale of change is judged to be **medium** for areas of Upland Fringes within approximately 5km of the Site. Areas where forest cover	

[22] SNH (2019). SNH National Landscape Character Assessment: Upland Fringes – Lothians.

SNH (2019) LCT	269. Upland Fringes – Lothians
limits visibility, or where wind farm development has already contributed to a change in character, will not be affected to the same degree. Beyond 5km from the proposed turbines in areas of the LCT to the east of the Site, the Development will be seen as a distant group of turbines. Operational wind farms will typically also be apparent in views. The scale of change is judged to be small for these areas. The overall magnitude of change is considered to be medium for areas of the LCT within 5km, and low for the wider LCT beyond 5km. Overall, the effect of the Development on this LCT is judged to be **Significant (Moderate)** for areas of Upland Fringes (269) LCT within 5km, and **Not Significant (Minor)** for wider areas of the LCT.	
Cumulative Effects: The consented small extension to Tormywheel, the consented Longhill Burn and Camilty are all located within this LCT. The latter wind farm will somewhat break with the emerging pattern of wind farm development, reading as a more distinct scheme further east within this LCT. The Development will likely be read as part of one larger wind farm (including Tormywheel and its extension, Longhill Burn and Pates Hill) located at the south-western extent of this LCT. This is in an area which is heavily influenced by human activity through coniferous forest cover and is already characterised by wind farm development. This larger group will continue to maintain separation with the Black Law Group (further west) and the Pearie Law and Harburnhead grouping (further east). Whilst significant effects are acknowledged in the primary LVIA for this LCT (within 5km), the increased influence of wind farms under the cumulative scenarios and role the Development plays in creating one larger coherent wind farm group is **not considered to result in any additional significant cumulative effects under either cumulative scenario.**	

Table 6.14 Operational effects on Lowland Plateaux – Lothians (SNH LCT 273)

SNH (2019) LCT	273. Lowland Plateaux – Lothians
Location and baseline description: Within the Study Area, this LCT covers a predominantly settled area to the north of the Site. Key characteristics include: • *"Broadly undulating and open plateau landform, becoming more rolling to the south and east to form a series of craggy hills above Blackridge;* • *The principal rivers form shallow valleys, with more deeply incised tributaries;* • *A pastoral landscape with post and wire fences, thin hedges and windswept shelterbelts;* • *Important wetland habitats and lowland peat bogs;* • *Scattered woodland consisting of small areas of coniferous, deciduous and mixed species;* • *Evidence of historical mining activity, leaving highly visible traces in the red shale bings;* • *Widespread residential and commercial development, as well as major transport corridors; and* • *A landscape with extensive presence of modern human development and infrastructure."*[23] There are no commercial scale wind farms within the Lowland Plateaux (273) LCT, although the Black Law Group and Tormywheel, Harburnhead, Pearie Law and Pates Hill Wind Farms are visible to the south from parts of the LCT, and Burnhead Wind Farm is situated on the edge of the neighbouring Lowland Plateaux (151) LCT.	
Sensitivity: The LCT features highly developed areas, including the M8 transport corridor and a number of scattered settlements and towns. The varied landscape pattern indicates a higher susceptibility, while the prevalence of man-made development and infrastructure indicates a lower susceptibility. Overall, the susceptibility of this LCT to wind energy development is considered to be medium-low.	

[23] SNH (2019). SNH National Landscape Character Assessment: Lowland Plateaux – Lothians.

SNH (2019) LCT	273. Lowland Plateaux – Lothians
The Blackridge Heights SLA is located within the Lowland Plateaux (273) LCT, focussed on an area to the north-west around Eastcraigs Hill and Blawhorn Moss, indicating a higher value. However, the majority of this LCT sits outwith designated landscapes and is highly developed, indicating a lower value. Overall value is considered to be medium. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **medium.**	
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT. The Development will be theoretically visible from the majority of the LCT within 10km, seen above the low-lying simple plateaux landscape in views to the south and in the context of the Black Law Group and Tormywheel, Harburnhead, Pearie Law and Pates Hill Wind Farms. Actual visibility will be reduced by buildings across the LCT including the settlements of Whitburn, Blackburn and Armadale. Where views are available these will be medium to longer distance and in the context of human influence which is readily apparent close at hand, and in longer distance views of wind farm development which has altered horizons to the south. Judgements: Scale: small; Geographical extent: medium. The overall magnitude of change is considered to be **low**. Overall, the effect of the Development on this LCT is judged to be **Not Significant (Minor)**.	
Cumulative Effects: There are no cumulative schemes within this LCT. This is a highly developed LCT and buildings often reduces the potential for open views south. When visible, the Development will likely be read as part of a larger wind farm (with operational, consented and proposed schemes) on the gently undulating forested horizon in middle distance views to the south. Given the influence of existing and proposed wind farms on the character of outward views from this LCT, and as the Development will likely be read as part of a larger wind farm group, this is **unlikely to result in significant cumulative effects on landscape character, under either cumulative scenario.**	

Table 6.15 Operational effects on Plateau Farmland – Glasgow & Clyde Valley (SNH LCT 201)

SNH (2019) LCT	201. Plateau Farmland – Glasgow & Clyde Valley
Location and baseline description: Within the Study Area, this LCT covers a number of flat, low-lying areas of farmland on the edge of Glasgow, with the closest being situated to the east of Motherwell, to the west of the Site. Key characteristics include: • *"Extensive, open, flat or gently undulating landform;* • *Dominance of pastoral farming, but with some mosses surviving;* • *Limited and declining tree cover;* • *Visually prominent settlements and activities such as mineral working; and* • *Rural character of the Plateau Farmland has reduced as tree cover has declines and the visual influence of settlement, transport infrastructure and mineral working has increased."*[24] There are no commercial scale wind farm developments within the area of Plateau Farmland (201) LCT closest to the Site, although there are views of wind farms in the wider landscape including Black Law Wind Farm to the south-east of this LCT.	
Sensitivity: The larger scale, simple landform and influence of man-made development indicate a medium-low susceptibility to wind energy development. There are no landscape designations within this LCT. Whilst the LCT displays some rural qualities, the influence of man-made development is widespread. Overall value is considered to be low. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **low**.	

[24] SNH (2019). SNH National Landscape Character Assessment: Plateau Farmland – Glasgow & Clyde Valley.

SNH (2019) LCT	201. Plateau Farmland – Glasgow & Clyde Valley
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT. Within 15km, the Development will be intermittently theoretically visible from parts of the LCT to the east of Newarthill. Actual visibility will be reduced by buildings within settlements and areas of coniferous forest cover. Where views are available, these will typically be longer distance. The Development will be seen beyond the operational Tormywheel and in the context of the large Black Law Group which has already altered simple horizons in views from this LCT). Judgements: Scale: small overall; Geographical extent: small. The overall magnitude of change is considered to be low. Overall, the effect of the Development on this LCT is judged to be **Not Significant (Negligible)**.	
Cumulative Effects: The consented Hartwood, Greengairs and Greengairs East will increase the influence of wind farm development on the eastern edge of this LCT. Under both development scenarios the Development will be seen behind the operational Tormywheel Wind Farm (which will be slightly extended due to the consented extension) from intermittent areas of this LCT in middle to longer distance views to the south-east and east. **This is unlikely to result in any additional cumulative effects on landscape character.**	

Table 6.16 Operational effects on Plateau Moorlands – Glasgow & Clyde Valley (SNH LCT 213)

SNH (2019) LCT	213. Plateau Moorlands – Glasgow & Clyde Valley
Location and baseline description: Within the Study Area, this LCT covers an extensive upland area to the north-west of the Site, situated between more densely settled areas to the east and west. Key characteristics include: • *"Large scale landform;* • *Undulating hills and sloping ridges in the western areas; a more even plateau landform in the east;* • *Distinctive upland character created by the combination of elevation, exposure, smooth plateau landform, moorland vegetation;* • *Predominant lack of modern development;* • *Extensive wind turbines development, including one of the largest wind farms in Scotland, Black Law; and* • *Sense of apparent naturalness and remoteness which contrasts with the farmed and settled lowlands, although this has been reduced in places by wind energy development."*[25] Northern parts of Black Law Wind Farm are located at the southern extent of the Plateau Moorlands (213) LCT, and there are views of wind farms in the wider landscape, including Burnhead Wind Farm to the north-east.	
Sensitivity: The large-scale, simple landform and influence of existing wind energy infrastructure indicate a low susceptibility to further wind energy development. There are no designations within this LCT. The LCT displays some qualities of remoteness and lack of modern development. Overall value is considered to be medium-low. Considering the judgements of susceptibility and value, overall sensitivity is judged to be **low**.	
Magnitude of Change and Significance of Landscape Effects: There will be no direct effects on the landscape features of this LCT. The Development will be theoretically visible from upland parts of the LCT to the south of the A71 and south of the M8. There	

[25] SNH (2019). SNH National Landscape Character Assessment: Plateau Moorlands – Glasgow & Clyde Valley.

SNH (2019) LCT	213. Plateau Moorlands – Glasgow & Clyde Valley
will also be intermittent theoretical visibility beyond 10 km from the Site, to the north and south of the A89. Actual visibility will be reduced by coniferous forestry and buildings within scattered settlements. Where views are available, these are typically more extensive views which have already been altered by wind farm development. The Development will be seen in the context of other operational wind farms including the Black Law Group, Tormywheel and Pates Hill Wind Farms. As such this will limit any further effects on perceptual qualities such as 'naturalness' and 'remoteness'. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is considered to be **low.** Overall, the effect of the Development on this LCT is judged to be **Not Significant (Negligible).**	
Cumulative Effects: The consented Hartwood, Greengairs and Greengairs East and the proposed West Benhar (consented after cumulative cut-off) and Forrestfield will increase the influence of wind farm development within this LCT. Under both scenarios the Development will be seen outside this LCT as part of a larger wind farm behind the operational Tormywheel Wind Farm (which will be slightly extended due to the consented extension) from intermittent areas in middle to longer distance views to the south-east. Under scenario 2 the Development will be seen as part of a larger wind farm grouping, outside this LCT, and beyond West Benhar Wind Farm. The Development will be read as part of a larger wind farm group outside this LCT. This area is more likely to be influenced by consented and proposed wind farm development within the LCT. **As such, this is unlikely to result in any additional cumulative effects on landscape character.**	

6.9.3.2 Operational Effects on Designated Landscapes

The Site is not covered by any landscape designations. However, there are landscape designations within the 45km Study Area, as listed in Table 6.3 above and shown on Figure 6.1.6. This section describes the implications of the proposed Development for designated areas in the Study Area, which have been taken forward for detailed assessment, as outlined in Table 6.2.

Table 6.17 Operational effects on Pentland Hills locally designated landscape area

Pentland Hills locally designated landscape area
Location and baseline description: Parts of the Pentland Hills are designated within Scottish Borders Council, West Lothian and South Lanarkshire, in addition to the Pentland Hills Regional Park which is focused to the north-eastern extents of the hills and largely beyond 10km from the Development. The designations that cover the Pentland Hills comprise Pentland Hills SLA (West Lothian), Pentland Hills and Black Mount SLA (South Lanarkshire) and Pentland Hills SLA (Scottish Borders). Given that these designations respond to council boundaries but the experience of the hills is as one larger upland area, these local landscape designations will be considered in conjunction with one another. The Pentland Hills "*comprise an upland landscape of rounded hill tops and sweeping slopes cut by steep upland streams and covered with grassland and heather moorland*"[26]. They are located to the east of the Site and form a long ridge stretching from near Newbigging in the south-west to the edge of Edinburgh in the north-east. The Pentland Hills and Black Mount SLA is the closest designated area, within 10km to the east of the proposed turbines of the Development. Some of the key scenic and cultural features as set out within the citations for designations include the wild, undeveloped character; panoramic views over central Scotland; the setting the hills provide in views from

[26] LUC on behalf of West Lothian Council (2013). West Lothian Local Landscape Designation Review.

Pentland Hills locally designated landscape area
elsewhere; dramatic topography in contrast with the lower-lying surroundings; and the opportunities for recreation.[27] Long distance views from upland areas are characteristic of the area, with panoramic views across the surrounding lower-lying hills and lowland plateaux. There are no commercial scale wind farm developments within the designated area, but a number are visible from hill summits and western-facing hill flanks, including Harburnhead, Pearie Law, Pates Hill and Tormywheel Wind Farms and the Black Law and Muirhall Groups.
Changes: Views of the Development will be available from hill slopes facing towards the Site, including the western-facing slopes of hills including East Cairn Hill and West Cairn Hill to the north; and the north-facing slopes of Black Law, Harrows Law and Bleak Hill to the south. Visibility will be most widespread from parts of the Pentland Hills within South Lanarkshire and West Lothian, with very limited theoretical visibility from the Scottish Borders. There will be no direct effects on key landscape features such as rounded hill tops and recreational routes. Furthermore, the Development will not alter the important role these hills play in providing a setting and dramatic contrast in views from the surrounding lowlands. In terms of effects on the perceptual special qualities and views outwith this designated landscape operational turbines have altered the surrounding landscape, particularly to the west of the designated area. The Development will introduce further turbines seen beyond operational wind farms including Harburnhead and Pearie Law in views to the west, and will result in some limited effects on the sense of "wildness" experienced from some hill summits within the designated area. However, given that turbines have already altered the landscape in views from the designated area, 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 designations by impacting on the qualities for which they have been designated.
Cumulative Effects: There are no cumulative schemes within the local level landscape designations. Within the more immediate context to the north-west, consented single turbines, small consented extensions to Tormywheel, the consented Longhill Burn and Camilty (which will bring wind farm development closer to the Pentlands) will increase the influence of wind farms and turbines in longer distance, large scale and elevated views to the north-west. The Development will likely be read as part of a larger wind farm (including Tormywheel, its extension, Longhill Burn and Pates Hill) in these views. Given the existing influence of wind farms outside these designated landscapes, and as the Development will not be responsible for bringing wind farm development closer to this area, **it is unlikely to compromise the reasons for designation, under either cumulative scenario**. Furthermore, the role the Pentlands play in providing a setting in views will remain unaltered, under the introduction of the development in either cumulative scenario.

Table 6.18 Operational effects on Blackridge Heights SLA

Blackridge Heights SLA
Location and baseline description: Blackridge Heights SLA is located within 15km to the north-west of the Development. The key scenic and cultural features of the area as set out within the West Lothian Local Landscape Designation Review (2013), and subsequently adopted within the West Lothian Local Development Plan (2018)[28], are as follows:

[27] Scottish Borders Council (2012). Supplementary Planning Guidance: Local Landscape Designations; LUC on behalf of West Lothian Council (2013). West Lothian Local Landscape Designation Review; Ironside Farrar on behalf of South Lanarkshire Council (2010). Validating Local Landscape Designations.
[28] The Local Development Plan (2018) refers back to the Statement of Significance laid out within the Local Landscape Designation Review (2013) as reason for the designation.

