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13. Summary of Likely Significant Effects

13.1 Introduction

- 13.1.1 **Chapters 5 to 12** of the Environmental Impact Assessment (EIA) Report present the findings of the assessment of likely significant effects of the Proposed Development and the Likely Grid Connection Route on a topic-by-topic basis. The significance of these effects has been assessed using criteria defined in the topic chapters. Where appropriate, the significance of effects has been categorised as Major, Moderate, Minor or Negligible. In the context of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017¹ (the 'EIA Regulations'), effects assessed as being of 'Major' or 'Moderate' significance are considered as significant effects. Where this differs for certain topic chapters, this has been clearly stated, and details are provided for how significant effects have been defined for that assessment. Impacts of the Proposed Development on aviation and socio-economics, tourism and recreation are assessed but not in the context of the EIA Regulations².
- 13.1.2 In line with Schedule 4 of the EIA Regulations and relevant EIA guidance, the EIA Report has focused on identifying likely significant environmental effects (both adverse and beneficial) of the Proposed Development and Likely Grid Connection Route during construction, operation and decommissioning (including cumulatively with other nearby schemes) to inform decision making. Additional mitigation measures that would be required to address these effects are also identified. The Proposed Development and the Likely Grid Connection Route are considered to be a 'single' project for the purposes of the EIA due to their interdependent nature (see **Chapter 2: Approach to the EIA**). As such, the assessment of effects of the Likely Grid Connection Route has been assessed on its own and in-combination with the Proposed Development throughout the EIA Report (where relevant to each topic chapter) to ensure that the project as a whole has been assessed for decision making purposes.
- 13.1.3 **Tables 13.1 – 13.5** below summarise the predicted likely significant effects of the Proposed Development prior to and following the implementation of committed additional mitigation (over and above the proposed good practice and embedded mitigation measures). No likely significant effects have been identified for the Likely Grid Connection Route on its own or in-combination with the Proposed Development and this is therefore not addressed further in this chapter.

13.2 Summary of Likely Significant Effects

- 13.2.1 No likely significant effects are predicted for the Proposed Development in relation to the following topics:
- **Cultural Heritage;**
 - **Ornithology;**
 - **Noise and Vibration;** and
 - **Shadow Flicker.**
- 13.2.2 Likely significant effects are predicted in relation to the following topics prior to consideration of any additional mitigation measures (where applicable):
- **Landscape and Visual Amenity;**
 - **Ecology (Beneficial);**
 - **Hydrology, Hydrogeology, Geology, and Peat;**
 - **Access, Traffic and Transport;** and
 - **Climate Change (Beneficial).**
- 13.2.3 **Significant** (adverse) residual effects remain for the following topics only:
- **Landscape and Visual Amenity.**

¹ The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. Available [online] at: <https://www.legislation.gov.uk/ssi/2017/102/contents> [Accessed: 20th February 2026]

² See Technical Appendix 4.3: Aviation Assessment in Volume 4 of the EIA Report and the Socio-Economic, Tourism and Recreation Impact Assessment Report which accompanies the application.

13.3 Landscape and Visual Amenities

- 13.3.1 It should be noted that wind turbines, as tall man-made structures, introduce features which are likely to bring about landscape and visual change. Measures to reduce effects upon the landscape resource and upon views and visual amenity are predominantly achieved through the design of the Proposed Development, as described in **Chapter 3: Site Selection and Design Strategy** of the EIA Report. As all mitigation for landscape and visual effects is embedded within the final design for the Proposed Development, all effects summarised in this section are effectively residual effects as no additional mitigation, which would reduce these effects, is proposed (See **Table 13.1**).

Significant Landscape Effects

- 13.3.2 Significant effects have been predicted on the landscape resource of the Site itself during construction (**Major**) and operation (**Major**) (including cumulatively under both scenarios 1 and 2).
- 13.3.3 Significant effects on landscape character during operation are predicted for:
- Host LCT – 79 - Plateau Moorland with Windfarms - Ayrshire (also includes assessment from adjacent 214 - Plateau Moorland with Windfarms - Glasgow & Clyde Valley). **Moderate (Significant)** effects are predicted from the level of the immediate surroundings of the Site and a localised surrounding area between Neilston Community Wind Farm to the north; Whitelee Wind Farm to the east; Glassock Bridge to the south; and (east of) Kingsford to the west (and cumulatively under both scenarios 1 and 2). These effects will extend into hours of darkness as a result of visible aviation lighting but will not be over a greater geographical extent than day-time effects.
 - 66 - Agricultural Lowlands – Ayrshire – **Moderate (Significant)** effects are predicted from a localised area to the north-east of the LCT, to the north-east of Stewarton and contained within approximately 5 kilometres (km) of the Proposed Development (and cumulatively under both scenarios 1 and 2). These effects will extend into hours of darkness as a result of visible aviation lighting but will not be over a greater geographical extent than day-time effects.
- 13.3.4 These landscape effects are considered to be localised. No significant effects on other LCTs across the 45 km study area are predicted.

