

14. LANDSCAPE AND VISUAL

14.1 Introduction

This chapter of the Environmental Impact Assessment Report (EIAR) addresses the potential landscape and visual impacts of the proposed Glenora Wind Farm (the “Proposed Development”). The emphasis in this chapter is on the likely significant direct and indirect effects of the Proposed Development upon the landscape and visual amenity as well as landscape policy and relevant guidance. It covers the assessment methodology, a description of the Proposed Development and the existing landscape, as well as landscape policy and relevant guidance. It includes a description of the landscape policy of County Mayo with specific reference to wind energy and the Landscape and Visual Impact Assessment (LVIA) study area in which the Proposed Development Site is located.

The landscape of the Proposed Development Site and wider landscape area is described in terms of its existing character, which includes a description of landscape values and the landscape’s sensitivity to change. The landscape and visual impact assessment of the Proposed Development uses theoretical visibility mapping, representative viewpoints and photomontages. The potential impacts in both landscape and visual terms are then assessed, including cumulative impacts.

14.1.1 Statement of Authority

MKO has developed extensive expertise and experience over the last 15 years in the Landscape and Visual Impact Assessment of a range of projects, including large scale wind energy developments.

This EIAR chapter and Appendices (Appendix 14-1, Appendix 14-2, Appendix 14-3, and Appendix 14-4) were written by Jack Smith, MSc., PIEMA, a Landscape and Visual Impact Professional. Jack is a Project Environmental Scientist and Landscape and Visual Impact Assessment (LVIA) specialist with MKO. Jack is an Affiliate member of the British Landscape Institute and holds membership with the Landscape Research Group. Jack’s primary role at MKO is producing the LVIA chapter of EIA reports. Jack specialises in preparing Landscape and Visual Impact Assessment Reports for large-scale renewable energy projects including wind farms, solar farms, quarry extraction and strategic housing schemes. Jack has additional experience in preparing landscape feasibility reports for large wind farm projects.

Jack Smith was also aided by Jack Workman MSc, TMLI. Jack is a chartered member of the British Landscape Institute as a Technician Member (TMLI) and he is the Landscape & Visual Project Director at MKO. He is an Environmental Scientist and Landscape and Visual Impact Assessment (LVIA) specialist. Jack Workman’s primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Jack holds an MSc. in Coastal and Marine Environments and a BSc. in Psychology, he is a member of the Landscape Research Group, as well as holding a membership with the Chartered Institute of Water and Environmental Management.

This chapter was reviewed by Michael Watson. Michael is Director and head of the Environmental Team at MKO, an Irish planning and environmental consultancy with wind energy a company specialism. Michael has extensive expertise conducting LVIA’s for wind farm developments and 20 years’ professional consultancy experience as a project director, project manager and lead coordinator of environmental impact assessments for wind energy and other large-scale infrastructure projects.

14.1.2 ‘Do-Nothing’ Scenario

If the Proposed Development were not to proceed, no changes would be made to the current land-use practice of commercial forestry. Should this occur the landscape and visual impact would be neutral in the context of this EIAR.

Proposed Development Description

A full and detailed description of the Proposed Development can be found in Chapter 4 of this EIA. Section 4.1 describes the development and its component parts (the ‘Proposed Development’) including the works subject of a proposed application for planning permission to An Bord Pleanála.

The Proposed Development comprises the construction of 22 No. wind turbines and all associated works. The proposed turbines will have a maximum blade tip height of up to 180 metres above the top of the foundation. The Proposed Development comprises:

1. Construction of 22 no. wind turbines and associated hardstand areas with the following parameters:
2. A total tip height of 180 metres,
3. Hub height of 99 metres, and
4. Rotor diameter of 162 metres
5. All associated underground electrical and communications cabling;
6. 1 no. Meteorological Mast of 99 metres in height;
7. Upgrade of existing tracks and roads, provision of new permanent site access roads, upgrade of 1 no. existing site entrances;
8. 3 no. borrow pits;
9. 13 no. permanent peat placement areas;
10. 5 no. temporary construction compounds;
11. Permanent recreation and amenity works, including marked trails, seating areas, amenity car park, and associated amenity signage;
12. Site Drainage;
13. Site Signage;
14. Ancillary Forestry Felling to facilitate construction and operation of the proposed development;
15. All works associated with the habitat enhancement and biodiversity management within the wind farm site; and
16. All associated site development works.

This application is seeking a ten-year permission and 35 year operational life from the date of commissioning of the renewable energy development.

While not included in the planning application for the Glenora Wind Farm Development, the on-site electricity substation, and the grid connection route are also assessed in this chapter of the EIA.

Essential Aspects of the Proposed Development from an LVIA Perspective

The term ‘proposed turbines’ or ‘Proposed Development turbines’ refers to the 22 No. turbines proposed as part of the Proposed Development. Guidance for LVIA (GLVIA3, LI & IEMA 2013) states that:

“it is important to make sure that the project description provides all the information needed to identify its effects on particular aspects of the environment. For LVIA it is important to understand, from the project description, the essential aspects of the scheme that will potentially give rise to its effects on the landscape and visual amenity”.

The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects. In this regard, the proposed turbines are deemed to be the ‘essential aspect’ of the Proposed Development which will give rise to effects on the landscape and visual amenity and are therefore a primary focus of the LVIA conducted in this chapter.

The proposed meteorological mast is also a tall vertical structure, it is therefore included in the photomontage booklet and is fully considered throughout this chapter. However, it will be substantially less visible than any proposed turbine given its shorter and slender lattice form.

The other components of the Proposed Development (items 5-16 above) are not deemed to be as visually prominent as the proposed turbines, however, they have the potential to give rise to localised landscape and visual effects. Although not the primary focus of the LVIA, these proposed components are fully considered throughout this chapter and are assessed in detail in Section 14.7.3.5 – *Ancillary Project Elements*.

14.1.4 Mitigation as Part of the Iterative Design Process

As part of an upland, remote landscape, the Proposed Development site was strategically selected as a landscape highly suitable for accommodating wind energy development. Also, through the iterative project design process, various best practice tools used for assessing the landscape and visual impact of a proposed wind farm development were used to bring forward the optimum design for the Proposed Development with respect to landscape and visual factors. These tools include, landscape modelling, ZTV mapping and preparation of photomontage visualisations.

The final design of the Proposed Development and strategic siting of proposed turbines in the landscape was informed by extensive early-stage impact assessment work conducted by the authors throughout 2020, 2021 and 2022, including assessment of various turbine layouts and turbine models. The evolution of the proposed turbine layout included omission of turbines from the project and careful micro-siting of turbines aimed at preventing the potential for significant landscape and visual effects. The final design is also considered in the context of siting and design guidance stated in the ‘Wind Energy Development Guidelines for Planning Authorities’ published by the Department of Environment, Heritage and Local Government in 2006 – Hereafter referred to as the ‘WEDGs (DoEHLG, 2006)’. Siting and design guidance was also considered from ‘Draft Revised Wind Energy Development Guidelines for Planning Authorities’ published by the Department of Housing, Planning and Local Government in 2019 – Hereafter referred to as the Draft WEDGs (DoHPLG, 2019).

Proposed Turbines: The final proposed turbine layout that is the subject of this LVIA, already incorporates the following landscape and visual design considerations for good wind farm design:

- The Proposed Development is strategically sited in a remote and isolated upland landscape with large separation distances from any sensitive visual receptors.
- Strategic siting of the Proposed Development in a landscape enclosed by tall mountainous features, obscuring views from vast areas of the LVIA Study Area and many sensitive receptors.
- Through an iterative design process, the proposed turbines are strategically sited at lower elevations relative to the ridgelines enclosing it to the north and west. This eliminates visibility of the proposed turbines from most sensitive receptors along the North Mayo coastline and reduces their prominence when they are visible from receptors in this area.
- The proposed turbine layout has been designed to create a coherent cluster, contiguous and connected to each other visually and with consistent spacing in line with the siting and design guidance for this landscape type in the WEDGs (DoEHLG, 2006), and in the Draft WEDG’s (DoHPLG, 2019).
- The proposed turbines have been strategically sited to ensure they are visually balanced within the landscape, as demonstrated by most of the photomontages the visible turbines are most often arranged neatly in a linear array, sympathetic to the defined contours of the landform enclosing them to the north and west.
- Strategic siting of the turbines on a site of commercial forestry, a highly modified landscape of low landscape value and sensitivity.

- All of the proposed turbines are sited within or in close proximity to designated wind energy development zones as defined in local planning policy (Mayo County Development Plan 2022-2028).
- Siting of proposed turbines adheres to the minimum 500 metre set back distance in the current WEDGs (DoEHLG, 2006) and also the 4 times tip height set-back distance explicitly set out for residential visual amenity prescribed by the Draft WEDGs (DoHPLG, 2019).