Blackridge Heights SLA
"*This area of continuous moorland plateau forms a surprisingly upland landscape for the central belt of Scotland. The area has an openness emphasised by the extensive moorland land cover, lack of trees, and the availability of long views in all directions. The area provides attractive long views northwards to the Highlands and southwards to the Pentland Hills. A sense of remoteness is notable, with limited human influence on the landscape in comparison to nearby areas.* *Westcraigs, Crowns and Eastcraigs Hills are landmark features of the wider area: they are clearly seen from the M8 and provide a setting for the settlement of Blackridge. Prominent lines of mature beech trees around Blawhorn Moss form visually attractive landscape features which are highly representative of West Lothian.* *Blawhorn Moss National Nature Reserve is a unique large-scale wetland in central Scotland and provides opportunities for experiencing the moorland landscape. Rocky hills and undulating landform adjacent to the settlement of Blackridge provide local footpaths and have high recreational value for local residents."*[29] Long distance views are available to the north and south from the upland area covered by this SLA. There are no commercial scale wind energy developments within the SLA, although views are available to the north of the nearby Burnhead Wind Farm, and to the south and including the large Black Law Group, amongst others.
Changes: The Development will be theoretically visible from a widespread area of this open, upland landscape. There will be no direct effects on key landscape features such as moorland cover, mature beech trees, wetlands or rocky hills. In terms of effects on the perceptual special qualities of this landscape operational turbines have altered the surrounding landscape, particularly to the south of the SLA. The Development will introduce further turbines seen in the context of operational wind farms including Tormywheel, Harburnhead and Pearie Law Wind Farms and the large Black Law Group in views to the south. As such, this will have a limited effect on the sense of 'remoteness' experienced from this area. Given that turbines have already altered the landscape in views outside the SLA, 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 designation by impacting on the qualities for which it has been designated.
Cumulative Effects: There are no cumulative schemes within the Blackridge Heights SLA. When visible, the Development will likely be read as part of a larger wind farm (with operational, consented and proposed schemes) on the gently undulating forested plateau around the Site in longer distance views to the south. Under scenario 2 West Benhar (consented after cumulative cut-off) will introduce wind farm development in the varied lower lying landscape between the SLA and the Site. The remote character attributes of the SLA are unlikely to be notably altered by further, more distant views of wind farms to the south. The Development will be apparent in noted views towards the Pentlands, but these views have already been altered by wind farm development. The cumulative scenarios will increase the influence of wind farm development in these views and the Development will likely be read as part of a larger wind farm, rather than a further wind farm which alters less developed parts of the view towards the Pentlands. **As such, the Development is unlikely to compromise the reasons for designation, under either cumulative scenario.**

Table 6.19 Operational effects on Upper Clyde Valley and Tinto SLA

Upper Clyde Valley and Tinto SLA
Location and baseline description: The extensive Upper Clyde Valley and Tinto SLA is located approximately 10 km to the south of the proposed turbines. The area includes Upper Clyde Valley, Tinto and its hills to the west, parts of the

[29] LUC on behalf of West Lothian Council (2013). West Lothian Local Landscape Designation Review.

Upper Clyde Valley and Tinto SLA
Southern Upland hills, and the town of Biggar to the east. The key scenic and cultural features of the SLA are as follows: • "*scenic qualities of a meandering river in a broad semi-upland valley setting that contrasts with the enclosing hills of the Southern Uplands and the prominent Tinto Hill;* • *cultural features include country houses set in designed policies, small settlements and the historic burgh of Biggar in the valley and many signs of prehistoric settlement in the hills;* • *a network of mature policy woodlands and shelterbelts, a high-quality water environment and vast areas of heather moorland and rough grasslands; and* • *frequently visited, as it is traversed by major transport routes to the south and includes popular hillwalking destinations such as Tinto Hill and Culter Fell."*[30] Long distance views from upland areas are characteristic of this SLA, with panoramic views across the Clyde valley and surrounding landscape available from the uplands and Tinto Hill. There are no operational wind farms located within the SLA, but views towards operational wind farms including Hagshaw Hill, Clyde and the Black Law Group are a common feature from more elevated parts.
Changes: Visibility of the Development will be available from upland areas of farmland to the south of the Clyde Valley within 15km, and from the north-facing slopes of Tinto and the surrounding foothills further south. There will be no direct effects on key landscape features such as the meandering river, policy woodlands, heather moorland, or hill summits. Operational turbines are present in the surrounding landscape, particularly to the west and north-west of the SLA, where a large number of wind farms are spread across plateau moorland within South Lanarkshire, and are a feature in views from Tinto Hill. The Development will introduce further turbines seen in the context of operational wind farms to the north, including Tormywheel, Harburnhead and Pearie Law Wind Farms, and the Black Law Group. Given that turbines are already present in views from the SLA, 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 designation by impacting on the qualities for which it has been designated.
Cumulative Effects: Under both scenarios the Development will likely be read as part of a larger emerging wind farm group in longer distance, large scale views from more elevated parts of this SLA. The role that Tinto Hill plays in providing a prominent landmark in views from this SLA will be unaltered. **As such, the development is unlikely to compromise the reasons for designation, under either cumulative scenario.**

6.9.4 Operational Visual Effects

The assessment of visual effects from the 18 viewpoints selected to represent views of the Development are set out below (as listed in Table 6.4 above and shown on Figure 6.1.2a). This assessment assumes that all effects are long-term, during the proposed 30 year operational lifespan of the Development, and reversible, unless stated otherwise.

Accompanying visualisations for each assessment viewpoint are contained in Volume 2 of the EIA Report prepared in accordance with the methodology set out in Appendix A6.2.

Table 6.20 Viewpoint 1: A704/A706 Junction

Viewpoint 1: A704/A706 Junction		**Grid Reference**	295531 658247
LCT	269, Upland Fringes - Lothians	**Landscape designation or WLA**	None
Direction of view	South-east	**Distance to nearest turbine**	0.96km

[30] Ironside Farrar for South Lanarkshire Council (2010). Validating local landscape designations.

Viewpoint 1: A704/A706 Junction		**Grid Reference**	295531 658247
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.1a – j
Viewpoint location and existing view	This viewpoint is located at the junction of the A704 and A706 to the south-west of Breich. The A706 runs to the west of the Site. Receptors include road users, cyclists and farm workers in the vicinity of the viewpoint. Views towards the Site are orientated to the south-east across undulating moorland, which rises up away from the viewpoint and forms the horizon in the middle distance. Tormywheel Wind Farm is visible at close proximity in this direction, with the nearest turbine at a distance of 0.19km. To the east, the horizon is formed by forest cover in the middle distance. Views in other directions are contained by roadside vegetation along the A704 and A706.		
Sensitivity	The viewpoint will predominantly be experienced in sequential and oblique views for road users travelling in both directions along the A704 and south along the A706. The viewpoint is not located within any designations and human influence over the landscape is apparent through operational wind turbines and areas of forest cover. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low.**		
Assessment of Visual Effects	The Development will introduce 12 turbine hubs and 14 turbine blades in views to the south-east. The Development will be seen above the horizon in this direction (open rolling moorland and coniferous forest cover), and will introduce additional turbines into the view beyond the operational turbines of Tormywheel Wind Farm. No low level ancillary infrastructure will be visible from this viewpoint due to the rising nature of the intervening landform. Due to proximity to turbines within Tormywheel, the difference in scale between turbines in this scheme and the Development will be difficult to discern. The Development will occupy a large proportion of views from this viewpoint, seen in fleeting sequential and typically oblique views from this section of the road. Judgements: Scale: large; Geographical Extent: small. The overall magnitude of change is judged to be **high.** Overall, the visual effect of the Development on views from this location is judged to be **Significant (Moderate).**		
Cumulative Effects	Under both cumulative scenarios the key change to the baseline will be the consented Longhill Burn. Views in other directions are somewhat limited by coniferous forest cover. The Development will be seen between close proximity views of operational turbines in Tormywheel with further turbines in the consented Longhill Burn beyond, in views to the east. Whilst this will increase the number of turbines it will likely read as one larger wind farm in views to the east. **The introduction of the Development is not predicted to result in any significant additional cumulative effects, under either cumulative scenario.**		

Table 6.21 Viewpoint 2: Minor road near Haywood and Bughtknowes

Viewpoint 2: Minor road near Haywood and Bughtknowes		**Grid Reference**	297260 655170
LCT	6, Plateau Moorland	**Landscape designation or WLA**	None
Direction of view	North	**Distance to nearest turbine**	1.73km
Theoretical Visibility	Hubs: 7 Blades: 11	**Figure Number**	6.2.2a – h

Viewpoint 2: Minor road near Haywood and Bughtknowes	**Grid Reference**	297260 655170
Viewpoint location and existing view	This viewpoint is located on the minor road which runs east to west to the south of the Site between Auchengray and Wilsontown, near Haywood and Bughtknowes. The viewpoint represents views experienced from number of residential properties located along the road, some of which have views oriented to the north. Similar views will be experienced by road users including cyclists. Views towards the Site are to the north over rolling pastoral farmland which slopes upwards away from the viewpoint, with occasional trees and hedgerows. Coniferous forest on the southern edge of the Site and trees within the intervening pastoral farmland form the enclosing horizon to the north. Single turbines associated with Upper Haywood and Mountainblaw Farm are visible upon the horizon to the north-west and north-east, and electricity distribution infrastructure can be seen crossing the pastoral farmland in the middle distance. To the south, the foreground is formed by pastoral farmland which gently rises up to form the horizon across parts; across other parts longer distance views are available towards distant hill ranges beyond the Dippool Water Valley. To the west, residential development is visible along the minor road. To the east, the Pentlands can be seen in long distance views beyond residential development at Crooklands.	
Sensitivity	The viewpoint represents a moderately scenic rural outlook experienced by residential receptors. However, there are man-made elements in the view, including electricity infrastructure and operational wind turbines. Operational wind farms to the north and west are largely screened by the topography. There are no indicators that this is a valued view. Judgements: Susceptibility: high; Value: medium-low. The overall sensitivity is judged to be **medium-high.**	
Assessment of Visual Effects	In total, filtered views of four turbine hubs and nine turbine blades will be visible above the horizon beyond the pastoral farmland and forestry to the north. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. Retained forest cover on the horizon (to the north-west of view) and intervening deciduous woodland/ trees will partially screen lower parts of the turbine towers, and the topography will screen turbines towards the north of the Site. The Development will appear to sit behind the ridge of the upland plateau, in views to the north. This change in the view will be apparent along much of the minor road to the south of the Site. Judgements: Scale: medium; Geographical Extent: medium. The overall magnitude of change is considered to be **medium**. Overall, the visual effect of the Development on views from this location is judged to be **Significant (Moderate).**	
Cumulative Effects	Key changes to the baseline will include the consented Upper Haywood Farm Extension single turbine and to a lesser degree Longhill Burn, both located to the north. The consented Burnfoot Poultry Farm single turbine will be located to the east. Views of other consented and proposed schemes to the south are much longer distance. The Development will be seen beyond the Upper Haywood Farm Extension single turbine, and in front of two turbine blades within Longhill Burn which may be visible above the wooded horizon. Turbines within the Development will be largely contained between the turbines of these two schemes. The difference in scale between the Development and the Upper Haywood Farm Extension turbine will be apparent, although this effect will be minimised by the siting of the Development turbines largely behind the ridge to the north. **The introduction of the Development is not predicted to result in any significant additional cumulative effects, under either cumulative scenario.**	

Table 6.22 Viewpoint 3: Breich

Viewpoint 3: Breich		**Grid Reference**	296458 660560
LCT	269, Upland Fringes - Lothians	**Landscape designation or WLA**	None
Direction of view	South	**Distance to nearest turbine**	1.93km
Theoretical Visibility	Hubs: 13 Blades: 14	**Figure Number**	6.2.3a – f
Viewpoint location and existing view	This viewpoint is located to the north of the Site, along a minor road to the south of the settlement of Breich. The viewpoint represents views experienced by residential receptors within properties in Breich, a number of which have views orientated south towards the Site, from the rear of the property. Views towards the Site look north over pastoral farmland in the foreground. The topography rises up to the north and the gently undulating horizon is formed by coniferous forest to the north of the Site. Electricity infrastructure and Tormywheel Wind Farm are visible on the skyline above the forest to the south and south-west. Pastoral farmland also forms the foreground to the east and west. To the east, there are remnants of former quarrying activity in the middle distance and two turbines are visible in longer distance views. To the south, residential development within Breich is visible in middle distance views, with some properties orientated south towards the Site.		
Sensitivity	This viewpoint represents a rural outlook experienced by residential receptors. However, there are man-made elements in the view including operational wind turbines, forestry and electricity infrastructure. Whilst this represents a rural outlook from the settlement edge there are no indicators that this is a valued view. Judgements: Susceptibility: high; Value: medium-low. The overall sensitivity is judged to be **medium-high**.		
Assessment of Visual Effects	In total, eight turbine hubs and 12 turbine blades will be visible above the horizon beyond the pastoral farmland and forestry to the south. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. Retained forest cover on the horizon will partially screen lower parts of the turbine towers and blades on turbines to the south of the Site. The Development will be visible alongside the turbines of Tormywheel Wind Farm, and the two developments will likely be read as one larger wind farm with the Development bringing turbines closer to the viewpoint. The difference in scale between the two developments will be apparent, although the three turbines at 150m maximum blade tip height (T1-T3) to the west of the Development will help to integrate both wind farms. The Development will also be seen behind and between steel towers on the overhead electricity line which crosses the view to the south. There will be some overlapping between turbine blades and a slight gap in the horizontal field of view occupied by turbines between turbine 11 and 5, from this viewing angle. However, this is a closer view and proximity to a wind farm can often result in less balanced views of turbines. This change in the view will be apparent from properties to the south of Breich with an open outlook to the south. Judgements: Scale: large; Geographical extent: medium. The overall magnitude of change is considered to be **large.** Overall, the visual effect of the Development on views from this location is considered to be **Significant (Major).**		

Viewpoint 3: Breich		**Grid Reference**	296458 660560
Cumulative Effects	The key change to the cumulative baseline will be the consented Longhill Burn, and to a lesser degree the consented extension to Tormywheel. Longhill Burn will be apparent on the plateau horizon in views to the south, and Tormywheel Extension will add a further two turbines to the horizontal field of view occupied by the operational Tormywheel. The Development will be seen between the consented Longhill Burn and Tormywheel (operational and consented extension). This will likely read as one larger wind farm occupying a wide field of view to the south. The turbine scale of the Development and Longhill Burn will be similar. As noted above, the difference in turbine scale between the Development and Tormywheel (and its consented extension) will be apparent. However, the three turbines at 150m maximum blade tip height (T1-T3) to the west of the Development will help to integrate this larger wind farm in views to the south. Whilst it is recognised that the Development will increase the presence of wind turbines in views to the south, the Development will be seen between turbines within other schemes; reflects the scale of the consented Longhill Burn (which is the key change to the cumulative baseline); and has the cumulative effect of creating one larger wind farm. **On balance the introduction of the Development is not judged to result in a significant additional cumulative effect, under either scenario.**		