Significant Visual Effects

- 13.3.5 Significant operational effects on views are predicted for 8 of the 18 LVIA viewpoints assessed. All of these effects are contained within 8.5 km of the Site. These effects are predicted for residential, recreational and transport receptors within the more immediate context.

Viewpoints

- 13.3.6 **Major (Significant)** effects are predicted from:
- Viewpoint 1: A77 near Drumbo (including cumulatively under both scenarios 1 and 2 and in relation to visible aviation lighting);
 - Viewpoint 3: Harelaw Road (including cumulatively under both scenarios 1 and 2 and in relation to visible aviation lighting); and
 - Viewpoint 4: Kingsford B769 (including cumulatively under both scenarios 1 and 2 and in relation to visible aviation lighting).
- 13.3.7 **Moderate (Significant)** effects are predicted from:
- Viewpoint 2: Glassock Bridge - A77/A719 (including cumulatively under both scenarios 1 and 2);
 - Viewpoint 5 - Queenseat B764 (including cumulatively under both scenarios 1 and 2);
 - Viewpoint 6 - Neilston Pad (including cumulatively under both scenarios 1 and 2);
 - Viewpoint 7 - Dunlop Road (A735), Stewarton (including cumulatively under both scenarios 1 and 2); and
 - Viewpoint 10 – Foreside (including cumulatively under both scenarios 1 and 2).

Routes

- 13.3.8 **Major (Significant)** effects are predicted from:
- Core Paths within 5 km: from sections of the Core Path network within 5 km and with open views towards the Proposed Development ((including cumulatively under both scenarios 1 and 2).
- 13.3.9 **Major to Moderate (Significant)** effects are predicted from:
- M77/ A77: within approximately 5 km (including cumulatively under both scenarios 1 and 2).
- 13.3.10 **Moderate (Significant)** effects are predicted from:
- A719: within approximately 5 km (including cumulatively under both scenarios 1 and 2).
- 13.3.11 For most commercial wind farms, having some residual significant landscape and visual effects is unavoidable. The level and distribution of assessed significant landscape and visual effects for the Proposed Development are considered to be localised, and would be expected for a larger commercial wind farm in this type of landscape.

Residential Properties

- 13.3.12 All properties with a high magnitude of residential visual amenity (RVA) change within 2 km of the turbines have been considered in terms of potential effect on 'living conditions' by judging whether the introduction of the Proposed Development will potentially lead to a breach of the RVA Threshold, in accordance with the Landscape Institute's Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 (LI TGN 2/19). As part of the RVA assessment process, **Significant** visual effects have been identified for 35 out of 38 properties where there are clear unobstructed views toward the Proposed Development from parts of the property, including access and garden areas.
- 13.3.13 Further details are provided in **Chapter 5: Landscape and Visual Impact Assessment** and **Technical Appendix 5.2: Residential Visual Amenity Assessment (RVAA)**.

13.4 Ecology

- 13.4.1 The assessment has predicted that no significant adverse effects are likely in relation to scoped in Important Ecological Features (IEFs). The implementation of the peatland restoration proposals (as detailed in **Technical Appendix 7.6: Outline Biodiversity and Enhancement Management Plan**) is likely to result in a **Moderate (beneficial)(Significant)** effect on peatland habitats within the Site in the long-term (see **Table 13.2**). Further details are provided in **Chapter 7: Ecology**.

13.5 Hydrology, Hydrogeology, Geology, and Peat

- 13.5.1 The assessment has predicted a **Moderate (Significant)** effect on water quality, specifically in respect of a single watercourse buffer encroachment ('F') during construction. This is due to the risk of sediment run-off/ pollution temporarily entering an unmapped headwater during construction and piling works for the T1 hardstanding. Additional mitigation measures will be applied at this location, as well as at buffer encroachment 'E' to further minimise potential impacts on water quality, thereby reducing the predicted effects to **Minor** (not significant) (see **Table 13.3**). Further details are provided in **Chapter 9: Hydrology, Hydrogeology, Geology and Peat**.