Ancillary Infrastructure – 110kV Substation, Met Mast, Grid Connection and Access Roads

- The intended connection to the national electricity grid is underground thereby eliminating potential landscape and visual effects during the operational phase.
- The proposed 110kV substation is sited within the commercial forestry on site and will be entirely screened from view outside of the immediate proximity of the site. It is also located a substantial distance from the nearest sensitive receptor, aside from the Western Way, which runs adjacent to the site of the substation (see discussion below in Section 14.7.3.3.3).
- The internal site road layout makes use of the existing tracks wherever possible (to be upgraded for construction and the delivery of wind turbine components), to minimise the requirement for new tracks within the site.
- Felling of existing coniferous plantation is predominantly limited to keyhole felling in localised parts of the site, in keeping with existing practices in the commercial forestry plantation on-site.

14.1.5 Scoping Replies/Pre-Planning Meetings

A scoping and consultation exercise has been carried out by MKO, as detailed in Chapter 2 of this EIA. Two pre-planning meetings with An Bord Pleanála occurred on the 22nd September 2021 and the 3rd February 2022 in which the cumulative assessment of landscape and visual impacts was raised by the Board. A pre-application consultation meeting took place with Mayo County Council on the 9th September 2021, with designations, views and vulnerable areas, as well as cumulative and visual impacts discussed. In particular the potential impact of the Proposed Development from the Céide Fields was noted. All feedback and communications have been taken on board when compiling the chapter and assessment.

14.2 Brief Methodology and Assessment Criteria

This section broadly outlines the methodology and the guidance used to undertake the landscape and visual impact assessment of the Proposed Development; a more detailed description of the methodology is outlined in Appendix 14-1. There are five main sections to this assessment:

- Visibility of the Proposed Development
- Landscape Baseline
- Visual Baseline
- Cumulative Context
- Likely and Significant Effects – outlining the assessment of landscape, visual and cumulative effects

14.2.1 Scope and Definition of Landscape and Visual Impact (LVIA) Study Area

For the purposes of this chapter, where the ‘Proposed Development Site’ or ‘the site’ is referred to, this relates to the primary study area for the Proposed Development, as shown delineated in green on the in

the A0 LVIA Baseline Map (Appendix 14-4) as well as other mapping figures shown in Section 14.4 – *Landscape Baseline*.

The Guidelines for Landscape and Visual Impact Assessment 3rd Edition - GLVIA3 (LI & IEMA, 2013) guidance refers to the identification of the area of landscape that is to be covered while assessing landscape and visual effects. The guidelines state:

“The study areas should include the site itself and the full extent of the wider landscape around it which the Proposed Development may influence in a significant manner.”

Landscape and visual baseline mapping and viewpoint selection are based on wider study areas referred to as the ‘LVIA Study Area’. The geographical parameters for this LVIA were determined by desktop study, survey work undertaken, the professional judgement of the assessment team, experience from other relevant projects and policy guidance or standards, such as:

- *Appendix 3* of the ‘WEDGs (DoEHLG, 2006), (including reference to the Draft WEDGs DoHPLG, 2019);
- *The Guidelines for Landscape and Visual Impact Assessment 3rd Edition*, published by the Landscape Institute and IEMA in 2013, - Hereafter referred to as ‘GLVIA3 (LI, & IEMA, 2013)’

The distance at which a ZTV is set from a proposed wind farm development defines the parameters of the LVIA Study Area. The LVIA Study Area was chosen as 20 kilometres for landscape and visual effects as is suggested by guidance:

‘For blade tips in excess of 100m, a Zone of Theoretical Visibility radius of 20km would be adequate’ (WEDGs Page 94, DoEHLG, 2006; Page 152, DoHPLG, 2019)

Through experience conducting LVIA for other wind energy development projects, the assessment team determined that no significant effects on landscape character are likely to arise beyond distances of 15km from the proposed turbines. Therefore, a LVIA Study Area of 15km is deemed appropriate for effects on landscape character in relation to the assessment of effects upon designated Landscape Character Areas.

Furthermore, on the basis of desk studies and survey work undertaken, the professional judgement of the assessment team, experience from other relevant projects and policy guidance or standards, the following topic areas have been scoped out of the assessment:

- Effects on landscape and visual receptors that have minimal or no theoretical visibility (as predicted by the ZTV) and/or very distant visibility, and are therefore unlikely to be subject to significant effects;
- Effects on designated landscape receptors beyond a 20 km radius from the Proposed Development, from where it is judged that potential significant effects on key characteristics and/or special qualities, or views are judged unlikely to occur;
- Effects on landscape character and designated Landscape Character Areas beyond a 15 km radius from the Proposed Development, where it is judged that potential significant effects on landscape character are unlikely to occur;
- Effects on visual receptors beyond a 20 km radius from the Proposed Development, where it is judged that potential significant effects are unlikely to occur;
- Cumulative landscape and visual effects beyond a 20km radius from the Proposed Development, where it is judged that potential significant cumulative effects are unlikely to occur;

The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Development from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects. The landscape and visual impact of ancillary elements such as the proposed roads, substation, met mast and grid connection are addressed within this chapter, however, the proposed turbines are of primary focus in this LVIA.

14.2.2 Guidelines

The legislation and general guidance on Environmental Impact Assessment is set out in Chapter 1 of this EIA. The LVIA reported in this chapter was guided and informed by guidance documentation specifically pertaining to the Landscape and Visual Impact Assessment. Details of all the guidance used to conduct this LVIA are outlined in Section 1.2 of the Methodology Appendix – *Appendix 14-1*.

14.2.3 Baseline Landscape and Visual Information

In order to carry out this assessment, an initial desk study was undertaken which identified:

Landscape

- Landscape Receptors
- Policies and objectives contained in the relevant county development plan pertaining to landscape and wind energy
- Landscape designations in the LVIA study area (Amenity Areas; Views and Prospects; Landscape Character Areas; Historic Landscape Characterisation)
- Landscape character of the LVIA Study Area
- Landscape character of the Proposed Development Site based on:
 - Site Surveys undertaken in Summer 2021
 - Landscape Character Types identified in ‘Landscape and Landscape Assessment: Consultation Draft of Guidelines for Planning Authorities’ (Department of the Environment and Local Government, 2006)

Visual

- Identification of Visual Receptors in the LVIA Study Area;
- Preliminary assessments of visibility of the Proposed Development from visual receptors using ZTV mapping and on-site appraisals.
- Route Screening Analysis

14.2.4 Assessment of Potential Impacts

The landscape and visual assessment methodology used in this chapter (outlined in Appendix 14-1) includes clearly documented methods based on the GLVIA guidelines (LI & IEMA, 2013). This includes consideration of landscape and visual sensitivity balanced with the magnitude of the effect to determine the significance of effects. Mitigating factors are then taken into consideration to arrive at residual landscape and visual effects. Residual landscape and visual effects are graded upon an ‘impact assessment classification of significance’ scale, as defined by the Environmental Protection Agency of Ireland (EPA, 2022), included in Section 1.7.1 of Chapter 1 of this EIA.

Photomontages are used to assess potential impacts, whereby the potential effects arising as a result of the Proposed Development are assessed from viewpoint locations representative of prominent landscape and visual receptors located within the LVIA Study Area. Throughout this chapter ‘theoretical visibility’, is referred to, this is based on Zone of Theoretical Visibility (ZTV) mapping which is addressed in the following section of this chapter. Further details of the methods used to

produce ZTVs and Photomontages, as well as the landscape and visual impact assessment process are presented in the methodology appendix - *Appendix 14-1*.

14.3 Visibility of the Proposed Development

14.3.1 ZTV Mapping: Theoretical Visibility of the Proposed Development.

Zone of Theoretical Visibility (ZTV) mapping is an important step in the LVIA process, in that it clearly shows which areas will have theoretical visibility of the proposed turbines and which areas will have no theoretical visibility.

The ZTV mapping methodology outlined in Section 1.3 of Appendix 14-1 was used to examine the theoretical visibility of the 22 No. proposed turbines from all landscape and visual receptors within the LVIA Study Area, using the half blade height of the wind turbines as points of reference. As noted in Appendix 14-1, actual visibility on the ground is significantly less than predicted by the ZTV mapping due to intervening factors such as: on site screening from natural and man-made features, atmospheric weather and/or localised topography.

Generation of the ZTV utilises large scale topographical data (interpolation across 10 m OSi contour data) and does not account for topographical variation of smaller scale (e.g. < 10 metre). Therefore, in reality, small, localised undulations in topography are likely to further inhibit visibility of the Proposed Development that may not be represented in the ZTV map. Other features of the landscape such as vegetation and man-made elements are also likely to obscure the proposed turbines from view from many areas where the ZTV indicates there is full visibility. In this regard, the ZTV is a useful tool to indicate where there is definitely no visibility of the Proposed Development, therefore receptors located in these areas can be screened out from further assessment.