Table 6.23 Viewpoint 4: Minor road at Woolfords Cottages

Viewpoint 4: Minor road at Woolfords Cottages		**Grid Reference**	300461 656769
LCT	6, Plateau Moorland	**Landscape designation or WLA**	None
Direction of view	West	**Distance to nearest turbine**	2.41km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.4a – f
Viewpoint location and existing view	This viewpoint is located along the minor road to the south of Woolfords Cottages, to the east of the road bridge which crosses the West Coast Main Line railway. The view has been selected to be representative of views from the rear of properties at Woolfords. Similar views will be experienced by road users including cyclists. Views towards the Site are to the west over rolling pastoral farmland in the foreground, with field boundaries marked by dry stone walls and hedgerows. The topography slopes gently upwards towards the Site, and the gently undulating horizon is formed by coniferous forest on the eastern edge of the Site. Areas of mixed woodland are apparent within the pastoral farmland, and this woodland contributes to the horizon in the middle distance across parts of the view. Electricity infrastructure can be seen crossing the fields in the middle distance. Operational wind turbines within Pates Hill Wind Farm are visible on the horizon to the north-west, and the blades of a small number of turbines within Tormywheel Wind Farm can be seen above the coniferous forestry on the horizon to the west. To the north-east, turbines within Pearie Law and Harburnhead Wind Farms are visible beyond infrastructure associated with the railway line. To the east, there are glimpsed longer-distance views towards distant hill ranges. Views to the south are contained at close proximity by mixed woodland alongside the road and railway line.		
Sensitivity	The view has been selected to be representative of views from the rear of properties at Woolfords. Similar oblique, sequential views will also be		

Viewpoint 4: Minor road at Woolfords Cottages		**Grid Reference**	300461 656769
	experienced by road users. It represents a moderately scenic rural outlook however, there are man-made elements in the view including operational wind turbines, forestry and electricity infrastructure. Whilst this represents a rural outlook from the rear of a small settlement there are no indicators that this is a valued view. Judgements: Susceptibility: high; Value: medium-low. The overall sensitivity is judged to be **medium-high**.		
Assessment of Visual Effects	The Development will introduce 12 turbine hubs and 13 turbine blades above the horizon beyond the pastoral farmland and forestry to the west. Intervening deciduous woodland will partly screen turbines to the south of the Development. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. The turbines will be read as one coherent and well balanced group. The Development will be visible in front of the upper blades of turbines within Tormywheel Wind Farm. This change in the view will be apparent from more open parts of the minor road to the north and south of Woolfords Cottages and from the rear garden areas of certain properties with open views west in Woolfords. Judgements: Scale: large; Geographical extent: medium. The overall magnitude of change is judged to be high. Overall, the visual effect of the Development on views from this location is considered to be **Significant (Major).**		
Cumulative Effects	The key change to the cumulative baseline will be the consented Longhill Burn. Views of other consented and proposed schemes will either be much longer distance or largely hidden by intervening vegetation. The consented Longhill Burn will increase the field of view occupied by turbines beyond (southwest of) the operational Pates Hill. The Development will further extend the influence of turbines beyond Longhill Burn, in views to the west. The scale of the turbines in the Development and Longhill Burn will be similar. Pates Hill, Longhill Burn and the Development will likely read as one larger wind farm in views to the northwest. Whilst this will increase the influence of wind farms in wider successive views the Development will likely read as an extension to an emerging wind farm cluster, rather than another wind farm in a less developed part of the view**. As such, the introduction of the Development is not judged to result in a significant additional cumulative effect, under either scenario.**		

Table 6.24 Viewpoint 5: Forth

Viewpoint 5: Forth		**Grid Reference**	294665 654190
LCT	5, Plateau Farmland	**Landscape designation or WLA**	None
Direction of view	North-east	**Distance to nearest turbine**	2.67km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.5a – f
Viewpoint location and existing view	This viewpoint is located within the settlement of Forth, within an open recreational area on the north-eastern settlement edge. The viewpoint represents views experienced by recreational receptors. Similar views will be experienced by certain residential receptors from properties to the south of the recreational grounds, with open views. Views towards the Site are orientated to the north-east. The foreground is formed by grassland within the park, and there are scattered residential		

Viewpoint 5: Forth		**Grid Reference**	294665 654190
	properties beyond the park. The topography rises gently upwards to the north-east and the gently undulating horizon is formed by coniferous forestry to the south of the Site. An operational single turbine is visible at Upper Haywood Farm above the forestry on the horizon. Turbines within Tormywheel Wind Farm to the north are largely screened by mixed woodland on the northern edge of the park. The view to the south and west is contained by residential development and buildings within Forth, beyond the grassland and pitches within the recreational grounds. Longer distance views are available to the east towards hills within the Pentlands, over pastoral farmland in the middle distance. Turbines within the Muirhall Group are apparent in the middle distance to the east, largely back clothed by the hills beyond.		
Sensitivity	This viewpoint represents a moderately scenic outlook from the edge of the settlement, largely experienced by recreational receptors. Similar views will be experienced by a small number of residents on the fringes of the park. There are man-made elements in the view, including operational wind turbines and buildings. Whilst this represents a rural outlook from the settlement edge there are no indicators that this is a valued view. Judgements: Susceptibility: medium; Value: medium-low. Overall, the sensitivity is judged to be **medium**.		
Assessment of Visual Effects	In total, seven turbine hubs and nine turbine blades will be visible above the horizon beyond the grassland and intervening mixed woodland and forestry to the north-east. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform. Some forest removal within the Site (refer to Figure 15.3) will also be apparent on the horizon. The Development will appear as a distinct cluster of turbines seen above the largely wooded horizon from this location and behind the single operational turbine at Upper Haywood. The turbines in the development will sit at a similar elevation to the operational single turbine seen in views to the north-east. Woodland largely screens turbines within Tormywheel Wind Farm. This change in the view will be apparent from much of the north-eastern settlement edge within Forth. Judgements: Scale: medium; Geographical extent: medium. The overall magnitude of change is judged to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Significant (Moderate).**		
Cumulative Effects	Under both cumulative scenarios views of further consented or proposed wind farms will either be largely screened by intervening vegetation and built form, or very long distance. The single consented turbine at Upper Haywood Farm will be apparent with the Development seen at a similar elevation alongside this turbine. The Development will also be seen in front of a limited number of turbines within the consented Longhill Burn and will likely read as part of a larger wind farm group, in views to the north-east. **No significant additional cumulative visual effects are anticipated from this viewpoint, under either scenario.**		

Table 6.25 Viewpoint 6: Fauldhouse

Viewpoint 6: Fauldhouse		**Grid Reference**	294426 660773
LCT	273, Lowland Plateaux - Lothians	**Landscape designation or WLA**	None
Direction of view	South-east	**Distance to nearest turbine**	3.02km

Viewpoint 6: Fauldhouse		**Grid Reference**	294426 660773
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.6a – e
Viewpoint location and existing view	This viewpoint is located to the south of a new residential development on the eastern edge of Fauldhouse, to the north-west of the Site. A path along a disused railway line runs through a cutting to the north of the viewpoint. The viewpoint represents views experienced by residential receptors within Fauldhouse. Views towards the Site are oriented to the south-east over unimproved grassland in the foreground. The topography slopes down towards the valley of the Breich Water, and then gently rises up towards the Site. The gently undulating horizon is formed by coniferous forest on the northern edge of the Site. Infrastructure associated with the West Coast Main Line is visible in the middle distance, and electricity infrastructure can be seen (partially back clothed by the forestry) on the horizon. Operational wind turbines within Tormywheel Wind Farm can be seen upon the open moorland to the west of the Site. To the north, longer distance views are constrained by the rising topography, buildings on the edge of Fauldhouse and vegetation alongside the former railway cutting. To the east, views over unimproved grassland in the foreground are available. A row of mature deciduous trees in the middle distance filters views towards distant hills. Views to the west are over unimproved grassland in the foreground, beyond which turbines within the Black Law Group are visible upon the horizon above coniferous forest.		
Sensitivity	This viewpoint represents a rural outlook from the edge of the settlement, largely experienced by residents. However, there are man-made elements in the view, including operational wind turbines and electricity infrastructure. There are no indicators that this is a valued view. Judgements: Susceptibility: high; Value: medium-low. Overall, the sensitivity is judged to be **medium-high**.		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades seen above the horizon beyond the pastoral farmland and forestry to the south-east. Some forest removal across the Site (refer to Figure 15.3) will be apparent and open up limited views to some areas of access tracks and turbine hardstanding. The Development will be visible beyond and alongside the turbines of Tormywheel Wind Farm, and the two developments will appear as one larger coherent wind farm. The three turbines at 150m maximum blade tip height (T1-T3) to the west of the Development will help to integrate both wind farms, and the difference in scale between the two developments will not be readily apparent due to differences in topography and distance from the viewpoint. This change in the view will be apparent from locations to the east of Fauldhouse with an open outlook to the south. Judgements: Scale: medium; Geographical extent: small. The overall magnitude of change is considered to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Significant (Moderate).**		
Cumulative Effects	Under Scenario 1 the key change to the cumulative baseline will be the consented Longhill Burn, and to a lesser degree the consented extension to Tormywheel in views to the southeast. Under scenario 2 longer distance views of proposed schemes to the east and northwest will largely be screened by vegetation. Longhill Burn will be apparent on the plateau horizon in views to the southeast, and Tormywheel Extension will add a further two turbines to the horizontal field of view occupied by the operational Tormywheel. The		

Viewpoint 6: Fauldhouse		**Grid Reference**	294426 660773
	Development will be seen between the consented Longhill Burn and Tormyhweel and will likely read as one larger wind farm. The turbine scale between the Development and Longhill Burn will reflect each other. As noted above, the difference in turbine scale between the Development and Tormywheel will not be readily apparent due to differences in topography and distance from the viewpoint. Whilst it is recognised that the Development will increase the presence of wind turbines in views to the southeast, the Development will be seen between turbines within other schemes; reflects the scale of turbines in this direction of view; and has the cumulative effect of creating one larger wind farm. **On balance the introduction of the Development is not judged to result in a significant additional cumulative effect, under either scenario.**		

Table 6.26 Viewpoint 7: Longridge

Viewpoint 7: Longridge		**Grid Reference**	295193 662202
LCT	273, Lowland Plateaux - Lothians	**Landscape designation or WLA**	None
Direction of view	South-east	**Distance to nearest turbine**	3.88km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.7a – e
Viewpoint location and existing view	This viewpoint is located on the southern settlement edge of Longridge, and represents views experienced by residential receptors within Longridge with open views. Views towards the Site are to the south-east over pastoral farmland in the foreground. The topography slopes down towards the valley of the Breich Water, and then gently rises up towards the Site. The gently undulating horizon is formed by coniferous forest on the northern edge of the Site. Infrastructure associated with the West Coast Main Line is visible in the middle distance, as well as buildings along the B7015 and A71. Electricity infrastructure can be seen back clothed by the forestry on the horizon. Operational wind turbines within Tormywheel Wind Farm can be seen upon the open moorland horizon to the west of the Site. Views in other directions are largely screened by woodland and vegetation, although glimpsed views are available towards residential properties to the north, beyond garden vegetation.		
Sensitivity	This viewpoint represents a rural outlook from the edge of the settlement, largely experienced by residents. However, human influence upon the landscape is apparent in the view through buildings, electricity infrastructure, operational wind turbines and forestry. There are no indicators that this is a valued view. Judgements: Susceptibility: high; Value: medium-low. The overall sensitivity is judged to be **medium-high.**		
Assessment of Visual Effects	14 turbine hubs and blades will be visible above the horizon beyond the pastoral farmland and forestry to the south. Some forest removal across the Site (refer to Figure 15.3) will be apparent and open up limited views to some sections of access tracks and turbine hardstanding. The upper part of the met mast is just visible to the right (west) of the layout. The Development will be visible beyond and alongside the turbines of Tormywheel Wind Farm. Whilst there will be some overlapping of turbine blades within and between the two schemes they will likely be read as one larger wind farm. There will be slight gaps between turbines 8 and 11 and 6 and 4, due to the viewing angle from this location. The three turbines at 150m maximum blade tip height (T1-T3) to the west of the Development		

Viewpoint 7: Longridge		**Grid Reference**	295193 662202
	will help to integrate with Tormywheel. This change in the view will be apparent from parts to the south of Longridge with an open outlook to the south. Judgements: Scale: medium; Geographical extent: small. The overall magnitude of change is considered to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Significant (Moderate)**.		
Cumulative Effects	The key change to the cumulative baseline will be the consented Longhill Burn, and to a lesser degree the consented extension to Tormywheel, in views to the south. Longer distance views of proposed scenario 2 schemes will largely be screened by intervening vegetation. Longhill Burn will be apparent on the plateau horizon in views to the south, and Tormywheel Extension will add a further two turbines to the horizontal field of view occupied by the operational Tormywheel. The Development will be seen between the consented Longhill Burn and Tormywheel and will likely read as one larger wind farm occupying a wide field of view to the south. Whilst it is recognised that the Development will increase the presence of wind turbines in views to the south, the Development will be seen between turbines within other schemes; reflects the scale of the consented Longhill Burn (which is the key change to the cumulative baseline) and has the cumulative effect of creating one larger wind farm. **On balance the introduction of the Development is not judged to result in a significant additional cumulative effect, under either scenario.**		

Table 6.27 Viewpoint 8: West Calder

Viewpoint 8: West Calder		**Grid Reference**	300798 662528
LCT	273, Lowland Plateaux - Lothians	**Landscape designation or WLA**	None
Direction of view	South-west	**Distance to nearest turbine**	5.28km
Theoretical Visibility	Hubs: 13 Blades: 14	**Figure Number**	6.2.8a – f
Viewpoint location and existing view	This viewpoint is located on the A71 on the western settlement edge of West Calder. The viewpoint represents views experienced by road users, including cyclists and local residents when travelling west out of the settlement. Views from the settlement itself are limited by buildings. Views towards the Site are orientated to the south-west. The foreground comprises the A71 and pastoral farmland. The topography slopes gently upwards towards the Site, and woodland is visible in the middle distance. Local undulations in the terrain from former mining activity are apparent. Coniferous forest on the northern edge of the Site contributes to the gently undulating horizon. Electricity infrastructure can be seen upon the horizon crossing the pastoral farmland in the middle distance. Turbines within Pates Hill and Tormywheel Wind Farms are visible on the horizon to the south-west. Longer-distance views in other directions are largely screened by roadside vegetation and buildings within West Calder. The blades of a number of turbines within Pearie Law are visible to the south, filtered by woodland cover on the horizon.		
Sensitivity	The viewpoint represents a rural outlook. It will predominantly be experienced in sequential views for road users travelling west along the A71. The viewpoint is not located within any designations and human		

Viewpoint 8: West Calder		**Grid Reference**	300798 662528
	influence over the landscape is apparent through operational wind turbines, electricity infrastructure and areas of coniferous forest cover. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.		
Assessment of Visual Effects	11 turbine hubs and 14 turbine blades will be visible above the horizon beyond the pastoral farmland and forestry to the south-west. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. The Development will be visible behind a large steel-tower overhead electricity line. It will be seen alongside the turbines in Pates Hill, and in front of and alongside the turbines of Tormywheel Wind Farm, set behind the ridge on the horizon. From this viewing angle the Development will likely be read as a larger wind farm and extension to Pates Hill, seen in front of Tormywheel. The Development will extend the influence of turbines on the enclosing horizon to the east. This change in the view will be apparent from a short stretch of the A71 when travelling west. Judgements: Scale: medium; Geographical extent: small. The overall magnitude of change is considered to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor)**.		
Cumulative Effects	The key change to the cumulative baseline will be the consented Longhill Burn, and to a lesser degree the consented extension to Tormywheel, in views to the southwest. Wider successive views of other consented and proposed schemes are largely screened by intervening vegetation, from this viewpoint. Longhill Burn will be apparent on the forested plateau horizon in views to the southwest and the Development will likely read as an extension behind this scheme. The Development will marginally increase the horizontal field of view occupied by turbines either side of Longhill Burn. This larger cluster (including the operational Pates Hill) is likely to read as a larger wind farm seen in front of Tormywheel. Given the developed nature of the view to the southwest, and as the Development will read as an extension behind Longhill Burn, this is **not judged to result in a significant additional cumulative effect, under either scenario.**		