13.6 Access, Traffic and Transport

- 13.6.1 During the construction phase, and prior to mitigation, **Major / Moderate (Significant)** effects are predicted for Floak Road Users/Residents (in terms of severance, driver delay, non-motorised user amenity, fear and intimidation, road safety and large loads) and A77 Users/Residents (in terms of road safety and large loads) due to increased traffic volumes. The impacts relate to the peak of construction activities; however, as the construction period is short lived, the effects will be temporary in nature. Whilst it is acknowledged that other months within the 20-month construction programme may cause significant effects, these would be less than those assessed and for which mitigation measures have been proposed. Following the application of committed additional mitigation, such as a Construction Traffic Management Plan (CTMP), Abnormal Load Transport Management Plan and Staff Travel Plan, the effects are reduced to **Minor (Not Significant)**. Further details are provided in **Chapter 11: Access, Traffic and Transport**.

13.7 Climate Change

- 13.7.1 During the operational phase of the Proposed Development, carbon lost during the manufacture and construction phase will be offset, as well as the emissions lost to backup generation requirements. The assessment on climate change predicts that there will be an overall **Moderate (beneficial) (Significant)** effect associated with the Proposed Development on its own and **Major (beneficial) (Significant)** cumulative effect with respect to the collective avoidance of greenhouse gas emissions (see **Table 13.5**). Further details are provided in **Chapter 12: Climate Change**.

13.8 Interrelated Effects

- 13.8.1 The EIA Regulations (Schedule 4, Paragraph 5) require that EIA Reports consider the interrelationships between aspects of the environment likely to be significantly affected by a development. It is considered that the following effects discussed below are interrelated.
- 13.8.2 **Chapter 5** notes that there will be no notable interrelationships between landscape and visual amenity and other disciplines. Visual effects will play a role in effects on the setting of cultural heritage features, as discussed in **Chapter 6: Cultural Heritage**. Effects on landscape features such as woodland and peatland will play a role in effects on habitats, as discussed in **Chapter 7**.
- 13.8.3 **Chapter 7** highlights that the potential interrelationship between direct habitat loss and effects on protected species has been accounted for. **Negligible/Minor (Not Significant)** indirect effects to protected species may occur due to effects of habitat loss for prey items, however this is taken into account under the habitat loss assessment in **Chapter 7**. Of the other topics with potential to affect ecological receptors, those effects identified in **Chapter 8: Ornithology** and **Chapter 9** are most likely to produce a measurable effect. Interrelated effects could potentially occur due to loss or reduction in quality of habitats via hydrological changes. Changes to the ornithological assemblage (**Chapter 8**) as a result of the Proposed Development may also affect protected species, either as prey or as competitors, however the level of change is likely to be negligible. In summary, no significant interrelated effects in relation to ecology are predicted due to the Proposed Development or Likely Grid Connection Route.
- 13.8.4 **Chapter 9** highlights that excessive levels of suspended sediment in watercourses as a result of construction activities can have an indirect effect on watercourse ecology and fish. However, with embedded design, good practice measures and additional site-specific mitigation (e.g. adherence to GPPs [Guidance for Pollution Prevention], SuDS [Sustainable Drainage Systems], buffers etc) there is considered to be no significant residual effect on water quality of the downstream watercourses.

Table 13.1 Summary of Likely Significant Landscape and Visual Effects

Predicted Effects	Significance	Cumulative Effect (Scenario 1)	Cumulative Effect (Scenario 2)
Construction			
The Site	Major (Significant)	N/a	N/a
Operation			
The Site	Major (Significant)	Major (Significant)	Major (Significant)
Host LCT – 79 - Plateau Moorland with Windfarms - Ayrshire (also includes assessment from adjacent 214 - Plateau Moorland with Windfarms - Glasgow & Clyde Valley)	Moderate (Significant) Experienced at the level of the immediate surroundings of the Site and a localised surrounding area between Neilston Community Wind Farm to the north; Whitelee Wind Farm to the east; Glassock Bridge to the south; and (east of) Kingsford to the west. Significant effect on landscape character as a result of proposed visible aviation lighting also likely to extend into hours of darkness.	Moderate (Significant)	Moderate (Significant)