14.3.2 Half Blade ZTV of the Proposed Development

The Half Blade ZTV map of the Proposed Development and LVIA Study Area is shown in Figure 14-1 below. The ZTV map is used within several mapping figures included in this chapter to enable assessment of theoretical visibility from landscape and visual receptors (See Appendix 14-4 – *LVIA Baseline Map*; Figure 14-12 – *Landscape Character Units & ZTV*; Figure 14-14 – *Visual Baseline & ZTV*). Separate colour bands are used on the ZTV map to indicate the number of turbines of which the half blade will potentially be visible, shown on Figure 14-1. The legend on Figure 14-1 shows the number of visible turbines for each corresponding colour, which are as follows:

- > Orange: 1-5 turbines visible
- > Teal: 6-10 turbines visible
- > Yellow: 11-15 turbines visible
- > Navy: 16-22 turbines visible

Figure 14-2 (below) shows the topographical features and elevation gradients existent within the receiving landscape of the LVIA study area, the geography of these topographical features define the distribution of theoretical visibility illustrated in Figure 14-1.

Description of Theoretical Visibility

The Proposed Development is enclosed by an elevated landform which wraps around the proposed turbines from the west to the north and then east. As the proposed turbines are on the southern side of this curving ridgeline or range, the topography will obscure visibility of the proposed turbines from most of the coastal landscape to the north, west and north-east. The ZTV map shows that theoretical

visibility of the proposed turbines is very limited in locations to the west and northeast of the Proposed Development and there will be no theoretical visibility along vast areas of the northern Mayo coastline.

Figure 14-1 illustrates that most full theoretical visibility of the 22 No. turbines will occur within the relatively flat plains to the south and southeast of the LVIA Study Area where there is no topographical screening of the Proposed Development. The topography of the Proposed Development Site is located within an upland landscape setting. The major ridgeline that surrounds the Proposed Development Site to the north, west and southwest provides substantial screening of many of the proposed turbines from sensitive visual receptors in the wider landscape. The topography and elevation of the site of the proposed turbines relative to the surrounding ridgelines to the north and west effectively screen the proposed turbines from sensitive receptors along the north Mayo coastline, in particular to the northeast where the Céide Fields are located. The low-lying elevation and flat topography to the southeast in the LVIA Study Area will create longer-range, more expansive views of the Proposed Development Site. In this regard, there will be full theoretical visibility of the Proposed Development to the southern extent of the LVIA Study Area, which is located just north of the northern slopes of the Nephin Beg range. As shown by the ZTV map, theoretical visibility will be limited to the southeast of the Proposed Development within 10 km where the Cluddaun and Shanetra Hills will screen visibility in this direction as shown by the partial theoretical visibility indicated on Figure 14-1.

Figure 14-1 indicates that theoretical visibility within 5 km is mainly full to partial to the southwest, south and southeast, with an area of no visibility to the west and north, beyond the peaks of the surrounding topography. To the northeast, within 5 km of the site, there is partial theoretical visibility indicated, again as a result of the adjacent topography. The topography surrounding the Proposed Development, which can be seen in Figure 14-2 below, can be seen to limit the theoretical visibility of the proposed turbines to the west, north, east, and southeast, even in locations within 5 km of the Proposed Development.








Beyond 5 km, theoretical visibility remains extremely limited to the west, north, and northeast, with large areas of no or partial theoretical visibility. There is partial to full theoretical visibility in the area around Downpatrick Head to the northeast, and along the stretch of the R314 regional road near Glenamoy to the west. Aside from these locations there is very limited full theoretical visibility to the west, north, and northeast. It is evident from Figure 14-1 that there is widespread full theoretical visibility beyond 5 km throughout the LVIA Study Area to the south and east. Between 5 km and 10 km to the southeast there is an area of partial theoretical visibility, again as a result of the topography surrounding the site. Aside from this, approximately 15km directly south of the Proposed Development, there are some patches of no theoretical visibility caused by some smaller topographical undulations.

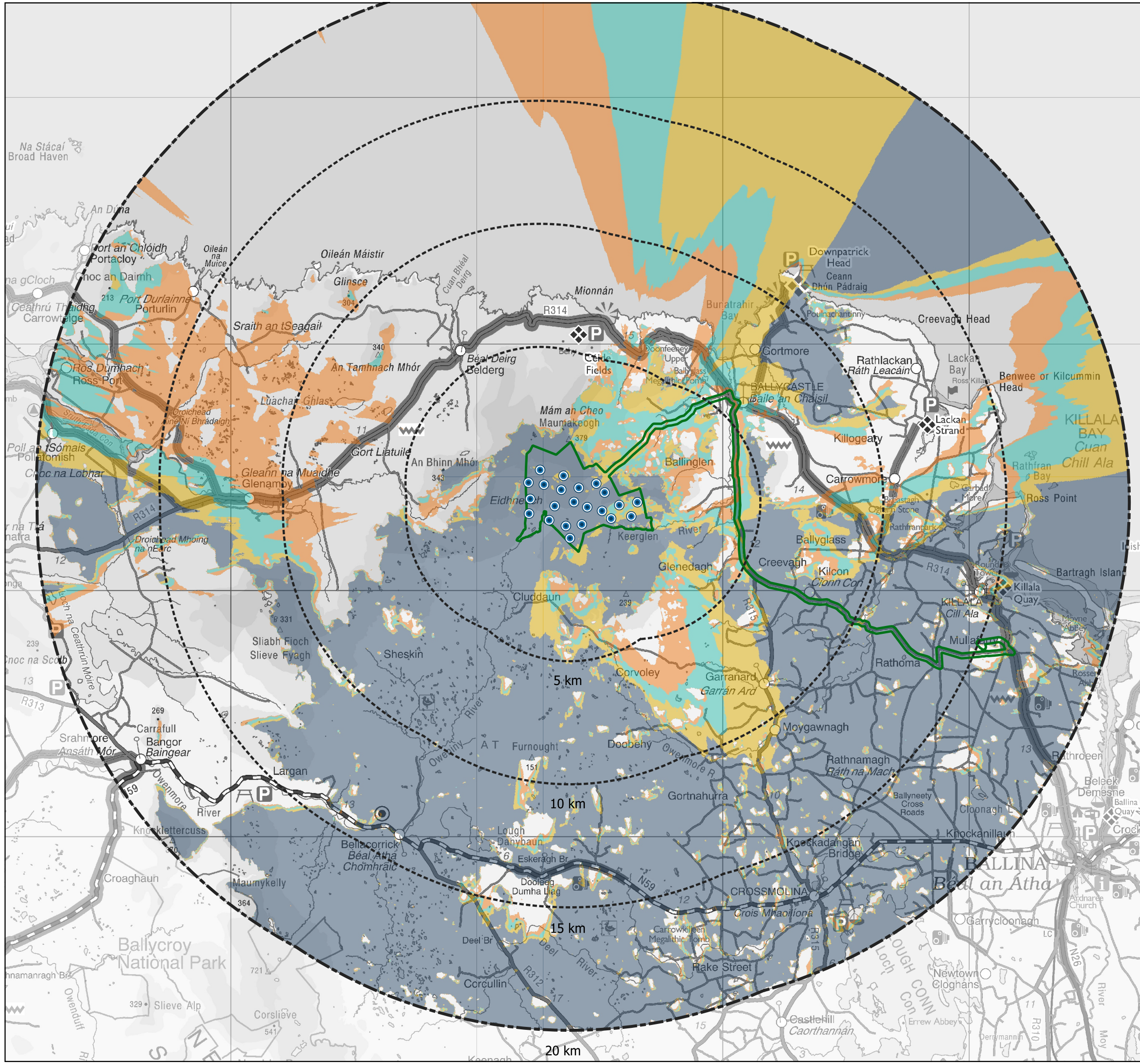
Additional ZTV mapping exercises were conducted to assess the theoretical visibility of the Proposed Development cumulatively with all other existing, permitted and proposed wind farm developments located within 20 km of the Proposed Development. These ZTV maps are presented and discussed in Section 14.6 of this Chapter - *Cumulative Context*.

Briefing Note

During the iterative design process, multiple ZTVs were produced for differing turbine layout designs, with differing numbers of turbines, and differing turbine dimensions and locations, with the aim of reducing visibility of the Proposed Development from sensitive visual receptors to the north. As a result of this iterative design process the proposed turbines are sited at locations below 230m above ordnance datum (AOD) to ensure they are contained by the elevated landform encircling them to the west, north and east (Maumakeogh) which will limit visibility from vast areas in the northerly and westerly parts of the LVIA Study Area.