Table 6.28 Viewpoint 9: B7016 at Braehead

Viewpoint 9: B7016 at Braehead		**Grid Reference**	295450 650962
LCT	5, Plateau Farmland	**Landscape designation or WLA**	None
Direction of view	North	**Distance to nearest turbine**	5.69km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.9a – f
Viewpoint location and existing view	This viewpoint is located along the B7016 to the north of Braehead, south of the Site. The majority of people who experience this view will be road users (including cyclists) travelling north along the B7016. Similar views will be experienced by a limited number of properties with open views north on the edge of this small settlement. Views towards the Site are to the north, over pastoral farmland in the foreground towards coniferous forest on the gently undulating horizon. The landform slopes gently down towards the valley of the Law Burn, and then rises up towards the Site. Buildings within Forth can be seen below to horizon to the north. A number of operational turbines can be seen on		

Viewpoint 9: B7016 at Braehead	**Grid Reference**	295450 650962
	the horizon to the north, including turbines within the Black Law Group and Tormywheel Wind Farm. Turbines within Pates Hill, Pearie Law and Harburnhead Wind Farms are visible on the horizon to the north-east, partially filtered by woodland cover in the middle distance. There is also a small single turbine at Upper Haywood Farm, to the south of the Site. Views to the south are contained by forest cover and buildings within Braehead. To the east, longer distance views are contained by pastoral farmland which rises up to form the horizon in the middle distance. The hubs and blades of a number of turbines within the Muirhall Group are visible above the horizon in this direction. To the west, longer-distance views are available over undulating farmland which forms the horizon in the distance. Electricity infrastructure is visible at close proximity crossing the fields in the foreground.	
Sensitivity	This viewpoint represents a rural outlook for road users travelling north, when departing the small settlement of Braehead. The viewpoint is not located within any designations and human influence over the landscape is apparent through operational wind turbines, buildings and electricity infrastructure. Judgements: Susceptibility: low; Value: medium-low. The overall sensitivity is judged to be **medium-low**.	
Assessment of Visual Effects	14 turbine hubs and 14 turbine blades will be visible above the horizon beyond the pastoral farmland and forestry in views to the south. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. The Development will be visible in front of and alongside the turbines of Tormywheel Wind Farm extending the influence of wind farm development across the horizon to the south. Turbine 13 and 14 will appear as slight outliers. From this viewing angle, the Development will likely read as a larger wind farm seen in front of Tormywheel. This change in the view will be visible from locations to the north of Braehead with an open outlook to the north, and from a stretch of the B7016 to the south of Braehead when travelling north. As this is a sequential view, the arrangement of turbines will change as road users move along the road. Judgements: Scale: medium; Geographical extent: medium. The overall magnitude of change is considered to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor)**.	
Cumulative Effects	The key change to the cumulative baseline under scenario 1 will be the consented Tormywheel Extension, Longhill Burn, Upper Haywood Farm and Burnfoot Poultry Farm which will add further turbines onto the forested plateau, in views to the north. Views of further proposed schemes, under scenario 2, will either be very long distance and/ or screened by intervening vegetation. The Development will be seen in front and between Longhill Burn and Tormywheel. This will likely read as one larger wind farm cluster, with slight outliers in the Development being drawn into this larger cluster. Views to the north are already very influenced by operational wind farm development and consented schemes will extend this influence. The potential for significant total cumulative effects in views to the north and northwest is recognised. Medium distance views of the Development, to the north, do not notably contribute to this effect. In terms of additional effects, the Development will likely read as one larger wind farm cluster (including Longhill Burn) seen in larger scale rural views to the north on a simple horizon which is already influenced by wind farm development. **The introduction of the Development is not judged to result in a significant additional cumulative effect under either scenario.**	

Table 6.29 Viewpoint 10: A71 South of Stane

Viewpoint 10: A71 South of Stane		**Grid Reference**	289401 658283
LCT	213, Plateau Moorlands – Glasgow & Clyde Valley	**Landscape designation or WLA**	None
Direction of view	East	**Distance to nearest turbine**	6.03km
Theoretical Visibility	Hubs: 12 Blades: 14	**Figure Number**	6.2.10a – f
Viewpoint location and existing view	This viewpoint is located on the A71, where it passes to the south of the settlement of Stane, to the west of the Site. The majority of receptors will be road users on this fast moving road. Views towards the Site are oriented to the east, over gently undulating pastoral farmland in the foreground towards coniferous forest cover to the west of the Site on the horizon above. Coniferous and mixed woodland is also visible at lower elevations in the middle distance. A number of operational wind farms are visible on the horizon to the east, including the Black Law Group, Tormywheel Wind Farm and a small single turbine near the road. Electricity infrastructure can be seen crossing through areas of forest cover, partly back clothed and partly visible upon the horizon. Buildings associated with quarrying activity can be seen below the horizon to the west of Tormywheel Wind Farm. Turbines within the Black Law Group are visible in the middle distance to the south, beyond coniferous forestry. Longer distance views are available to the west towards rolling forested hills beyond pastoral farmland. To the north, longer distance views are contained by rising topography and woodland on the horizon in the middle distance.		
Sensitivity	The viewpoint will predominantly be experienced in sequential views for road users travelling east along the A71. It is not located within any designations and human influence over the landscape is apparent through operational wind turbines, quarrying activity and areas of forest cover. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.		
Assessment of Visual Effects	10 turbine hubs and 14 turbine blades will be seen above the horizon in views to the east. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. The Development will be visible directly behind the turbines of Tormywheel Wind Farm, and the two developments may be read as one larger wind farm. Differences in the scale of the turbines will be apparent, although from this viewing angle with the larger turbines in the Development seen behind Tormywheel, this difference will be less apparent. There will be overlapping of turbine blades and towers between the two wind farms. The Development will extend the influence of turbines slightly to the south of Tormywheel, set behind the enclosing horizon to the east. The Development will be seen in the context of existing wind farm development at closer proximity. This change in the view will be apparent from a stretch of the A71 when travelling east. Judgements: Scale: medium; Geographical extent: small. The overall magnitude of change is judged to be **medium**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	Under scenario 1 Longhill Burn and Tormywheel Extension will add turbines in more direct views from the A71 when travelling east and Hartwood in more direct successive views when travelling west. Under scenario 2 West Benhar (consented after cumulative cut-off) will add turbine blades behind mature trees on the horizon in successive views to		

Viewpoint 10: A71 South of Stane		Grid Reference	289401 658283
	the north. Changes to the cumulative baseline associated with other consented and proposed wind farms will be less apparent. The Development will increase the influence of turbines in middle distance views to the east, creating a denser cluster of turbines seen beyond near distance views of Blacklaw and Climpy. **In terms of additional cumulative effects the introduction of the Development will be difficult to perceive so it is not judged to result in a significant additional cumulative effect under either scenario.** In terms of total cumulative effects, wind turbines influence the view in multiple directions including Black Law Wind Farm, which is a large scale scheme. Whilst vegetation helps to partially screen views of wind farms this view is judged to be subject to significant total cumulative effects. Medium distance views of the Development in a developed part of the horizon, do not notably contribute to this effect.		

Table 6.30 Viewpoint 11: A70 Maidenhill

Viewpoint 11: A70 Maidenhill		Grid Reference	304281 655815
LCT	268, Upland Hills - Lothians	**Landscape designation or WLA**	None
Direction of view	North-west	**Distance to nearest turbine**	6.34km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.11a – e
Viewpoint location and existing view	This viewpoint is located on the A70 at Maidenhill, north of the junction with the minor road towards Tarbrax. The viewpoint is representative of views experienced by road users travelling along the fast moving road. Similar views will be experienced by farm workers within the vicinity. Views towards the Site are to the north-west. The landform slopes gently down towards the valley of the Dippool Water and then rises up beyond towards the Site. The foreground features pastoral farmland with areas of woodland cover. Blocks of coniferous forestry are visible on the horizon. There is evidence of former mining activity in the form of a large bing in the plateau of the Dippool Water valley, which has begun to naturalise. Operational wind farms including the Black Law Group, Tormywheel, Harburnhead and Pearie Law are visible throughout the landscape to the north-west. Views to the north and east are contained by vegetation alongside the road, and views to the south are contained by the rising landform in this direction.		
Sensitivity	Sequential and oblique views will predominantly be experienced by road users travelling in both directions along the A70. The viewpoint represents a rural outlook, although it is not located within any designations, and human influence over the landscape is apparent through operational wind turbines, areas of coniferous forest cover and former mining features. Judgements: Susceptibility: low; Value: medium-low. The overall sensitivity is judged to be **low**.		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades on the horizon to the north-west. No low level ancillary infrastructure will be visible from this viewpoint due to screening by retained forest cover. The Development will be visible beyond Pates Hill and in front of the turbines of Tormywheel Wind Farm, and will extend the influence of wind farm development on the distant horizon to the north and south of Tormywheel. The Development will be seen in a modified landscape in the context of existing wind farm development and former mining activity.		

Viewpoint 11: A70 Maidenhill		**Grid Reference**	304281 655815
	This change in the view will be apparent in sequential and oblique views from a stretch of the A70. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	A number of consented and proposed wind farms will increase the influence of wind turbines in long distance and large scale rural views to the west. The Development will likely read as an extension to the consented Longhill Burn, seen behind turbines within the operational Pates Hill and in front of turbines within the operational Tormywheel and longer distance views of Black Law. **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant.** The Development will read as an extension to a consented wind farm in a large scale view which is already influenced by wind turbines. In terms of total effects, wind farm development results in significant total effects in long distance views to the west. However, the Development does not notably contribute to this effect.		

Table 6.31 Viewpoint 12: B8084 south of Armadale

Viewpoint 12: B8084 south of Armadale		**Grid Reference**	294577 665916
LCT	273, Lowland Plateaux - Lothians	**Landscape designation or WLA**	None
Direction of view	South-east	**Distance to nearest turbine**	7.61 km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.12a – e
Viewpoint location and existing view	This viewpoint is located on the B8084 to the south of Armadale. The viewpoint represents road users including cyclists. Similar views will be experienced by farm workers in the vicinity. Views towards the Site are orientated to the south. The B8084 stretches to the south in the foreground, lined by hedgerows which screen views to the east and west. Buildings in Whitburn can be seen in the middle distance to the south, filtered by woodland. The landform slopes down towards the middle distance, then rises back up towards the forested high ground on which the Site is situated. The hubs and blades of turbines within Tormywheel Wind Farm can be seen to the south, with the towers partially screened by woodland on the horizon. Pates Hill Wind Farm can be seen in views to the south-east, visible upon the horizon. To the north, the B8084 rises up away from the viewpoint, bordered by pastoral farmland on to the east and west, with wood pole electricity distribution infrastructure visible against the gently undulating horizon.		
Sensitivity	The viewpoint will predominantly be experienced in sequential views for road users travelling south along the B8084. The viewpoint is not located within any designations and human influence over the landscape is apparent through operational wind turbines and buildings. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.		
Assessment of Visual Effects	The Development will introduce 13 turbine hubs and 14 turbine blades visible above the horizon to the south. No low level ancillary infrastructure will be visible from this viewpoint due to screening by retained forest cover. The Development will be visible beyond and alongside the turbines of Tormywheel Wind Farm, and will extend the influence of wind farm		

Viewpoint 12: B8084 south of Armadale		**Grid Reference**	294577 665916
	development on the middle distance horizon to the east of Tormywheel. The difference in scale between the turbines of Tormywheel Wind Farm and the Development will be apparent, although the three turbines at 150m maximum blade tip height (T1-T3) on the western side of the Development will help to integrate the two schemes. Whilst there will be some overlapping of turbine blades within and between the two schemes the Development will likely be read as part of one larger wind farm grouping. There will be some overlapping of turbine towers (T10 and 12) and a slight gap between T 8 and 11, from this viewing angle. The arrangement of turbines will change as road users move along this route. This change in the view will be apparent in sequential views from a short stretch of the B8084 south of Armadale. Judgements: Scale: medium; Geographical extent: small. The overall magnitude of change is judged to be **medium-low.** Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	The key change to the cumulative baseline will be Longhill Burn, and to a lesser degree Tormywheel Extension, both consented. Views of other consented and proposed schemes will largely be screened by roadside and intervening vegetation. The Development will be seen in framed middle distance views south from the road, between Longhill Burn and Tormywheel. The Development will read as part of one larger wind farm. The turbine scale between Longhill Burn and the Development will reflect each other. As noted above the difference in turbine scale with Tormywheel will be apparent. However, turbines 1-3 at 150m maximum tip height to the west of the Development will help the Development integrate with Tormywheel and the three wind farms read as one larger cluster, on the forested plateau to the south. **The introduction of the Development is not judged to result in a significant additional cumulative effect under either scenario.**		

Table 6.32 Viewpoint 13: Harrows Law

Viewpoint 13: Harrows Law		**Grid Reference**	305485 653046
LCT	12, Old Red Sandstone Hills	**Landscape designation or WLA**	Pentland Hills and Black Mount SLA
Direction of view	North-west	**Distance to nearest turbine**	8.46km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.13a – f
Viewpoint location and existing view	This viewpoint is located at the summit of Harrows Law, a hill towards the western extent of the Pentland range, east of the A70. Receptors include recreational visitors to the summit including hillwalkers, and farm workers within the vicinity. The viewpoint offers panoramic views to the north, west and south. Views to the east are contained by the higher summits of the Pentlands in this direction. Views towards the Site are orientated to the north-west, over plateau moorland and coniferous forest cover on the lower slopes of the hills, pastoral farmland across the valley of the Dippool Water, and forest cover on the enclosing horizon. Buildings within Forth and other small settlements is apparent to the west and north-west. A number of operational wind turbines are visible throughout this panoramic view, including turbines within the Muirhall Group on the plateau moorland of the lower slopes to the north-west, largely back clothed by the hills beyond; the Black Law Group, Tormywheel and Pates Hill Wind Farms on		

Viewpoint 13: Harrows Law		**Grid Reference**	305485 653046
	the horizon to the north-west; and Harburnhead Wind Farm, partially back clothed by distant hills within West Lothian to the north. Views to the south are towards the hills of the Southern Uplands and Tinto Hill ranges in the distance, beyond the foothills of the Pentlands in the middle distance.		
Sensitivity	The viewpoint is located within the Pentland Hills and Black Mount SLA and will predominantly be experienced by hill walkers. The influence of human activity is apparent through blocks of coniferous forestry, operational wind farms and buildings. Judgements: Susceptibility: medium; Value: high. The overall sensitivity is judged to be **medium-high.**		
Assessment of Visual Effects	14 turbine hubs and 14 turbine blades will be seen above the horizon in views to the east. Due to the elevated nature of the viewpoint forest clearance and low level ancillary infrastructure may be theoretically visible, but at this viewing distance and due to retained forest cover will be harder to decipher. The Development will be seen in large scale and panoramic views in front of the operational Tormywheel and beyond (and distinct from) Pates Hill and Harburnhead Wind Farms. Pates Hill and Harburnhead (along with the Muirhall Group) will remain the closer wind farms to the Pentlands. The Development will extend the influence of turbines slightly to the north and south of Tormywheel on the horizon to the north-west. The Development will be seen in the context of existing wind farm development throughout the surrounding landscape in large scale views outwith the Pentlands. This change in the view will be apparent from the western-facing slopes of hills towards the western extent of the Pentlands. Judgements: Scale: medium-low; Geographical extent: large. The overall magnitude of change is judged to be **medium-low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	A number of consented and proposed wind farms will increase the influence of wind turbines in long distance and large scale rural views to the west and northwest. The Development will likely read as an extension behind the consented Longhill Burn, seen in front of turbines within the operational Tormywheel. **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant.** The Development will read as an extension to a wind farm in a large scale view and in a direction of view which is already influenced by wind turbines. In terms of total effects, wind farm development results in significant total effects in long distance views to the west and northwest. However, the contribution the Development makes to this is not notable. The Development reads as an extension; does not notably increase the horizontal field of view occupied by turbines; and does not bring wind farm development closer to the Pentlands.		