Predicted Effects	Significance	Cumulative Effect (Scenario 1)	Cumulative Effect (Scenario 2)
	However, these effects are not judged to affect a greater geographical extent than identified in the daytime assessment from these LCT.		
66 - Agricultural Lowlands - Ayrshire	Moderate (Significant) Experienced from a localised area to the north-east of the LCT, to the north-east of Stewarton and contained within approximately 5 km of the Proposed Development. Significant effects on landscape character as a result of proposed visible aviation lighting is likely to extend into the hours of darkness. But these effects are not judged to affect a greater geographical extent than identified in the daytime assessment from this LCT.	Moderate (Significant)	Moderate (Significant)
Viewpoint 1 - A77 near Drumboy	Major (Significant)	Major (Significant)	Major (Significant)
Viewpoint 2 - Glassock Bridge - A77/A719	Moderate (Significant)	Moderate (Significant)	Moderate (Significant)
Viewpoint 3 - Harelaw Road	Major (Significant)	Major (Significant)	Major (Significant)
Viewpoint 4 - Kingsford B769	Major (Significant)	Major (Significant)	Major (Significant)
Viewpoint 5 - Queenseat B764	Moderate (Significant)	Moderate (Significant)	Moderate (Significant)
Viewpoint 6 - Neilston Pad	Moderate (Significant)	Moderate (Significant)	Moderate (Significant)
Viewpoint 7 - Dunlop Road (A735), Stewarton	Moderate (Significant)	Moderate (Significant)	Moderate (Significant)
Viewpoint 10 - Foreside	Moderate (Significant)	Moderate (Significant)	Moderate (Significant)
M77/ A77	Major to Moderate (Significant) Predicted within approximately 5 km	Major to Moderate (Significant)	Major to Moderate (Significant)
A719	Moderate (Significant) Predicted within approximately 5 km	Moderate (Significant)	Moderate (Significant)
Core Paths within 5 km	Major (Significant) From sections of the Core Path network within 5 km and with open views towards the Proposed Development.	Major (Significant)	Major (Significant)

Predicted Effects	Significance	Cumulative Effect (Scenario 1)	Cumulative Effect (Scenario 2)
35 residential properties within 2 km RVAA study area.	Major to Moderate (Significant) Where there are clear unobstructed views toward the Proposed Development from parts of the property, including access and garden areas.	Major to Moderate (Significant)	Major to Moderate (Significant)

Table 13.2 Summary of Likely Significant Ecology Effects

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Operation			
Blanket Bog and Wet Modified Bog: Restoration and Enhancement.	Moderate beneficial and Significant.	Not applicable.	Moderate beneficial and Significant.

Table 13.3 Summary of Likely Significant Hydrology, Hydrogeology, Geology, and Peat Effects

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Construction			
Effects during construction on surface and ground water quality and quantity	Moderate (Significant) (at buffer encroachment F)	The temporary floating hardstanding at location F will be micrositied to maintain a 10 metres (m) buffer distance from the headwater channel, if possible. If this cannot be achieved, the channel will be temporarily culverted under the floating hardstanding during construction. Additional Mitigation (e.g. silt fences/additional SuDS) will be installed between the hardstanding areas and the watercourse to reduce the risk of sediment/silt runoff during construction.	Minor (Not Significant)

Table 13.4 Summary of Likely Significant Access, Traffic and Transport Effects

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Construction			
Floak Road Users and Residents			
Severance	Major (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)

Predicted Effects	Significance	Committed Additional Mitigation	Significance of Residual Effect
Driver Delay	Moderate / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Non-motorised User Amenity	Major / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Fear and Intimidation	Major (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Road Safety	Major / Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Large Loads	Major (Significant)	Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier.	Minor (Not significant)
A77 Users and Residents			
Road Safety	Moderate (Significant)	CTMP – will be secured through a planning condition and delivered by the Contractor. Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier. Staff Travel Plan – will be delivered by the Principal Contractor.	Minor (Not significant)
Large Loads	Major (Significant)	Abnormal Load Transport Management Plan – will be prepared and delivered by the Abnormal Load supplier.	Minor (Not significant)

Table 13.5 Summary of Likely Significant Climate Change Effects

Description of Effect	Significance	Committed Additional Mitigation Measures	Significance of Residual Effect
Operation			
Carbon Losses and Savings (climate change mitigation)	Moderate (beneficial) (Significant)	None	Moderate (beneficial) (Significant)
Cumulative			
Carbon Losses and Savings (climate change mitigation)	Major (beneficial) (Significant)	None	Major (beneficial) (Significant)