Map Legend

-  LVIA Study Area
-  EIAR Site Boundary
-  Proposed Turbine Locations
- Zone of Theoretical Visibility**
-  1-5 Turbines Theoretically Visible
-  6-10 Turbines Theoretically Visible
-  11-15 Turbines Theoretically Visible
-  16-22 Turbines Theoretically Visible



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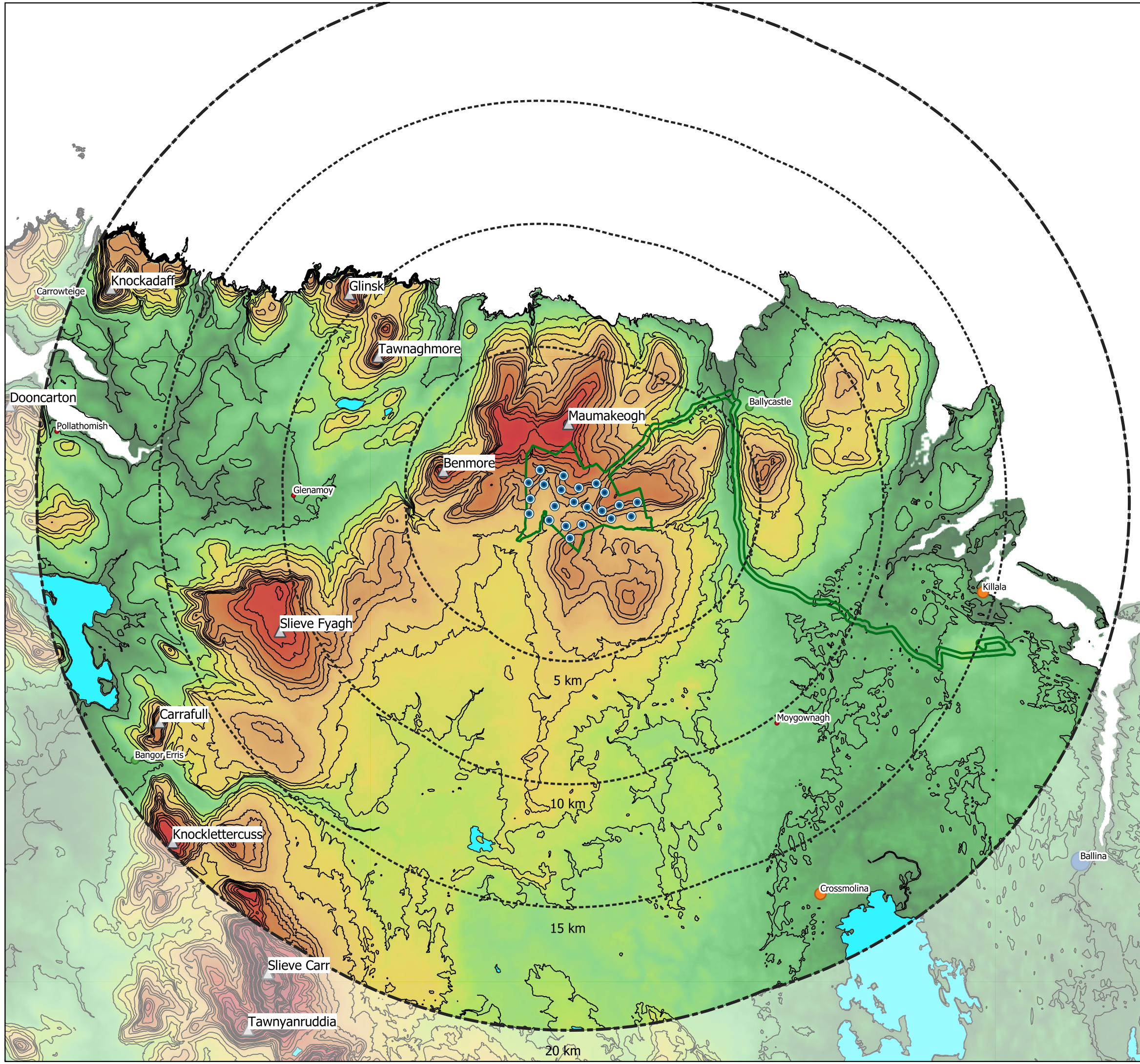
Drawing No. **Figure 14-1**

Drawing Title **Zone of Theoretical**

Project Title **Glenora Renewable Energy Development**

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW





Map Legend

- LVIA Study Area
- EIA Site Boundary
- Proposed Turbine Locations
- Elevation Above Ordnance Datum**
- 1 metre
- 25 metres
- 50 metres
- 75 metres
- 100 metres
- 150 metres
- 200 metres
- 250 metres
- 300 metres
- 350 metres
- 400 metres
- Topographical Features
- Lake Waterbodies
- County Mayo Settlement Hierarchy**
- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5

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Drawing No.

Figure 14-2

Drawing Title

Physical Landscape Features

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW



14.3.3 ZTV Versus Actual Visibility

The ZTV does not account for localised undulations in topography and other screening factors, and actual visibility is often far less than is indicated by the ZTV. Whilst the ZTV is a useful tool to aid analysis of likely visibility of turbines and screen out areas where impacts will not occur. This LVIA in was also informed by visibility appraisals conducted from sensitive receptors throughout the LVIA Study Area during site visits conducted during in 2021, 2022 and 2023. The theoretical visibility and actual visibility recorded from specific visual receptors identified in the LVIA Study Area is reported in Section 14.5 – *Visual Baseline*.

The likely visibility of the Proposed Development was appraised from receptors where the ZTV indicates theoretical visibility, this included an analysis of visibility towards the proposed turbines from the local road network immediately surrounding the Proposed Development Site during an exercise called a ‘Route Screening Analysis’.

14.3.4 Visibility of the Proposed Development in Close Proximity to the Site - Route Screening Analysis

In order to comprehensively demonstrate the varying characteristics of the roads and to record the actual visibility in comparison to the theoretical visibility, a methodology was developed termed Route Screening Analysis, and this was undertaken from all public roads within a five-kilometre radius of the proposed turbines. The full methodology is outlined in Section 1.3.4 of Appendix 14-1 and the categories recorded were as follows:

- Little/No Screening – mainly open and with some very light vegetation (see Plate 14-1)
- Intermittent/Partial Screening – light deciduous roadside vegetation and vegetation with short gaps which would allow intermittent or partial views (Plate 14-2)
- Full Screening – vegetation which is dense enough to block views e.g. coniferous forestry (see Plate 14-3)



Plate 14-1 An Example of ‘Little/No Screening’