Table 6.33 Viewpoint 14: Carnwath (A70)

Viewpoint 14: Carnwath (A70)		**Grid Reference**	298343 646685
LCT	4, Rolling Farmland	**Landscape designation or WLA**	None
Direction of view	North	**Distance to nearest turbine**	10.18km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.14a – e

Viewpoint 14: Carnwath (A70)	**Grid Reference**	298343 646685
Viewpoint location and existing view	This viewpoint is located on the A70 to the north of the settlement of Carnwath, adjacent to John Mann Park. Carnwath is located to the south of the Site. The majority of receptors who will experience this view are road users, including cyclists and local residents. Recreational users of the park, some limited properties with open views on the edge of the park and farm workers in the vicinity will experience similar views. Views towards the Site are to the north, across gently undulating pastoral farmland in the foreground. The topography rises up in the foreground and screens views towards the Dippool Water valley in the middle distance. Coniferous forest to the south of the Site is visible on the gently undulating horizon in the distance. A number of operational wind farms are visible from this viewpoint, including the Black Law Group and Tormywheel above the horizon to the north-west. View in other directions feature buildings within Carnwath to the south, and grassland within the park rising gently to the east. Small single turbines are visible in the more immediate landscape context in various directions.	
Sensitivity	The viewpoint will predominantly be experienced in sequential views for road users travelling north along the A70. The viewpoint represents a rural outlook, but it is not located within any designations and human influence over the landscape is apparent through operational wind turbines, buildings and areas of coniferous forest cover. Judgements: Susceptibility: low; Value: medium-low. The overall sensitivity is judged to be **low**.	
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades seen above the horizon in views to the north. No low level ancillary infrastructure will be visible from this viewpoint due to screening by the intervening landform and retained forest cover. The Development will be visible in front the turbines of Tormywheel Wind Farm, and the two developments may be read as one larger wind farm. The three turbines at 150m maximum blade tip height (T1-T3) at the western extent of the Development will help to somewhat integrate the two developments. From this viewing angle there will be some overlapping of blades and towers within and between the two schemes, slight gaps and outlying turbines from this viewing angle. The arrangement of the turbines will change as road users move along the road. The Development will extend the influence of turbines to the east of Tormywheel on the enclosing horizon to the north. The Development will be seen in the context of existing wind farm development in sequential and oblique views north. This change in the view will be apparent from a short stretch of the A70 to the north of Carnwath, at a distance of approximately 10km. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**	
Cumulative Effects	A number of consented and proposed wind farms will increase the influence of wind turbines in long distance views to the southwest and north. The Development will likely read as an extension to the consented Longhill Burn, seen in front of turbines within the operational Tormywheel and consented Tormywheel Extension. **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant under either scenario**. The Development will read as an extension to a wind farm in a large scale view which is already influenced by wind turbines.	

Table 6.34 Viewpoint 15: Eastcraigs Hill

Viewpoint 15: Eastcraigs Hill		**Grid Reference**	290353 668015
LCT	273, Lowland Plateaux - Lothians	**Landscape designation or WLA**	Blackridge Heights SLA
Direction of view	South-east	**Distance to nearest turbine**	11.27km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.15a – f
Viewpoint location and existing view	This viewpoint is located at the summit of Eastcraigs Hill (250m AOD) within Blackridge Heights SLA and to the north-west of the Site. The viewpoint is representative of recreational visitors to the summit including hillwalkers. Similar views will be experienced by farm workers in the vicinity. Views towards the Site are to the south-east across pastoral farmland below the slopes of Eastcraigs Hill, woodland cover and buildings within the valley of the River Almond, towards coniferous forest cover to the north of the Site on the gently undulating horizon. Turbines within Tormywheel Wind Farm are visible to the west of the Site, set within open ground below the horizon and partially back clothed against the hill beyond. Turbines within Standhill Farm and Torrance Farm Wind Farms can also be seen in the middle distance, largely back clothed by the hills beyond. To the east, hills within the Pentlands are visible at distance, and buildings within settlements throughout the River Almond valley is visible to the south. The turbines of Drumduff and Burnhead Wind Farms are apparent in middle distance views to the north-west.		
Sensitivity	The viewpoint is located within the Blackridge Heights SLA and will predominantly be experienced by hill walkers. The influence of human activity is apparent through operational wind farms and buildings. Judgements: Susceptibility: high; Value: medium-high. The overall sensitivity is judged to be **high**.		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and blades seen upon the horizon in views to the south-east. At this viewing distance any views of low level ancillary development, including access tracks, will be limited. The Development will be visible beyond and alongside the turbines of Tormywheel Wind Farm. The three turbines at 150m maximum blade tip height at the western extent of the Development (T1-T3) will help to integrate the two developments. The Development will extend the influence of turbines to the east of Tormywheel. The Development will be seen in the context of a large scale and panoramic view which has already been altered by wind farm development, including operational schemes much closer to the viewpoint. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	A number of consented and proposed wind farms will increase the influence of wind turbines in long distance and large scale rural views to the east, south and west. The Development will likely read as an extension behind the consented Longhill Burn, seen in longer distance views as part of a larger cluster of turbines including Tormywheel and Pates Hill. This cluster will be seen in middle distance views behind Torrance Farm Wind Farm. **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant.** The Development will read as an extension to a wind farm cluster in a large scale view and in a direction of view which is already influenced by wind turbines.		

Viewpoint 15: Eastcraigs Hill		**Grid Reference**	290353 668015
	In terms of total effects, wind farm development results in significant total effects in long distance views to the east, south and west. There are a number of schemes in these viewing directions seen in near, middle and long distance views. Consented and proposed schemes further complicate this picture. However, the contribution the Development makes to this effect is not notable. The Development reads as an extension and does not bring wind farm development in closer proximity to Eastcraigs Hill.		

Table 6.35 Viewpoint 16: A70 (Harperrig Reservoir)

Viewpoint 16: A70 (Harperrig Reservoir)		**Grid Reference**	309181 661723
LCT	269, Upland Fringes - Lothians	**Landscape designation or WLA**	Pentland Hills SLA (WLC) and Pentland Hills Regional Park
Direction of view	South-west	**Distance to nearest turbine**	11.70km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.16a - c
Viewpoint location and existing view	This viewpoint is located on the A70 adjacent to Harperrig Reservoir at the foot of the Pentland Hills, to the south-west of the Site. The viewpoint is representative of views experienced by road users moving west along the fast moving road. Similar, albeit slightly longer distance and very fleeting views, will be available for recreational walkers from a short section of the Cross Borders Drove Road, as it passes to the east of the Harperrig Reservoir. Views towards the Site are to the south-west. The foreground includes the A70 which stretches through unimproved grassland. Blocks of coniferous forest are visible in the middle distance on either side of the road. Harburnhead and Pearie Law Wind Farms are situated on a low ridge to the south-west in the middle distance. Beyond, the ground rises gently up towards the Site. The hubs and blades of a number of turbines within Tormywheel Wind Farm and the Black Law Group are visible above coniferous forest on the gently undulating horizon. Views to the north are contained by rising topography in this direction, while to the south Harperrig Reservoir is visible in the middle distance with low rolling moorland hills beyond. Hills within the Pentlands are visible at distance to the north-east.		
Sensitivity	This viewpoint is located within the Pentland Hills SLA and Pentland Hills Regional Park which indicates a higher value. However, the viewpoint is situated towards the edge of this designation and displays fewer of the special qualities cited as reasons for designation than the higher peaks and more upland areas to the east. The viewpoint will predominantly be experienced in sequential views for road users travelling south-west on the A70. The influence of human activity is apparent through operational wind turbines and areas of forest cover. Judgements: Susceptibility: low; Value: medium-high. The overall sensitivity is judged to be **medium**.		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades seen on the horizon to the south-west. No low level ancillary infrastructure will be visible from this viewpoint due to screening by retained forest cover. The Development will occupy a small proportion of the view and be seen beyond existing wind farm development at Harburnhead and Pearie Law Wind Farms. There will be some overlapping of turbine blades and towers in this sequential view which will change as road users move along the route. This change in the view will be apparent in sequential views from a short stretch of the A70 adjacent to Harperrig Reservoir.		

Viewpoint 16: A70 (Harperrig Reservoir)		**Grid Reference**	309181 661723
	Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	Consented schemes including Longhill Burn and Camilty will increase the influence of wind turbines in middle to longer distance direct views to the southwest from this location. The Development will slightly increase the density of turbines in the longer distance turbine cluster (seen beyond three operational schemes and the consented Longhill Burn). **The introduction of the Development will be difficult to perceive so is not judged to result in significant additional cumulative effects.**		

Table 6.36 Viewpoint 17: West Cairn Hill

Viewpoint 17: West Cairn Hill		**Grid Reference**	310730 658397
LCT	268, Upland Hills - Lothians	**Landscape designation or WLA**	Pentland Hills SLA (West Lothian) and Pentland Hills Regional Park
Direction of view	West	**Distance to nearest turbine**	12.55km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.17a - f
Viewpoint location and existing view	This viewpoint is located at the summit of West Cairn Hill (562m AOD), within the Pentland Hills SLA and Pentland Hills Regional Park. The viewpoint sits in an elevated position towards the western extent of the Pentland Hills range, and offers 360° panoramic views. This viewpoint represents the views experienced by hill walkers. Views towards the Site are orientated to the west over moorland on the lower slopes of the hill. The topography slopes downwards towards a broad valley which encompasses a number of small tributaries of the Linhouse Water, and the land cover comprises pastoral farmland, coniferous forest and two reservoirs. The topography then gently rises up towards the Site, with coniferous forest cover visible on the gently undulating horizon. Turbines within Harburnhead, Pates Hill and Pearie Law Wind Farms can be seen on lower ground in the middle distance, back clothed by the hills surrounding the Site, while Tormywheel Wind Farm and the Black Law Group are visible on higher ground to the west of the Site, back clothed by distant hills. Turbines within the Muirhall Group are visible to the south-west. Settlements including Livingston and Edinburgh are visible to the north. The Firth of Forth and the Ochil Hills are apparent beyond. The Pentland Hills and further distant hill ranges are visible to the east and south.		
Sensitivity	The viewpoint is located within the Pentland Hills SLA and Pentland Hills Regional Park and will predominantly be experienced by hillwalkers. The influence of human activity is apparent through blocks of coniferous forestry, operational wind farms and buildings. Judgements: Susceptibility: high; Value: high. The overall sensitivity is judged to be **high**.		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades seen below the horizon in views to the west. At this viewing distance any views of low level ancillary development, including access tracks, will be difficult to decipher. The Development will be visible in front of and alongside the turbines of Tormywheel Wind Farm and the Black Law		

Viewpoint 17: West Cairn Hill		**Grid Reference**	310730 658397
	Group, and will be contained within the horizontal extent of these two wind farms. The Development will be seen in the context of a large scale and panoramic view which has already been altered by wind farm development, including operational schemes much closer to the viewpoint. Judgements: Scale: small; Geographical extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor)**.		
Cumulative Effects	This is an elevated and panoramic view and a number of consented and proposed wind farms will increase the influence of wind turbines in long distance views in all directions, but with a greater intensity to the west and southwest. The Development will likely read as an extension behind the consented Longhill Burn. Both schemes will be behind turbines in Camilty (consented at 138.5m to tip with application for tip height increase withdrawn after cumulative cut-off) and the operational Pearie Law, Harburnhead and Pates Hill. **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant.** The Development will read as an extension to a wind farm in a large scale view and in a direction of view which is already influenced by wind turbines. In terms of total effects, wind farm development results in significant total effects in long distance panoramic views. However, this would be the case without the development. As such, the contribution the Development makes to this is not judged to be notable. The Development reads as an extension; does not notably increase the horizontal field of view occupied by turbines; nor does it bring wind farm development in closer proximity to the Pentlands.		

Table 6.37 Viewpoint 18: Tinto Hills

Viewpoint 18: Tinto Hills		**Grid Reference**	295321 634367
LCT	11, Prominent Isolated Hills	**Landscape designation or WLA**	Upper Clyde Valley and Tinto SLA
Direction of view	North	**Distance to nearest turbine**	22.28km
Theoretical Visibility	Hubs: 14 Blades: 14	**Figure Number**	6.2.18a - f
Viewpoint location and existing view	This viewpoint is located on the cairn summit of Tinto Hill (711m AOD), within the Upper Clyde Valley and Tinto SLA. Tinto is an outlying hill of the Southern Uplands and sits in an elevated position above the surrounding Upper Clyde Valley. The viewpoint offers 360° panoramic views. This viewpoint represents the views experienced by hill walkers. Views towards the Site are orientated to the north across moorland on the lower slopes of Tinto Hill, with pastoral farmland and shelterbelts on the lower lying ground within the Clyde Valley beyond. Quarrying activity is visible on a lower lying hill to the north, and there are frequent scattered settlements. The topography rises up beyond the valley of the Dippool Water towards the coniferous forest cover and gently undulating landform of the Site. The Site is back clothed by the distant Ochil Hills. Wind farms including the Black Law Group, Tormywheel and Pates Hill can be seen to the north. In other directions, views are available over pastoral farmland towards hills including those within the Lowther and Southern Upland ranges. Extensive wind farm development is visible throughout the panoramic view provided by this prominent hill.		