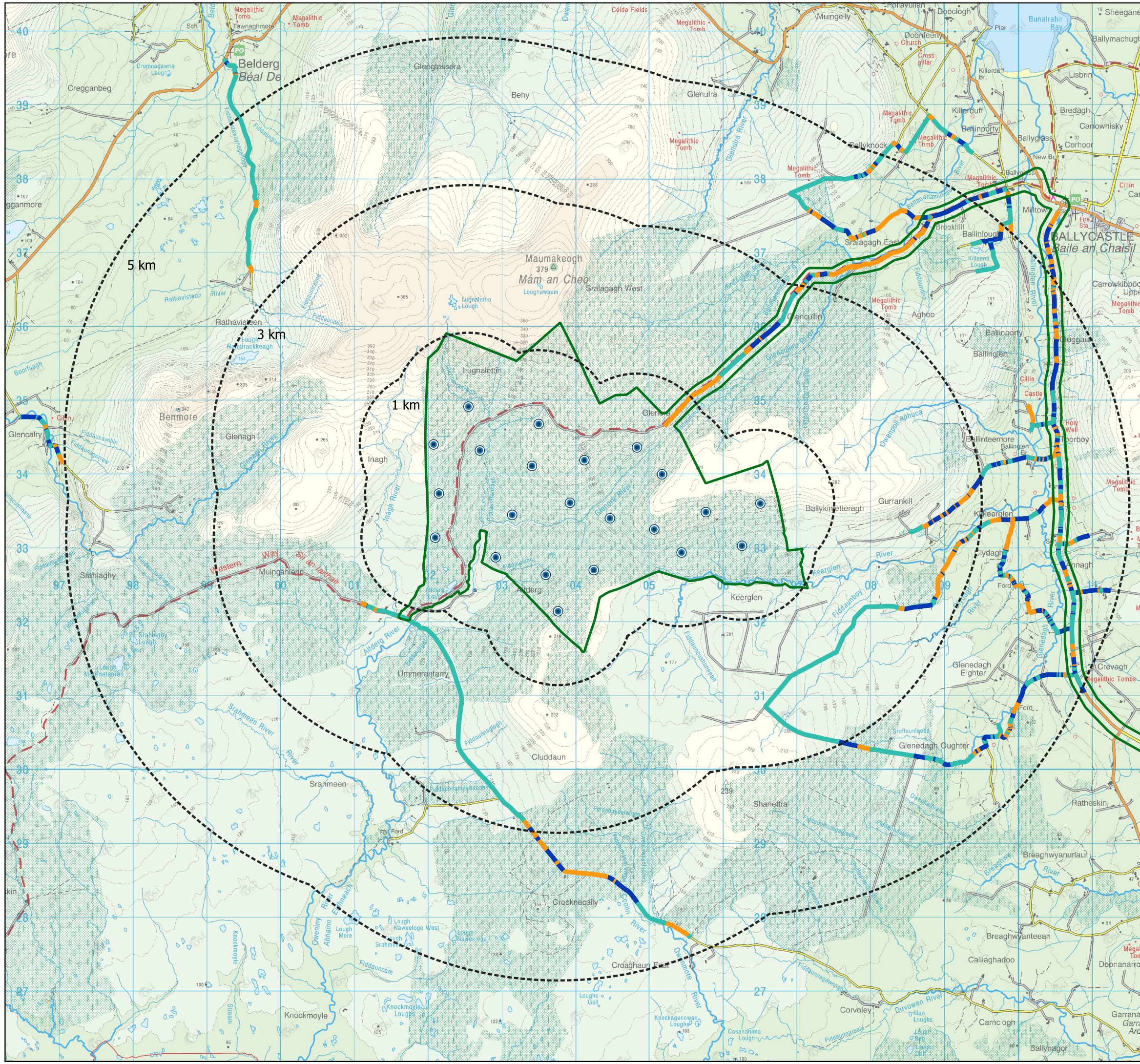


Plate 14-2 An Example of ‘Partial/Intermittent Screening’



Plate 14-3 An Example of ‘Full Screening’

The type of screening recorded on the local road network surrounding the site is mapped in Figure 14-3 below. The Proposed Development is located in a remote and sparsely settled upland landscape. As shown in Figure 14-3, there are very few public roads within 5 km of the site. This figure indicates that the majority of the roads within 5 km of the proposed turbines have ‘Intermittent/Partial Screening’ and ‘Little/No Screening’. Immediately adjacent to the Proposed Development Site boundary, views are restricted and contained due to the presence of mature coniferous forestry as shown in Plate 14-3 above.



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbine Locations
- Route Screening Analysis**
- Little/No Screening
- Intermittent/Partial Screening
- Full Screening

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Drawing No.

Figure 14-3

Drawing Title

Route Screening Analysis

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
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Roads around the Proposed Development Site within 1 km are all local roads of low traffic density. Figure 14-3 shows that there is only one road within 1km, with the screening type recorded as being predominantly ‘Full Screening’ due to presence of forestry. For roads beyond 1km (but within 5 km) to the north and east of the Proposed Development, screening was predominantly recorded as ‘Full Screening’ and ‘Intermittent/Partial screening’. ‘Little/No Screening’ was recorded along the local roads south and southeast of the proposed turbines where the upland landscape has little in the way of roadside vegetation. There are open and expansive views across the moorland landscape surrounding the site to the south and southeast, although long distance views can be restricted by several coniferous forestry plantations located in proximity to these roads, as shown in Plate 14-4 below.



Plate 14-4 An Example of ‘Little/No Screening’ along the load road south of the site.

Within 1-3 km south of the site, ‘Little/No Screening’ is the dominant category. Many of these roads, however, are very in rough condition and are low trafficked. Although there is very little roadside vegetation screening, long distance views along these roads are restricted due to the undulating topography. It is noted that there are very few residential receptors (or any other visual receptors) located in the open upland landscape to the south of the Proposed Development Site within 3km where there is no roadside screening.



Plate 14-5 An Example of ‘Intermittent / Partial Screening’ along the load road north of the site.

In areas assessed beyond 3 km ‘Intermittent/Partial Screening’ is the dominant category. To the north and northeast of the turbines around the village of Ballycastle, ‘Intermittent/Partial Screening’ and ‘Full Screening’ are the dominant category due to the mature vegetation that exists along the local roads. Plate 14-5 above was taken from a local road southwest of Ballycastle and shows an example of the ‘Intermittent/Partial Screening’ present here. The roads into Ballycastle and immediately adjacent to the village are comprised mainly of ‘Full Screening’. The road within the village of Ballycastle were not assessed as part of the route screening as it was beyond 5 km from the site, however, visibility was examined during the viewpoint assessment, and it was found that visibility would be very limited as a result of the screening provided by built infrastructure within the village itself.

The R315 regional road which runs east of the proposed turbines is classed primarily as ‘Intermittent/Partial Screening’, as the majority of this roadway is lined by mature vegetation, and views of the proposed turbines will be intermittent or fully screened. The northern portion of this regional road (south of Ballycastle) has no theoretical visibility indicated by the ZTV due to the steep side of the valley west of the Ballinglen River and the Regional Road.

Table 14-1 Distribution of Screening recorded during Route Screening Analysis.

Screening Class	Length of Road Mapped in Figure 14-3	Percentage Distribution of Screening on the Surveyed Roads
Little/No Screening	22.8 km	48%
Partial/Intermittent Screening	12.2 km	25%

Screening Class	Length of Road Mapped in Figure 14-3	Percentage Distribution of Screening on the Surveyed Roads
Full Screening	12.7 km	27%

‘Little/No Screening’ was recorded for 48% of the surveyed roads and was the most common class recorded, followed by ‘Full Screening’ at 27%, and ‘Intermittent/Partial’ at 25%. Many of the roads with large stretches of ‘Little/No Screening’ are remote local roads of low traffic density in the upland landscape in close proximity to the Proposed Development where there is generally an absence of visual receptors.

Most roadside screening is recorded at lower elevations where the landscape transitions to marginal land comprising agricultural fields, river valleys and residential settlements where more landscape elements such as vegetated field boundaries will screen views. A cluster of residential dwellings are located in the Clydagh and Glenedagh River Valleys to the east of the proposed turbines (mostly greater than > 3km). A mosaic pattern of screening (all three classes) is evident along the local road network in this area to the east where partial theoretical visibility is indicated by the ZTV. A mosaic of different screening classes was recorded along the roadway of the Regional Road which follows the Ballinglen River in a northerly direction to the settlement of Ballycastle and is the main transport route for residents within 5km of the proposed turbines.

In general, the route screening analysis serves to show that actual visibility of the proposed turbines is often far less than indicated by the ZTV, particularly in the lower lying, undulating and more vegetated farmland landscapes to the east.

14.4 Landscape Baseline

The Landscape Baseline provides baseline information about the receiving landscape of the Proposed Development Site and its wider setting. This is broken down into the following sections:

- **Landscape Designations and Policy Context** - Policy setting pertaining to the location and nature of the Proposed Development Site from a landscape perspective based on:
 - Mayo County Development Plan 2022-2028 (MCDP)
 - Landscape Appraisal of County Mayo
- **Landscape Character of the Proposed Development Site** - A description of the physical landscape and characteristics of the site and its immediate landscape setting, this includes the following considerations:
 - Landscape characteristics based upon findings from a site visit conducted in 2021.
 - A review of the Wind Energy Development Guidelines (DoEHLG, 2006) (WEDGs), Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019) (Draft WEDGs) and siting guidance relating to the landscape characteristics of the Proposed Development Site.
 - An appraisal of landscape value and the susceptibility of landscape receptors to change, and a determination of landscape sensitivity.
- **Landscape Character of the wider LVIA Study Area** - A description of landscape in a wider setting including the identification of designated Landscape Character Areas (LCAs) located within 15 km of the Proposed Development based upon:
 - Mayo County Development Plan 2022-2028 (MCDP)
 - Landscape Appraisal of County Mayo

14.4.1 Landscape Designations and Policy Context

This sub-section reviews the policies and objectives of various planning policy documents relating to landscape, planning and the locational siting of wind farms, as they relate to the Proposed Development Site.

The Proposed Development and the entirety of the LVIA Study Area (all areas within 20km) is located in County Mayo, therefore, the Mayo County Development Plan 2022-2028 (hereafter referred to as MCDP), as well as the Landscape Appraisal of County Mayo was consulted to identify landscape designations and policy within the 20 km LVIA Study Area.

14.4.1.1 Mayo County Development Plan

14.4.1.1.1 Landscape Policies and Objectives

The MCDP sets out an overall strategy for the proper planning and sustainable development of the administrative area of Mayo County Council. *Chapter 10* of the MCDP outlines policies pertaining to the natural environment for County Mayo. Landscape policy is also covered in *Chapter 10* of the MCDP. Relevant landscape policy and landscape objectives contained within the MCDP are as follows:

“NEP 14 To protect, enhance and contribute to the physical, visual and scenic character of County Mayo and to preserve its unique landscape character.

“NEO 25 To consider applications for development, along Mayo’s’ Scenic routes, that can demonstrate a clear need to locate in the area concerned, whilst ensuring that it:

- *Does not impinge in any significant way on the character, integrity and distinctiveness of the area;*
- *Meets high standards in siting and design;*
- *Contributes to and enhances local landscape character*
- *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations.”*

Scenic Routes are considered in more detail below in Section 14.4.1.3.

“NEO 26 To consider applications for development, within Mayo’s Coastal Areas and Lakeshores and within areas along scenic routes with designated scenic views, that can demonstrate a long-standing social link to the area concerned, whilst ensuring that it:

- *Does not impinge in any significant way on the character, integrity and distinctiveness of the area;*
- *Cannot be considered at an alternative location;*
- *Meets high standards in siting and design;*
- *Contributes to and enhances local landscape character.*
- *Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations”*

Mayo’s Coastal Areas and Lakeshores, as well as other landscape features are considered in more detail below in Section 14.4.1.4,

“NEO 27 To ensure all development proposals are consistent with the Landscape Appraisal of County Mayo and the associated Landscape Sensitivity Matrix and future editions thereof.

NEO 28 To review the Landscape Appraisal for Mayo and update this plan as appropriate, following publication of the statutory guidelines for Planning Authorities on Local Landscape Character Assessments, as detailed in the National Landscape Strategy 2015-2025 and ensure consistency with the provisions of RPO 4.16 and RPO 5.2(b) of the RSES, 2020-2032.”

The Landscape Appraisal of County Mayo has been consulted, as demonstrated throughout this report, during the Landscape and Visual Impact Assessment conducted and reported here. The Landscape Sensitivity Matrix is considered in greater detail below in Section 14.4.1.2. The assessment contained in rest of this chapter discusses both the Landscape Appraisal of County Mayo and the Landscape Sensitivity Matrix in line with the above policies and objectives.

“NEO 29 Require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscapes, where appropriate.”

14.4.1.1.2 County Mayo Renewable Energy Strategy

The MCDP refers to the Renewable Energy Strategy (RES) for County Mayo (2011-2020) and states that *“Mayo County Council will commence the review and update the Mayo Renewable Energy Strategy within one year of adopting this plan.”* In the absence of this update the RES is referred to in relation to policy relevant to landscape and visual effects in the LVIA Study Area. The RES outlines the strong need for wind energy developments in the county and states:

“any proposals for on-shore wind farm developments will be determined in accordance with the Wind Energy Development Guidelines (DoEHLG) 2006 or any subsequent guidelines and the requirements set out in Section 6.5”.

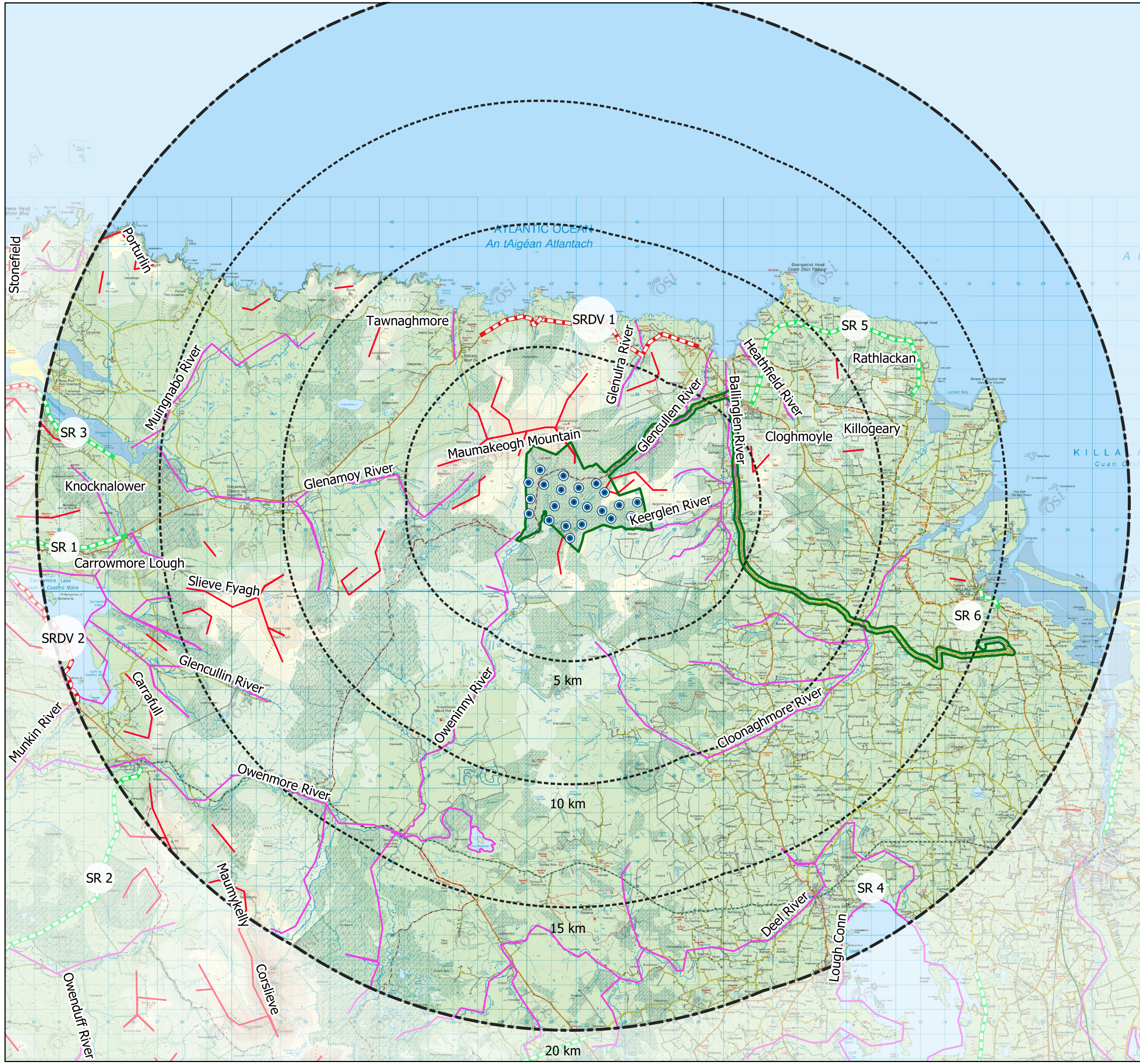
Section 6.4.1 of the RES outlines areas within the county suitable for onshore wind energy development. These 4 classifications areas are as follows:

- **“Priority Areas:** are areas which have secured planning permission and where on shore wind farms can be developed immediately.
- **Tier 1- Preferred (large wind farms):** are areas in which the potential for large wind farms is greatest.
- **Tier 1- Preferred (cluster of turbines):** are areas identified as being most suitable for smaller clusters of wind turbines (clusters of up to three to five turbines depending on site conditions and visual amenity).
- **Tier 2- Open to Consideration:** identifies areas which may be considered for wind farms or small clusters of wind turbines but where the visual impact on sensitive or vulnerable landscapes, listed highly scenic routes, scenic routes, scenic viewing points and scenic routes will be the principal consideration. The Tier 2 classification will be reviewed by the Council following a determination by EirGrid of grid infrastructure for the County.”








4 No. of the proposed turbines fall within the classification areas *Tier 2 - Open to Consideration* and 3 No. turbines fall within the classification area of *Tier 1- Preferred (large wind farm)* as set out in the RES for County Mayo. The remaining turbines are within an area that does not fall under any designation in the RES, however, the turbines are all proposed within 700 m of the *Tier 2 - Open to Consideration* or *Tier 1- Preferred (large wind farm)* designation (refer to Chapter 2, Section 2.4.3.2 of this EIAR).

The Renewable Energy Strategy also gives guidance on issues relating to landscape and states that “renewable energy developments shall avoid sensitive and vulnerable landscapes, listed highly scenic views, scenic views, scenic viewing points and scenic routes where detailed visual analysis demonstrates that the development will have an adverse effect on those landscapes.”

The classification zones can be found on Figure 14-6 and *Map 8* of the County Mayo RES. Large areas within the 20km LVIA Study Area include classification areas of *Tier 2 - Open to Consideration*, *Tier 1 - Preferred (large wind farm)* and *Consented* and *Priority Areas*.



Map Legend

-  LVIA Study Area
-  EIAR Site Boundary
-  Proposed Turbine Locations
- County Mayo Visually Vulnerable Features**
-  Vulnerable Features - Skylines or Ridgelines
-  Vulnerable Features - Riverbanks / Lake Shores
- County Mayo Designated Scenic Routes**
-  Scenic Route
-  Scenic Route with Designated View

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Drawing No.