Viewpoint 18: Tinto Hills		**Grid Reference**	295321 634367
Sensitivity	In terms of value, the viewpoint is located within the Upper Clyde Valley and Tinto SLA and is a popular destination for hill walkers. The influence of human activity is apparent through blocks of coniferous forestry, operational wind farms and buildings. Judgements: Susceptibility: high; Value: high. The overall sensitivity is judged to be **high.**		
Assessment of Visual Effects	The Development will introduce 14 turbine hubs and 14 turbine blades in views south-west. The turbines will be seen largely against a backdrop of distant hills with turbines blades to the east of the scheme seen above the horizon. Turbines 13 and 14 will appear as slight outliers from the main grouping, from this viewing angle. The Development will appear as a distant feature in the view and will occupy a small proportion of the available panorama. Effects on the overall scenic qualities of the view will be small. Ancillary infrastructure will be difficult to see from this distant viewpoint. The Development will be seen in the context of turbines within Tormywheel Wind Farm and the Black Law Group. Judgements: Scale: small; Geographical Extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this location is considered to be **Not Significant (Minor).**		
Cumulative Effects	This is an elevated and panoramic view and a number of consented and proposed wind farms will increase the influence of wind turbines in long distance views in all directions, but with a greater intensity to the north, south and west. The Development will likely read as part of a larger emerging wind farm cluster in long distance and large scale views to the north (including Longhill Burn, Pates Hill and Tormywheel). **In terms of additional cumulative effects, the introduction of the Development is not judged to be significant.** When consented and proposed wind farms are added to the baseline, total cumulative effects in views to the west and south are considered to be significant. Long distance views of the Development, to the north, do not notably contribute to this effect.		

6.9.5 Operational Effects on Views from Settlements

Receptors who will experience views from settlements are assumed in most instances to be local residents at their residential properties and curtilages, or moving around the community, who will regularly experience the available views. Residential receptors are therefore considered to have a high susceptibility to changes in the view. The settlements in the surrounding area from which potential views of the Development are possible are assessed in Table 6.38 to Table 6.44 below.

Table 6.38: Auchengray

Auchengray			
Representative Viewpoint	N/a	**Distance to nearest turbine**	3.32km
Settlement description and existing view	This settlement lies on the route of a minor road to the south-east of the Site. The settlement lies in a slightly elevated position above lower-lying pastoral land to the west, and a number of properties within the settlement are typically orientated with open views to the west. Views are available towards the Black Law Group above the horizon to the west, and Pates Hill Wind Farm to the north. Localised buildings and deciduous shelter belts play a role in screening views to the north-west towards the forested horizon on which the Site is located. More open views towards		

Auchengray	
	the Site (and the operational Tormywheel Wind Farm) are available from properties to the south of this small settlement.
Sensitivity	This is a small rural settlement, with a number of period properties and large scale, rural views. Judgements: Susceptibility: high; Value: medium. The overall sensitivity is judged to be **medium-high**.
Assessment of visual effects	The Development will introduce 14 turbine hubs and 14 turbine blades visible above the horizon to the north-west. Localised buildings and deciduous shelter belts will screen views towards the Development from parts of the settlement on the eastern side of the minor road. Open views will be available towards the Development from the rear of certain properties to the west of the road and from properties with open views in its southern extents. The Development will be seen in the context of existing wind farm development, in large scale views upon the gently undulating horizons to the north and west. Judgements: Scale: medium; Geographic extent: small. The overall magnitude of change is judged to be **medium.** Overall, the visual effect of the Development on views from this settlement is considered to be **Significant (Moderate).**
Cumulative Effects	From parts of the settlement with more open views to the north-west, the Development will be seen on the forested plateau horizon between the consented Longhill Burn and Tormywheel (operational and small consented extension). This will likely read as one larger wind farm, seen beyond further single turbine consented schemes at Upper Haywood and Burnfoot Poultry Farm. This will increase the influence of wind farm development in views to the north-west, from parts of the settlement. **However, the introduction of the Development is not judged to result in a significant additional cumulative effect.** This is a larger scale rural view which has been altered by wind farm development and the development will likely read as part of a larger wind farm.

Table 6.39: Breich and Longridge

Breich and Longridge			
Representative Viewpoint	VP3: Breich VP7: Longridge	**Distance to nearest turbine**	2.00km
Settlement description and existing view	These settlements lie to the north of the Site, with Breich located along the A71, and Longridge along the A706. Although the settlements are approximately 1.7 km apart, both settlements are situated on lower-lying ground below the Site and buildings within the settlements largely screen outward views. From both settlements there are views towards the Site from the southern edges. Views are available towards Tormywheel Wind Farm on the gently undulating forested horizon to the south from both settlements.		
Sensitivity	Both settlements include a mix of property types with a notable proportion of post-war housing. Man-made influence is visible in outward views from both settlements in the form of coniferous forestry, electricity and rail infrastructure and existing wind farm development. Judgements: Susceptibility: high; Value: medium. The overall sensitivity is judged to be **medium.**		
Assessment of visual effects	The Development will introduce 14 turbine hubs and 14 turbine blades visible above the gently undulating forested horizon in open views to the south. Localised buildings will largely screen views towards the Development from the centre of each settlement, and views towards the Development will be restricted to the southern settlement edge. There will		

Breich and Longridge	
	be framed views south along the A706, through the southern half of Longridge, and this is noted in the sequential assessment from this route. When visible, the Development will be seen in the context of existing wind farm development upon the horizon to the south, and in a view in which the influence of human activity is already apparent. Whilst significant visual effects are predicted from residential receptors with open views on the edges of these settlements, this is not predicted to translate into significant visual effects over the settlement as a whole, given the role buildings plays in screening views south, from parts of both settlements and the secondary nature of views. Furthermore, there is an immature berm of planting to the south and south-west of newer housing on the edge and to the west of Breich. As this matures over time, it will increasingly screen views from the rear of properties to the west of Breich. Judgements: Scale: small; Geographic extent: small. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this settlement is considered to be **Not Significant (Minor).**
Cumulative Effects	Both of these settlements are located to the north of the Site, and the key cumulative change will relate to the consented Longhill Burn, and to a lesser degree the small consented extension to Tormywheel. Views of the Development will largely be focused to the southern edge of the settlement as represented by Viewpoint 3 and 7. When visible the Development will likely read as part of a larger wind farm on the forested plateau to the south. **The introduction of the Development is not judged to result in significant additional cumulative effects.**

Table 6.40: Stoneyburn and Bents

Stoneyburn and Bents			
Representative Viewpoint	N/A	**Distance to nearest turbine**	3.34km
Settlement description and existing view	These settlements are located along the B7015 which runs east to west to the north of the Site. The settlements are situated on lower lying ground to the north of the Site. From Stoneyburn, views towards the Site are limited to the southern edge of the settlement. Buildings within the settlement tends to limit views from elsewhere. Views from the B7015 through the centre of Bents are more open to the south, although roadside vegetation somewhat filters views. A number of properties within both settlements are orientated with open views to the south, including properties on the southern edge of Stoneyburn which have rear gardens orientated towards the Site. Views are available towards the operational wind turbines of Tormywheel, Pates Hill, Pearie Law and Harburnhead Wind Farms from open parts of both settlements.		
Sensitivity	Both settlements include a mix of property types including notable areas of new housing development. Human influences are apparent in outward views from both settlements in the form of coniferous forestry, electricity infrastructure and existing wind farm development. Judgements: Susceptibility: high; Value: low. The overall sensitivity is judged to be **medium**.		
Assessment of visual effects	The Development will introduce 14 turbine hubs and 14 turbine blades visible above the gently undulating forested horizon in open views, where available, to the south. Localised buildings will screen views towards the Development from the centre of Stoneyburn. The main street is orientated east to west, with the development to the south, and buildings on the southern side of the road typically restricts views. From Bents, roadside vegetation along the B7015 will typically filter views from the centre, with increased screening during the summer months when vegetation is in leaf.		

Stoneyburn and Bents	
	Views towards the Development will be largely be restricted to the southern settlement edges. The Development will be seen in the context of existing wind farm development upon the horizon to the south, and in a view in which the influence of human activity is already apparent. Whilst significant visual effects are considered likely for residential receptors with open views on the edges of these settlements, this is not predicted to translate into significant visual effects over the settlement as a whole, given the role buildings and vegetation play in screening views south, from most parts of both settlements. Existing wind farm development has already altered more open outwards views to the south, where available. Judgements: Scale: small; Geographic extent: small. The overall magnitude of change is judged to be **low.** Overall, the visual effect of the Development on views from this settlement is considered to be **Not Significant (Minor).**
Cumulative Effects	Both of these settlements are located to the north of the Site, and the key cumulative change will relate to the consented Longhill Burn, and to a lesser degree the small consented extension to Tormywheel. Views of the development will largely be focused to the southern edge of the settlement. When visible the Development will likely read as part of a larger wind farm on the forested plateau to the south. **The introduction of the Development is not judged to result in significant additional cumulative effects.**

Table 6.41: Tarbrax

Tarbrax			
Representative Viewpoint	N/A	**Distance to nearest turbine**	4.84km
Settlement description and existing view	This settlement is located to the east of the Site, along the minor Tarbrax Road, which runs north to south. The settlement occupies a slightly elevated position above the lower lying pastoral farmland within the valley of the Dippool Water to the west. A number of properties on the southern edge of the settlement are orientated with open views to the west. Views are available towards Pates Hill, Harburnhead and Pearie Law Wind Farms to the north, and the Muirhall Group to the south. From the centre of the settlement, including from the small village green, views to the west are largely screened by buildings and localised deciduous vegetation. More open views towards Tormywheel Wind Farm and the forested horizon on which the Site is located are available from the western settlement edge, along Tarbrax Road. A large bing is visible in open views to the west.		
Sensitivity	This is a smaller rural settlement with a mix of period and more modern properties. Human influence is visible in outward views in the form of electricity infrastructure, evidence of former mining activity through the presence of the large bing and existing wind farm development. Judgements: Susceptibility: high; Value: medium-low. The overall sensitivity is judged to be **medium**.		
Assessment of visual effects	The Development will introduce 14 turbine hubs and 14 turbine blades visible above the gently undulating forested horizon in open views to the west, where available, at a distance of approximately 4.8km. Localised buildings and deciduous vegetation cover will largely screen views towards the Development from the centre of the settlement (including from the village green), and views towards the Development will be restricted to the western settlement edge, including the southern approach to the settlement. From the limited areas with visibility, the Development will be seen in larger scale views in the context of existing wind farm development upon the horizon to the west, and in a view in which the		

Tarbrax	
	influence of human activity is already apparent (including through former mining operations). Judgements: Scale: small; Geographic extent: small. The overall magnitude of change is judged to be **low.** Overall, the visual effect of the Development on views from this settlement is considered to be **Not Significant (Minor).**
Cumulative Effects	From parts of the settlement with more open views to the north-west, the Development will be seen on the forested plateau horizon between the consented Longhill Burn and Tormywheel (operational and small consented extension). This will likely read as one larger wind farm, seen beyond further single turbine consented schemes at Upper Haywood and Burnfoot Poultry Farm. This will increase the influence in views to the north-west, from the western settlement edge. **The introduction of the Development is not judged to result in a significant additional cumulative effect.** This is a larger scale rural view which has been altered by wind farm development and the Development will likely read as part of a larger wind farm.

Table 6.42: Woolfords

Woolfords			
Representative Viewpoint	VP 4: Minor Road at Woolford's Cottages	**Distance to nearest turbine**	2.18km
Settlement description and existing view	This linear settlement lies to the east of the Site, along the minor Auchengray Road which joins the A704 and A70. The settlement is situated on lower lying ground below the Site and within the broad valley of the Dippool Water, surrounded by pastoral farmland. There are views towards the Site from the western edge of the settlement. Properties within the settlement are typically orientated to the east, although a number of properties have gardens which face west towards the Site. Views are available towards operational wind turbines within Pates Hill Wind Farm on the horizon to the north-west, and a small number of turbines within Tormywheel Wind Farm can be seen on the horizon to the west.		
Sensitivity	This is a small scale rural settlement which includes a row of period terraced cottages. Outward views are over rural pastoral land, although human influence is visible in the form of coniferous forestry, electricity and rail infrastructure and existing wind farm development. Judgements: Susceptibility: high; Value: medium. The overall sensitivity is judged to be **medium**.		
Assessment of visual effects	The Development will introduce up to 14 turbine hubs and 14 turbine blades above the gently undulating horizon to the west at a distance of 2.18km. Intervening woodland will play a screen parts of the development, depending on the angle of view. Whilst localised buildings will screen views towards the Development from the village hall, properties east of the minor road and certain properties west of the minor road, open views will be available from the rear of certain properties, and their rear gardens, to the west of the minor road. The turbines will be read as one coherent and well balanced group. The Development will be visible in front of the upper blades of turbines within Tormywheel Wind Farm. Judgements: Scale: large; Geographical extent: medium. The overall magnitude of change is judged to be **medium-high**. Overall, the visual effect of the Development on views from this settlement is considered to be **Significant (Moderate).**		

Woolfords	
Cumulative Effects	The cumulative view from this small settlement is represented by Viewpoint 4. In views to the north-west the consented Longhill Burn will increase the field of view occupied by turbines beyond (south-west of) the operational Pates Hill. The Development will further extend the influence of turbines beyond Longhill Burn, in views to the west. Whilst this will increase the influence of wind farms in wider successive views the Development will likely read as an extension to an emerging wind farm cluster, rather than another wind farm in a less developed part of the view. **As such, the introduction of the Development is not judged to result in a significant additional cumulative effect, under either scenario.**

Table 6.43: Braehead

Braehead			
Representative Viewpoint	VP 9: B7016 at Braehead	**Distance to nearest turbine**	5.63km
Settlement description and existing view	This settlement is located to the south of the Site, along the B7016 and the Main Street. The settlement occupies a slightly elevated position above the valleys of the Dippool Water and the Mouse Water which are located to the east and west respectively. A small number of properties, mainly focused to the north of the settlement, are orientated with open views to the north (typically views from the rear of properties). Views are available beyond pastoral farmland within the Mouse Water valley towards the Black Law Group and Tormywheel Wind Farm on the gently undulating forested horizon to the north from open parts along the northern settlement edge. Turbines within the operational Pates Hill are also apparent. From the centre of the settlement including the Main Street, open views towards the Site are largely screened by buildings.		
Sensitivity	This is a smaller rural settlement with a mix of period and more modern properties. Outward views are over rural pastoral land but human influence is apparent in the form of electricity infrastructure, coniferous forestry and existing wind farm development. Judgements: Susceptibility: high; Value: medium. The overall sensitivity is judged to be **medium**.		
Assessment of visual effects	The Development will introduce 14 turbine hubs and 14 turbine blades visible above the gently undulating forested horizon in open views to the north at a distance of 5.63km. Localised buildings will typically screen views towards the Development from the centre of the settlement. Views towards the Development will largely be restricted to the northern settlement edge and a small number of properties with open views to the north. These are typically views from the rear of properties. The Development will be seen in the context of existing wind farm development upon the horizon to the north, and in a view in which the influence of human activity is already apparent. Viewpoint 9 indicates a medium magnitude of change. From higher sensitivity residential receptors this will translate into significant visual effects. However, this more open view is not representative of views from the Main Street, which tend to be contained by buildings in the settlement, or principal views from the majority of properties in the settlement. Judgements: Scale: small; Geographic extent: small. The overall magnitude of change is judged to be **low.** Overall, the visual effect of the Development on views from this settlement is considered to be **Not Significant (Minor).**		
Cumulative Effects	The cumulative view from this small settlement is represented by Viewpoint 9. The Development will be seen in front of and between Longhill Burn and Tormywheel. From places in the settlement with open		

Braehead	
	views to the north, the Development will likely read as one larger wind farm cluster (including Tormywheel and Longhill Burn) seen in larger scale rural views on a simple horizon which is already influenced by wind farm development. **The introduction of the Development is not judged to result in a significant additional cumulative effect.**

6.9.6 Operational Effects on Views from Routes

Sequential visual effects are assessed through considering the likely effects of the Development both in isolation, and in the context of other existing, consented and proposed wind energy developments on key routes through the study area. The routes to be assessed were identified through analysis of the ZTV shown on Figure 6.1.2a, and informed by consultation with statutory consultees. The assessment of likely effects on sequential views from these routes is detailed in Table 6.44 to Table 6.49 below.