Figure 14-4

Drawing Title

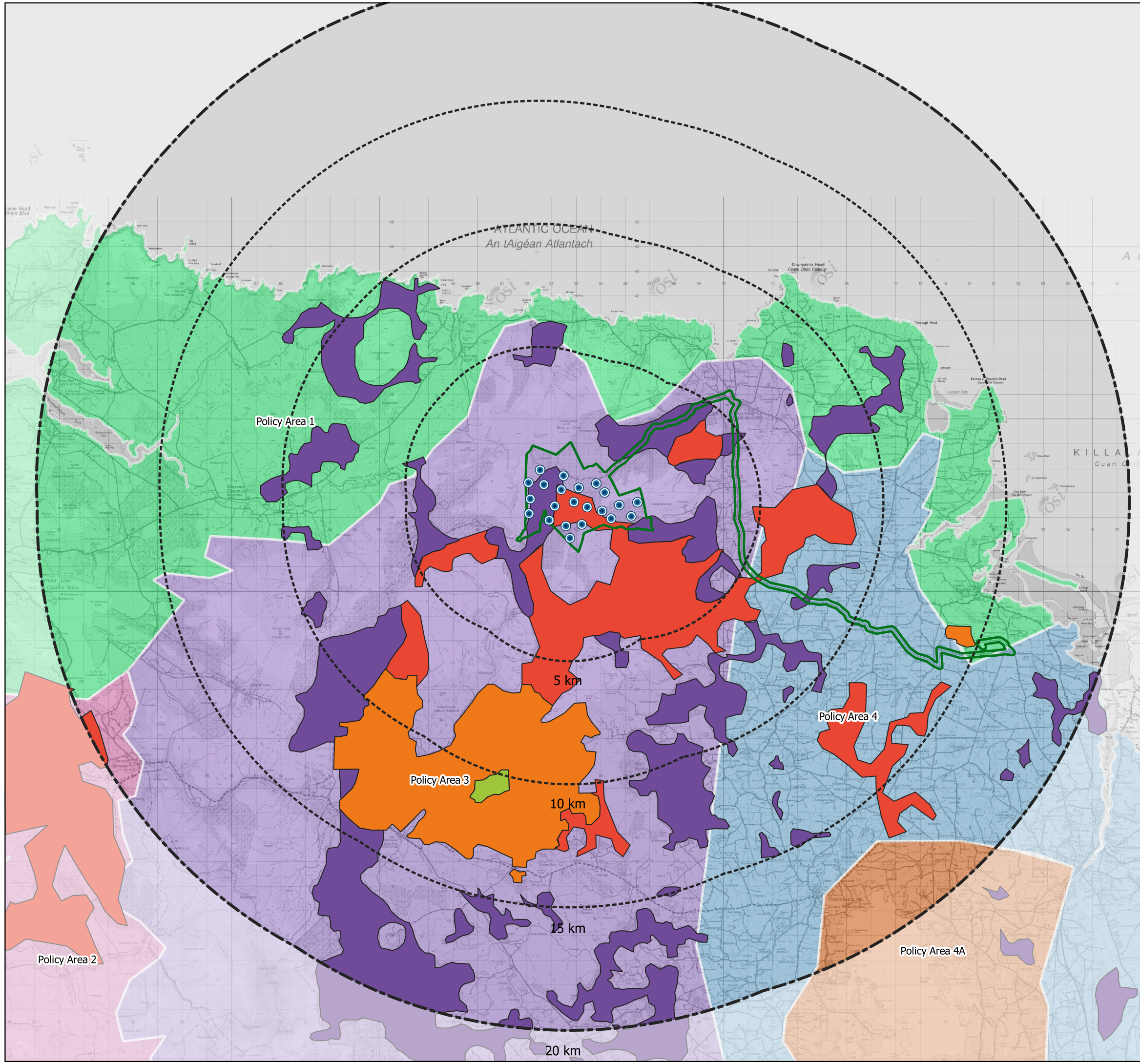
Landscape Baseline

Project Title






Glenora Renewable Energy Development

Scale 1:150,000	Project No. 201120	Date 15.11.2023	Drawn By JS	Checked By JW
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Map Legend

-  LVIA Study Area
-  EIA Site Boundary
-  Proposed Turbine Locations
- Landscape Policy Areas**
-  Policy Area 1
-  Policy Area 3
-  Policy Area 4
-  Policy Area 4A
- Renewable Energy Strategy Designations**
-  Priority Areas
-  Priority Areas - Existing Windfarm
-  Tier 1 - Preferred (large wind farms)
-  Tier 2 - Open to Consideration

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Drawing No.

Figure 14-6

Drawing Title
Landscape Policy Areas and RES

Project Title
Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW



14.4.1.2 Landscape Sensitivity

The Landscape Appraisal for County Mayo outlines ‘Landscape Policy Areas’ (LPAs) within the county boundary, as shown in Figure 14-6. The Landscape Appraisal for County Mayo groups Landscape Character Units (see section 14.4.3.2 below for further discussion of these) with similar visual landscape elements into one of four LPAs, shown on Figure 14-6 above and include:

1. Montaine Coastal
2. Lowland Coastal
3. Uplands, Moors, Heath or Bogs
4. Drumlins and Inland Lowlands

The Proposed Development is located within LPA 3 which is designated as *Area 3 – uplands, moors, heath or bogs*. The Landscape Appraisal for County Mayo states the following policies with regards to development in LPA 3:

Policy 12: *Recognise the occurrence of areas of highly valued scenic vistas, uninterrupted by shelter vegetation or undulating topography, which can cover vast areas and are abundant.*

Policy 13: *Encourage development that will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, as identified in the Development Plan, when viewed from areas of the public realm.*

Policy 14: *Encourage development that will not interrupt or penetrate distinct linear sections of primary ridge lines when viewed from areas of the public realm.*

Policy 15: *Facilitate developments that have a locational requirement to be situated on elevated sites (e.g. telecommunications and wind energy structures). It is necessary however to ensure that adverse visual impacts are avoided or mitigated wherever possible.*

Policy 16: *Preserve from development any areas that have not already been subject to development, which have retained a dominantly undisturbed upland/moorland character.”*

Other LPAs located within the 20km LVIA Study Area include LPAs 1, 2, 4 and 4A (a sub-policy area of LPA 4).

The Development Impact – Landscape Sensitivity Matrix outlined in the Landscape Appraisal for County Mayo and shown in *Figure 10.1* of the MCDP, reproduced in Figure 14-7 below, provides a general indication of the likelihood of success of planning applications for each development type. Under the Landscape Appraisal of County Mayo, the Proposed Development Site is located within LPA 3 which is shown in Figure 14-7 to have a:

“High potential to create adverse impacts on the existing landscape character. Having regard to the intrinsic physical and visual characteristics of the landscape area, it is unlikely that such impacts can be reduced to a widely acceptable level”.

Development Impact - Landscape Sensitivity Matrix								
	Wind farms	Power lines	Quarrying/ Extraction	Forestry	Commun- -ication Masts	Industrial/ Commercial	Rural Dwellings	Road Projects
Policy Area 1	Red	Red	Yellow	Yellow	Red	Green	Green	Green
Policy Area 2	Red	Red	Yellow	Yellow	Red	Green	Green	Green
Policy Area 3	Red	Red	Red	Red	Yellow	Yellow	Green	Green
Policy Area 4	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green

Key

- = High potential to create adverse impacts on the existing landscape character. Having regard to the intrinsic physical and visual characteristics of the landscape area, it is unlikely that such impacts can be reduced to a widely acceptable level.
- = Medium potential to create adverse impacts on the existing landscape character. Such developments are likely to be clearly discernible and distinctive, however with careful siting and good design, the significance and extent of impacts can be minimised to an acceptable level.
- = Low potential to create adverse impacts on the existing landscape character. Such development is likely to be widely conceived as normal and appropriate unless siting and design are poor.

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Figure 14-7 Landscape Sensitivity Matrix (extracted from the MCDP)

The Landscape Sensitivity Matrix suggests that all LPAs are sensitive to wind farm development, which is in some contradiction to the wind energy strategy that has areas designated as ‘Priority’, ‘Preferred’ and ‘Open to Consideration’ in landscape policy areas marked as having ‘high potential to create adverse impacts’. The LPAs are outlined in more detail on Figure 14-6.