Table 6.44 A70

A70			
Representative Viewpoint	Viewpoint 12: Carnwath (A70) Viewpoint 14: A70 (Harperrig Reservoir) Viewpoint 16: A70 Maidenhill	**Distance to nearest turbine**	6.28km
Description of Route and existing view	The A70 passes through the Study Area from Cumnock in the south-west to Edinburgh in the north-east, within 10 km to the east of the Site. Receptors include road users travelling in both directions on this fast-moving route. Medium distance views of the Site are available when travelling in both directions from sections of the route between Carnwath and Harperrig Reservoir. Roadside vegetation, including larger areas of coniferous forest cover, limits views to the west from localised sections of the route. This route is experienced by road users often travelling at speed, with the key focus of views being the road ahead. Sequential visibility of operational wind turbines within the Black Law Group, Pates Hill and Pearie Law Wind Farms is available from sections of this route, as well as close proximity views of turbines within the Muirhall Group.		
Sensitivity	The A70 is not known as a tourist route, but it passes through the Pentland Hills and Black Mount SLA, Upper Clyde Valley and Tinto SLA, Douglas Valley SLA and East Ayrshire SLA. Views from the route are largely over pastoral land, although overt human influence is apparent through settlements, existing wind farms and electricity infrastructure. Judgements: Susceptibility: low; Value: medium. The overall sensitivity is judged to be **low.**		
Assessment of visual effects	The Development will introduce up to 14 turbine hubs and 14 turbine blades seen in sequential views when travelling in both directions along this route. Theoretical visibility is more widespread within 10km between Harperrigg Reservoir and north of Carnwath, although actual visibility will be reduced along sections of the route by coniferous forest cover to the west. Views towards the Development will largely be oblique, with the turbines seen above the gently undulating hills in medium (beyond 6km) to longer distance views to the west. The Development will be seen in the context of existing man-made features, including turbines within Tormywheel Wind Farm and the Black Law Group to the north and west of the Development, as well as closer proximity turbines within the Muirhall Group (to the immediate west of the road), Harburnhead and Pearie Law Wind Farms from sections of the route. Given the viewing distance, reduced actual visibility due to areas of forest cover and context of		

A70	
	existing views which have already been altered by wind farm development the scale of sequential change is reduced. Judgements: Scale: small; Geographical Extent: medium. The overall magnitude of change is judged to be **low**. Overall, the visual effect of the Development on views from this route is judged to be **Not Significant (Minor).**
Cumulative Effects	Wind farms including the consented Longhill Burn and Camilty will increase the presence of wind farms in views to the west of the A70, with Camilty bringing wind farm development in close proximity to the route, as it passes to the northeast of Crosswood Reservoir. In longer distance views from the A70, represented by Viewpoints 14 and 16, the Development will typically increase the density of wind turbines seen as part of a larger emerging cluster in views to the west and north from the route. The cumulative change in longer distance sequential views will be harder to perceive and is not judged to result in significant additional sequential effects. In closer proximity (just over 6km distance) and oblique views, as represented by Viewpoint 11, the Development will likely read as an extension to the consented Longhill Burn, seen in front of turbines within the operational Tormywheel and longer distance views of Black Law. Whilst the potential for significant total effects is recognised from this stretch of the route, in terms of additional cumulative sequential effects, this is not judged to be significant. In summary, the Development will extend the influence of wind farms in middle to longer distance views to the west of the A70. However, it will not bring wind farm development closer to the route (as Camilty does); will typically be seen as an extension to Longhill Burn; and in longer distance views, the cumulative change will be harder to perceive. **The introduction of the Development is not judged to result in significant additional cumulative effects, under either scenario.**

Table 6.45 A71

A71			
Representative Viewpoint	VP 3: Breich VP 8: West Calder VP 10: A71 south of Stane	**Distance to nearest turbine**	2.20km
Description of Route and existing view	The A71 passes through the Study Area from Kilmarnock in the west to Edinburgh in the east, within 5 km to the north of the Site. Receptors include road users travelling in both directions along this fast moving route for sections of the road beyond settlements. Medium distance direct to oblique views of the Site are available when travelling in both directions from sections of the route between Stane and West Calder. Roadside vegetation, including larger areas of coniferous forest cover, limits views to the south from localised sections of the route. This route is experienced by road users often travelling at speed, with the key focus of views being the road ahead. Sequential visibility of wind turbines within the Black Law Group, Tormywheel, Pates Hill, Harburnhead and Pearie Law Wind Farms is available from sections of this route.		
Sensitivity	The A71 is not known as a tourist route, but it passes through the Middle Clyde Valley and Almond and Linhouse Valleys SLAs, beyond 10 km from the Site to the south-west and north-east respectively. Views from the route are largely over pastoral land, although overt human influence is apparent through larger areas of coniferous forest cover, buildings within settlements and existing wind farms.		

A71	
	Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.
Assessment of visual effects	The Development will introduce up to 14 turbine hubs and 14 turbine blades seen in sequential views when travelling in both directions along this route. Theoretical visibility is more widespread within 10km between Dykehead and Livingston, although actual visibility will be reduced along sections of the route by coniferous forest cover to the south. To the east, actual visibility will be limited to within around 5km by buildings within settlements including West Calder and Polbeth. Closer proximity views as the route passes to the north of the Site will tend to be oblique but the scale of change will increase given proximity (refer to Viewpoint 3). Direct views towards the turbines of the Development will be available when travelling east along a short stretch of the route between Stane and Breich, represented by Viewpoint 10. The Development will be seen on the gently undulating forested horizon, in the context of and beyond existing man-made features, including turbines within Tormywheel Wind Farms, and the Black Law Group. The ZTV indicates widespread visibility along a stretch of this route which is approximately 24km long, however actual visibility will be restricted to a stretch of around 13.5km between Stane and Breich. Along this stretch, actual visibility will also be restricted by forest cover next to the road, whilst this remains in place along certain sections of the route. Judgements: Scale: medium to small; Geographical Extent: medium. The overall magnitude of change is judged to be **medium-low.** Overall, the visual effect of the Development on views from this route is judged to be **Not Significant (Minor).**
Cumulative Effects	Wind farms including the consented Longhill Burn, Tormywheel Extension and West Benhar will increase the presence of wind farms in views to the south and north of the A71. In longer distance views from the A70, represented by Viewpoints 8 and 10, the Development will be seen between Longhill Burn and Tormywheel, creating a denser cluster of turbines in slightly oblique views in both directions of travel. As road users pass to the north of the Site, the Development will be seen between the consented Longhill Burn and Tormywheel (operational and consented extension). This will likely read as one larger wind farm occupying a wide field of view to the south. Significant total effects are recognised from parts of this route, more so to the west as it passes Black Law (represented by Viewpoint 10). However, given that the Development will typically read as an extension to a larger emerging wind farm group, from a route where views of wind farms are already a common feature, **the introduction of the Development is not considered to result in significant additional cumulative sequential effects.**

Table 6.46 A704

A704			
Representative Viewpoint	VP1: A704 / A706 Junction	**Distance to nearest turbine**	0.46km
Description of Route and existing view	The A704 passes within close proximity to the north of the Site, between the A706 and A71. Receptors include road users travelling in both directions on this fast-moving route. Close range views of the Site are available when travelling in both directions along this route. More direct views towards the Site tend to be experienced by road users travelling south-west. Large areas of coniferous		

A704	
	forest cover to the south of the road partially screen views towards the Site. However, the level of visibility at a given point in time will depend on forest management cycles. This route is experienced by road users often travelling at speed, with the key focus of views being the road ahead. Sequential visibility of wind farms including Pates Hill (to the south of the road) and Tormywheel (which is visible on both sides of the road near the junction with the A706) are available from sections of the route.
Sensitivity	The A704 is not known as a tourist route, and it does not pass through any landscape designations, which indicates a lower value. Man-made influence is apparent in views from the route through existing wind farms and coniferous forest cover on either side of the road. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.
Assessment of visual effects	The Development will introduce varying visibility of 14 turbine hubs and 14 turbine blades seen above the horizon as road users move along this route. The level of visibility will depend on the role the landform between the Site and the road and intervening forest cover play in screening the Development. As road users travel south-west, leaving West Calder, short range direct to slightly oblique views of the Development will be apparent. Views from this section of the road, outside areas of coniferous forest cover, tend to be more open. The Development will be seen in the context of the operational Tormywheel Wind Farm, in views to the south-west. As road users continue south-west forest cover will tend to screen more oblique views south towards the Development. When travelling north-east the Development will be apparent for a short section of the route in close proximity oblique views. The Development will be seen above the horizon in this direction, in the context of extensive coniferous forest cover and operational wind farm developments including the close proximity turbines of Tormywheel Wind Farm to the north and south of the route. The ZTV indicates widespread visibility along this route which is approximately 6.5km long. Assuming an average speed of 60km per hour this would equate to theoretical visibility for approximately 6.5 minutes. However, actual visibility will be reduced by forest cover next to the road, whilst this remains in place along certain sections of the route. Judgements: Scale: large; Geographical Extent: large. The overall magnitude of change is judged to be **high**. Overall, the visual effect of the Development on views from this route is judged to be **Significant (Moderate).**
Cumulative Effects	From this short section of road, the Development will likely read as an extension to the west of Longhill Burn. As road users pass in close proximity to both these schemes, and as the turbine sizes reflect each other, it will be difficult to tell the schemes apart. Significant sequential effects are recognised in the primary LVIA. However, given the Development will read as a seamless extension under a future cumulative baseline including Longhill Burn, **the introduction of the Development is not judged to result in significant additional cumulative sequential effects.**

Table 6.47 A706

A706			
Representative Viewpoint	VP1: A704 / A706 Junction	**Distance to nearest turbine**	0.35km

A706	
Description of Route and existing view	The A706 runs broadly north to south through the Study Area between Whitburn and Lanark, passing close to the west of the Site. Receptors include road users travelling in both directions on this fast-moving route. Close proximity direct to oblique views of the Site are available when travelling in both directions from a section of the route north of Forth and south of the A71 and the railway station near Breich. However, large areas of coniferous forest cover limit views to the east from localised sections of the route through this section. When travelling south medium to shorter distance direct views of the Site are available between Longridge and the A71. When travelling north longer distance direct views are available from a section of the route as it passes over open higher ground north of the A721. As road users continue north, on the approach to Forth, the rising terrain and belts of woodland increasingly screen medium distance views towards the Site. This route is experienced by road users often travelling at speed and the key focus of views is the road ahead. Turbines within Tormywheel Wind Farm are located on either side of the road to the north-west of the Site and as such are visible in certain closer and longer distance views. There is also sequential visibility of turbines within the Black Law Group to the west from sections of the route, and longer-distance views towards the Muirhall Group and larger clusters of wind farms on the distant hills to the south from open parts of the route including around Forth.
Sensitivity	The A706 passes through the Middle Clyde Valley SLA to the north-east of Lanark, which indicates a higher value. However, this is along a stretch of the route along which there is limited visibility of the Site. The route is not considered a tourist route, which indicates a lower value. Man-made influence is apparent in views from the route including existing wind farm developments in close proximity, coniferous forest cover and settlements. Judgements: Susceptibility: low; Value: low. The overall sensitivity is judged to be **low**.
Assessment of visual effects	The Development will introduce varying visibility of 14 turbine hubs and 14 turbine blades seen in sequential views when travelling in both directions along this route. From sections of the route nearest the Development (north of Forth and south of the A71 and the railway station near Breich) views will typically be oblique. Forest cover north of Forth will play an increasing role in screening the development when travelling in this direction. When travelling south, views from this section of the route tend to be more open, and the Development will be seen in the context of existing views of wind turbines due to the nearby operational Tormywheel Wind Farm. Viewpoint 1 is representative of this view and indicates a large scale of change. In wider sequential views when travelling south medium to shorter distance direct views of the Development will be available between Longridge and the A71. The Development will be seen on the gently undulating forested horizon visible beyond and alongside the turbines of Tormywheel Wind Farm. The two schemes will likely be read as one larger coherent wind farm. Viewpoint 7 from Longridge is representative of this view and a medium scale of change is predicted. When travelling south there is widespread theoretical visibility from the route between Longridge and the Site. However, actual visibility will be reduced by forest cover next to the road, particularly as the route passes to the immediate west of the Site. When travelling north longer distance (between 10km and 5km) direct views of the Development will be available from a section of the route as it passes over open higher ground north of the A721. The Development will be seen in front of and alongside Tormywheel on the gently undulating horizon in views north, in the context of larger scale rural views.

A706	
	Judgements: Scale: medium to large; Geographical Extent: medium. The overall magnitude of change is judged to be **medium-high.** Overall, the visual effect of the Development on views from this route is judged to be **Significant (Moderate) within 5km reducing to Not Significant (Minor) beyond 5km.**
Cumulative Effects	When travelling south and north, in longer distance views as represented by Viewpoints 3, 7 and 12 (all to the north) the Development will be seen in middle to long distance direct views on the forested plateau to the south between Longhill Burn (proposed) and the operational Tormywheel and its consented small extension. It will likely read as part of a larger wind farm cluster and will not result in additional cumulative sequential effects. As road users pass to the immediate west of the site, when visible the Development will be seen in close proximity views in front of Longhill Burn (as represented by Viewpoint 1). Whilst significant sequential effects are identified from this stretch of the route in the primary assessment, given the arrangement of cumulative schemes, **the introduction of the Development is not predicted to result in significant additional cumulative sequential effects.** Furthermore, as road users pass the site to the south-west forest cover and built form in Forth increasingly screen views.

Table 6.48 West Coast Main Line

West Coast Main Line			
Representative Viewpoint	VP 4: Woolford's Cottages	**Distance to nearest turbine**	2.24km
Description of Route and existing view	The West Coast Main Line passes from the south of the Study Area north to Carstairs, where the line splits into two, with one section running north-west towards Glasgow within 15km of the Site, and another section running north-east towards Edinburgh within 5km of the Site. Receptors include rail users travelling north and south on this fast-moving route. Close proximity views of the Site are available when travelling in both directions along open sections of the route to the east of the Site, between Carnwath and Woolfords. North of Woolfords cuttings, forest cover and localised buildings increasingly screen views south-west towards the Site. The following sequential assessment therefore focuses on the section of railway line between Carnwath and Woolfords. There is sequential visibility of turbines within the Muirhall and Black Law Groups, Tormywheel, Pates Hill, Pearie Law, and Harburnhead Wind Farms along this stretch of the route.		
Sensitivity	The West Coast Main Line passes through the Upper Clyde Valley and Tinto and Almond and Linhouse Valleys SLAs, although these are both beyond 10km of the Site and outwith the section of route where open views towards the Site are available. Views from the route are over rural, pastoral land, although man-made influence is apparent through existing wind farm development, coniferous forest cover, and rail and electricity infrastructure. Judgements: Susceptibility: low; Value: medium. The overall sensitivity is judged to be **low.**		
Assessment of visual effects	The Development will introduce visibility of up to 14 turbine hubs and 14 turbines blades seen in sequential views when travelling in both directions along this route between Carnwath and Woolfords. The turbines will be visible in oblique views to the west on the gently undulating forested hills of the Site in medium to short distance views with turbine just over 2km at the closest point. Theoretical visibility is widespread within 10km		

West Coast Main Line	
	however, actual visibility will be limited by buildings within settlements along the route, localised sections of cutting and the presence of coniferous forest cover to the west of the route. Where the turbines are visible, they will be seen in the context of existing wind farm development above the gently undulating forested horizon to the west, including Tormywheel and Pates Hill Wind Farms, as well as closer proximity views of Pearie Law Wind Farm in views from a section of the route to the north of Woolfords. The section of route between Carnwath and Woolfords is approximately 11km. However, actual visibility will be reduced by forest cover next to the railway, particularly to the south of Muirhall. Judgements: Scale: medium to small; Geographical Extent: medium. The overall magnitude of change is judged to be **medium to small**. Overall, the visual effect of the Development on views from this route is judged to be **Significant (Moderate) between Muirhall and Woolfords, reducing to Not Significant (Minor) beyond.**
Cumulative Effects	When visible the Development will be seen in largely oblique views to the west, in the context of further cumulative schemes including the proposed Longhill Burn and single turbines at Upper Haywood and Burnfoot Poultry Farm. Camilty (consented at 138.5m to tip with application for tip height increase withdrawn after cumulative cut-off) will also add further wind farms in views to the east of the railway, as it passes between Pearie Law and Harburnhead operational wind farms. The Development will further extend the influence of turbines beyond Longhill Burn, in largely oblique views to the west. The Development will likely read as an extension to an emerging wind farm cluster. **As such, the introduction of the Development is not judged to result in a significant additional sequential effect, under either scenario.**

Table 6.49 Core paths and rights of way within Site

Core paths and rights of way within Site			
Representative Viewpoint	N/A	**Distance to nearest turbine**	0.29km
Description of Route and existing view	A number of core paths and rights of way pass along forest roads within and just outwith the Site, particularly to the west of the Site and to the north of Wilsontown. Receptors include recreational users including walkers. Close proximity views of coniferous forest cover across the Site are available from the core paths and rights of way. This forest cover largely screens outward views towards the surrounding context. However, open areas due to forest management regimes and open glades sometimes offer views towards turbines within Tormywheel Wind Farm, to the immediate north-west of the Site.		
Sensitivity	Although the paths within the Site are designated as core paths and rights of way, they are not situated within any wider landscape designations, which indicates a lower value. The routes will predominantly be experienced by recreational users including walkers. Outward views are over a landscape which is heavily influenced by human development in the form of coniferous forest cover, including areas of clear felling. Judgements: Susceptibility: medium; Value: low. The overall sensitivity is judged to be **medium**.		
Assessment of visual effects	The Development will introduce visibility of up to 14 turbine hubs and 14 turbines blades seen in sequential views when travelling along core paths and rights of way within/ around the Site and depending on the level of screening provided by retained forest cover. The turbines will be seen in close proximity views, largely visible to the east of core paths and rights of way situated in the western part of the Site. The turbines will be visible		

Core paths and rights of way within Site	
	above retained coniferous forest cover within the Site. Figure 15.3 indicates areas of felling associated with the Development and shows that forest clearance is limited along Core Paths within the Site. When visible, the turbines will be seen in the context of existing human influence in the form of coniferous forest cover. The Development will be experienced by recreational receptors travelling at slow speeds along these routes, and as such will be visible for an extended period of time. Judgements: Scale: large; Geographical Extent: large. The overall magnitude of change is judged to be **high**. Overall, the visual effect of the Development on views from Core Paths within the Site is judged to be **Significant (Major).**
Cumulative Effects	The key cumulative change will be the consented Longhill Burn, to the immediate east of the site. When visible this will increase the influence of wind turbines over core path users in the Site, who will be subject to close proximity views of turbines in the Development. However, retained forest cover is likely to limit the potential for views towards Longhill Burn from many parts of the core path network in the Site. Furthermore, when both schemes are visible, it will also be difficult to tell the schemes apart. **The introduction of the Development is not judged to result in significant additional cumulative sequential effects, for core path users in the site.**

6.10 MITIGATION AND RESIDUAL EFFECTS

Measures to reduce effects upon the landscape resource and visual amenity were predominantly achieved through the design of the wind farm. Cumulative relationships with other wind farms, in particular the operational Tormywheel and the consented Longhill Burn (noting this scheme has a revised application for 8 turbines at 200m to tip), formed a key consideration in the design development.

Measures to reduce cumulative landscape and visual effects have been embedded into the design of the wind farm and the site restoration proposals. All residual effects are therefore as predicted in the assessment sections above.

6.11 SUMMARY OF EFFECTS

Table 6.50 provides a summary of the effects detailed within this chapter.

Table 6.50 Summary of Effects

Receptor	Sensitivity of Receptor	Magnitude of Change	Residual Effect	Cumulative Effects
Construction Effects				
The Site	Low	High	Significant (Major)	Not significant
Operational Effects on Landscape Character				
The Site	Low	High	Significant (Major)	Not significant
5. Plateau Farmlands	Medium-low	Low	Not Significant (Minor)	Not significant
6. Plateau Moorlands	Low	High for the Site and within 5 km; Low beyond 5 km	Significant (Moderate) for the Site and within 5 km; Not Significant (Minor) beyond 5 km	Not significant

Receptor	Sensitivity of Receptor	Magnitude of Change	Residual Effect	Cumulative Effects
12. Old Red Sandstone Hills	High	Low	Not Significant (Minor)	Not significant
268. Upland Hills - Lothians	High	Low	Not Significant (Minor)	Not significant
269. Upland Fringes - Lothians	Medium	Medium within 5 km; Low beyond 5 km	Significant (Moderate) within 5 km; Not Significant (Minor) beyond 5 km	Not significant
273. Lowland Plateaux - Lothians	Medium	Low	Not Significant (Minor)	Not significant
201. Plateau Farmland – Glasgow & Clyde Valley	Low	Low	Not Significant (Negligible)	Not significant
213. Plateau Moorlands – Glasgow & Clyde Valley	Low	Low	Not Significant (Negligible)	Not significant
Operational Effects on Designated Landscapes				
Pentland Hills Locally Designated Landscape Area	N/a	-	Will not compromise reasons for designation	Will not compromise reasons for designation
Blackridge Heights SLA	N/a	-	Will not compromise reasons for designation	Will not compromise reasons for designation
Clyde Valley and Tinto SLA	N/a	-	Will not compromise reasons for designation	Will not compromise reasons for designation
Operational Effects on Views and Visual Amenity				
Viewpoint 1: A704/ A706 Junction	Low	High	Significant (Moderate)	Not significant
Viewpoint 2: Minor road near Haywood and Bughtknowes	Medium-high	Medium	Significant (Moderate)	Not significant
Viewpoint 3: Breich	Medium-high	High	Significant (Major)	Not significant
Viewpoint 4: Minor road at Woolfords Cottages	Medium-high	High	Significant (Major)	Not significant
Viewpoint 5: Forth	Medium	Medium	Significant (Moderate)	Not significant
Viewpoint 6: Fauldhouse	Medium-high	Medium	Significant (Moderate)	Not significant

Receptor	Sensitivity of Receptor	Magnitude of Change	Residual Effect	Cumulative Effects
Viewpoint 7: Longridge	Medium-high	Medium	Significant (Moderate)	Not significant
Viewpoint 8: West Calder	Low	Medium	Not Significant (Minor)	Not significant
Viewpoint 9: B7016 at Braehead	Medium-low	Medium	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.
Viewpoint 10: A71 South of Stane	Low	Medium	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.
Viewpoint 11: A70 Maidenhill	Low	Low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.
Viewpoint 12: B8084 south of Armadale	Low	Medium-low	Not Significant (Minor)	Not significant
Viewpoint 13: Harrows Law	Medium-high	Medium-low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.
Viewpoint 14: Carnwath (A70)	Low	Low	Not Significant (Minor)	Not significant
Viewpoint 15: Eastcraigs Hill	High	Low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.

Receptor	Sensitivity of Receptor	Magnitude of Change	Residual Effect	Cumulative Effects
Viewpoint 16: A70 (Harperrig Reservoir)	Medium	Medium	Not Significant (Minor)	Not significant
Viewpoint 17: West Cairn Hill	High	Low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised. However, the contribution the Development makes to this effect is not considered to be notable.
Viewpoint 18: Tinto Hills	High	Low	Not Significant (Minor)	Not significant
Operational Effects on Settlements				
Auchengray	Medium-high	Medium	Significant (Moderate)	Not significant
Breich and Longridge	Medium	Low	Not Significant (Minor)	Not significant
Stoneyburn and Bents	Medium	Low	Not Significant (Minor)	Not significant
Tarbrax	Medium	Low	Not Significant (Minor)	Not significant
Woolfords	Medium	Medium-high	Significant (Moderate)	Not significant
Braehead	Medium	Low	Not Significant (Minor)	Not significant
Operational Effects on Routes				
A70	Low	Low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised from parts of the route. However, the contribution the Development makes to this effect is not considered to be notable.
A71	Low	Medium-low	Not Significant (Minor)	The potential for significant total cumulative effects is recognised from parts of the route. However, the contribution the Development makes to this effect is not considered to be notable.
A704	Low	High	Significant (Moderate)	Not significant
A706	Low	Medium-high	Significant (Moderate) within 5 km; Not	Not significant

Receptor	Sensitivity of Receptor	Magnitude of Change	Residual Effect	Cumulative Effects
			Significant (Minor) beyond 5 km	
West Coast Main Line	Low	Medium	Significant (Moderate) between Muirhall and Woolfords; Not Significant (Minor) beyond	Not significant
Core Paths and Rights of Way within Site	Medium	High	Significant (Major)	Not significant

6.12 4.10 STATEMENT OF SIGNIFICANCE

6.12.1 Primary Landscape and Visual Assessment

Landscape Effects

Significant effects are predicted on the landscape resource of the site itself (Major) during construction and operation. Significant effects on landscape character are predicted for the Plateau Moorlands and Upland Fringes (Lothian) LCTs. The Development is located on the transition between these LCTs, in an undulating plateau of coniferous forest. Existing wind farm development including Tormywheel (to the west) and Pates Hill (to the east) has already altered the character of these LCTs. The influence of human activity on these LCTs is also apparent through coniferous forest cover, roads, electricity infrastructure and a dispersed pattern of settlement.

The Development will increase the influence of wind farms on these LCTs, resulting in effects of Moderate significance within 5km mainly around the Site and to the north and south of the Development. Operational wind farm development has already altered the character of the landscape to the east and west. Furthermore, effects will be limited to areas where buildings and forest cover do not obscure views. Beyond this, no significant effects on landscape character are anticipated.

Furthermore, the Development is not anticipated to affect the integrity of any landscape designations by impacting on the qualities for which they have been designated.

Visual Effects

Significant effects on views are predicted at seven of the 18 representative viewpoints, all of which are located within 5km of the Development. Major effects are predicted from Viewpoint 4: Woolfords Cottages, a small row of cottages to the east of the Development, with the potential for open views from the rear of a number of properties. Major effects are also predicted from Viewpoint 3: Breich, from a view which is representative of rear views from properties on the southern edge of this small settlement. Both of these views represent closer proximity and more sensitive residential views to the north and east of the Site.

Moderate effects are predicted from:

- Viewpoint 1: A704/ A706 Junction;
- Viewpoint 2: Minor road near Haywood and Bughtknowes;
- Viewpoint 5: Forth;
- Viewpoint 6: Fauldhouse; and
- Viewpoint 7: Longridge.

In terms of settlements, significant effects are predicted from Auchengray and Woolfords. Both of these are smaller rural settlements within 5km to the south-east, with the potential for more open views from larger areas of the settlement.

Significant sequential effects are predicted from the A704, a relatively short road which passes to the immediate north of the site; parts of the A706, which passes to the immediate west of the Site and within 5km; a short section of the West Coast Main Line between Muirhall and Woolfords; and Core Paths within the site.

All of these significant visual effects will be limited to receptors within approximately 5km of the Site. In the majority of views the Development will be seen in the context of the operational Tormywheel wind farm (and other operational wind farms further east) on the gently undulating forested plateau to the centre of the Study Area.

6.12.2 Cumulative Landscape and Visual Assessment

There will be many wind farms across the landscape of the study area, should all consented and application stage wind farms be realised. The emerging pattern of wind farms typically sees larger developments located along an east to west band through the centre of the study area, on the undulating and forested plateau to the south of the M8 transport corridor. There are a number of discrete wind farms, consented and proposed, in areas of farmland and moorland either side of the M8 and north-east of greater Glasgow within 20km to the north-west of the Site. Larger emerging groups of wind farms within the wider landscape are focused to larger upland plateaux and hill ranges, particularly to the south-west within South Lanarkshire and East Ayrshire.

Under both cumulative scenarios, the Development will typically combine with Tormywheel (and its extension under scenario 2), Longhill Burn and Pates Hill, to create one larger wind farm on the central undulating forested plateau.

Significant Cumulative Landscape Effects

No significant additional cumulative landscape effects are predicted largely due to the influence of operational, consented and proposed wind farm development on landscape character and the role the Development plays in contributing to one larger wind farm, on the forested plateau to the south of the M8 transport corridor.

Significant Cumulative Visual Effects

No significant additional cumulative visual effects are predicted to arise from the introduction of the Development into views from the assessment viewpoints, settlements, or routes. Typically, the Development will read as part of a larger wind farm cluster – including the consented Longhill Burn, the operational Tormywheel and its small consented extension – seen on the simple forested plateau around the site. These future schemes will have altered views, and extending the influence of wind farm development in this context is not considered to result in an additional significant cumulative visual effect. Furthermore, the turbine scale and arrangement of the Development reflects that of the consented Longhill Burn.

The potential for significant 'total' cumulative effects is recognised from Viewpoints 9, 10, 11, 13, 15 and 17 and from corresponding stretches of the A70 (Viewpoint 11) and A71 (Viewpoint 10). These views tend to provide longer distance and large scale views where the large number of operational, consented and proposed wind farms across the study area is apparent. However, as the Development typically reads as part of a larger emerging wind farm cluster and extension to Longhill Burn, the contribution the Development makes to this effect is not considered to be notable.

6.13 GLOSSARY

Table 6.51 Glossary

Acronym	Definition
AOD	Above Ordnance Datum
CLVIA	Cumulative Landscape and Visual Impact Assessment
CZTV	Cumulative Zone of Theoretical Visibility
EIA	Environmental Impact Assessment
GDL	Garden and Designed Landscape
GLVIA3	Guidelines for Landscape and Visual Impact Assessment Third Edition
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LVIA	Landscape and Visual Impact Assessment
NCN	National Cycle Network
NSA	National Scenic Area
SLA	Special Landscape Area
SLC	South Lanarkshire Council
SNH	Scottish Natural Heritage (now NatureScot)
WLA	Wild Land Area
WLC	West Lothian Council
ZTV	Zone of Theoretical Visibility