14.4.1.3 Scenic Routes and Scenic Views

Mayo County Council designates scenic routes and prospects in *Chapter 10* and on *Map 10.2* of the MCDP and includes the following objective (also quoted above):

“NEO 25 To consider applications for development, along Mayo’s’ Scenic routes, that can demonstrate a clear need to locate in the area concerned, whilst ensuring that it:

- Does not impinge in any significant way on the character, integrity and distinctiveness of the area;*
- Meets high standards in siting and design;*
- Contributes to and enhances local landscape character*
- Satisfies all other criteria, with regard to, inter alia, servicing, public safety and environmental considerations.”*

Two classes of scenic routes are shown on *Map 10.2* of the MCDP, ‘*Scenic Routes*’ and ‘*Scenic Routes with Designated Views*’, these are shown on Figure 14-4 above. There are no Scenic Routes or Scenic Routes with Designated Views within the site or within 5 km of the Proposed Development Site boundary. The closest Scenic Route with Designated Views is approximately 5.5 km northeast of the nearest proposed turbine. The closest Scenic Route is located 5.7 km northeast of the nearest proposed turbine.

Table 14-2 below outlines the Scenic Routes and Scenic Routes with Designated Views within the LVIA Study Area, including the type of scenic route and the description of the route. It is noted that scenic routes and scenic views are described in the Landscape Appraisal for County Mayo, which is a supporting document for the MCDP but the descriptions contained therein do not always align with the Scenic Routes shown on *Map 10.2* in the MCDP. Therefore, the descriptions contained within have been incorporated within Table 14-2 below, but the descriptions are altered in some cases.

Table 14-2 Designated Scenic Routes and Scenic Views

Viewpoint Type	View Description	Figure 14-4 Map Ref.	Distance of the receptor from the nearest proposed turbine
Scenic Routes with Designated Views	R314 at Ceide Fields (looking towards the Atlantic Ocean).	SRDV 1	5.4km
Scenic Routes with Designated Views	Local road along the western shore of Carrowmore Lake.	SRDV 2	19.5km
Scenic Route	R314 from Ballanaboy to Barnatra.	SR 1	16.4km
Scenic Route	N59 from Bangor to east of Rosturk.	SR 2	18.9km
Scenic Route	Local road from south of Pollatomish to Barnatra.	SR 3	17.1km
Scenic Route	Local road north of Lough Conn	SR 4	17.5km
Scenic Route	Local road northeast of Ballycastle passing Downpatrick Head	SR 5	6.1km
Scenic Route	R314 within the settlement of Killala	SR 6	14.5km

14.4.1.4 Designated Vulnerable Features

Section 3 of the Landscape Appraisal for County Mayo designates a number of areas within the county as vulnerable. These areas include:

- > The coastline
- > The banks of the Rivers
- > The shoreline of all lakes
- > The skylines of upland areas
- > All headlands and promontories

Skylines and Ridges

As seen on Figure 14-4 above, there are a number of skylines and ridges of upland areas located within the LVIA study area and in close proximity to the Proposed Development. The skylines and ridges designated as vulnerable are listed in the Landscape Appraisal for County Mayo. The listed designations that are located within the LVIA Study Area are:

- > Tawnaghmore
- > Slieve Fyagh
- > Rathlackan
- > Porturlin
- > Maumykelly
- > Maumakeogh Mountain
- > Knockascallop
- > Knocknalower
- > Knocklettercuss
- > Knockadaf
- > Killogeary
- > Cloghmoyle
- > Carrafull

According to *section 3.1(b)* of the Landscape Appraisal for County Mayo 2014-2020, the following policy applies to these features:

“These areas or features designated as vulnerable represent the principal features which create and sustain the character and distinctiveness of the surrounding landscape. To be considered for permission, development in the environs of these vulnerable areas must be shown not to impinge in any significant way upon its character, integrity or uniformity when viewed from the surroundings. Particular attention should be given to the preservation of the character and distinctiveness of these areas as viewed from scenic routes and the environs of archaeological and historic sites.”

Wind turbines by their nature are tall vertical objects, they have the potential to visually interfere with the character, integrity and uniformity of these vulnerable features when viewed from the surroundings, these factors are incorporated into the assessment of landscape effects on these features in Section 14.7.3.1 below. In order to identify landscape effects on these designations that are likely to be of greatest significance, the assessment of landscape effects concentrates on ridgelines in close proximity (approx. 5km) to the Proposed Development, where the proposed turbines will appear in a larger horizontal and vertical extent within views upon these features from their surroundings.

The ZTV map (Figure 14-1 above) was used to determine potential locations where there will likely be visibility of the Proposed Development within views of the ridgelines noted above, including consideration of the distance between the Proposed Development and the ridgelines, it was determined that potential likely significant landscape effects on the character, integrity or uniformity of these features is only potentially likely to occur for those features located in close proximity (approx. 5km) to the Proposed Development. The following landscape features are therefore screened in for further assessment:

- > Cloghmoyle
- > Maumakeogh mountain

The Shorelines of Lakes, Rivers, and Estuaries

As seen on Figure 14-4 above, there are a number of banks of rivers and shorelines of lakes that have been listed in the Landscape Appraisal for County Mayo that are located within the LVIA Study Area. The listed designations that are located within the LVIA Study Area are:

- > Oweninny River
- > Muingnabo River
- > Lough Conn
- > Keerglen River
- > Heathfield River
- > Glenulra River
- > Glencullen River
- > Glenamoy River
- > Deel River
- > Cloonmore River
- > Carrowmore Lough
- > Belderg River
- > Ballinglen River

The policy from *section 3.1(b)* of the Landscape Appraisal for County Mayo quoted above in relation to skylines and ridgelines is also applicable to the designations listed above in this section. As tall vertical objects, wind turbines by their nature have the potential to visually interfere with the character, integrity and uniformity of these vulnerable features when viewed from the surroundings, these factors are incorporated into the assessment of landscape effects on these features in Section 14.7.3.1 below. In order to identify the likely landscape effects of greatest significance on these designations, the assessment of landscape effects concentrates on riverbanks and lakeshores that are in close proximity to the Proposed Development, where the turbines will appear in a larger horizontal and vertical extent within views upon these features from their surroundings, as well as other considerations such as the uniqueness, wildness, and naturalness of landscape features at different locations.

The ZTV map (Figure 14-1 above) was used to determine potential locations where there will likely be visibility of the Proposed Development within views of the riverbanks and lakeshores noted above, including consideration of the distance between the Proposed Development and the riverbanks and lakeshores. It was determined that potential likely significant landscape effects on the character, integrity or uniformity of these features is only potentially likely to occur for those features located in close proximity (approx. 5km) to the Proposed Development. The following landscape features are therefore screened in for further assessment:

- > Oweninny River
- > Keerglen River
- > Glencullen River
- > Glenulra River

14.4.1.5 Tourism Strategy

Chapter 5 of the MCDP – Tourism and Recreation, outlines the following policy in relation to the Wild Atlantic Way Tourist Route:

“To support the promotion of the Wild Atlantic Way in its role to grow the economic contribution of tourism along its route, through the upgrade and improvement of the touring network, facilities and visitor attractions through:

(a) Exploration of the development of signature discovery points to assist and secure Mayo’s position as ‘The Heartbeat of the Wild Atlantic Way’.

(b) Working with all relevant stakeholders and Fáilte Ireland to facilitate the erection of standardised signage for tourism facilities and tourist attractions along the Wild Atlantic Way.

(c) Working with relevant landholders and recreational/tourism agencies to increase access to the countryside and our coastal areas, and to ensure maintenance and access to the existing network of trails, paths, and tourist sites along the Wild Atlantic Way.

(d) Supporting the exploration of the development of new tourist services, parking and facilities or upgrading/extension of existing tourist services, parking and facilities at tourist sites along the Wild Atlantic Way.

(e) Build the concept of sustainability firmly into ongoing planning processes for tourism and outdoor recreation. In conducting tourism and recreation planning processes during the lifetime of the Mayo CDP, work towards adopting an ecosystem-based approach that assesses capacity of landscapes, communities, and natural resources to provide a basis for decision making that is firmly based on the principles of sustainability.

(f) Apply environmental measures as presented in the Wild Atlantic Way Operational Programme, the SEA and NIR of the Destination Mayo Strategy and support monitoring of environmental effects associated with tourism growth to ensure cumulative and in combination effects are avoided.

(g) To support the preparation of a masterplan and/or visitor traffic management plan at Downpatrick Head-Discovery Point.”

The Wild Atlantic Way is described in the MCDP as showcasing “*the natural assets and outstanding scenery of the West*”. Chapter 5 goes on to note that the Wild Atlantic Way “*contains 35 Discovery Points, three of which are Signature Points (Downpatrick Head, Keem Bay & Killary Harbour)*”, further noting that “*Signature Discovery points are worthy of significant investment and works have been completed at Downpatrick Head.*”

Whilst the MCDP identifies Downpatrick Head and the rugged landscape of the north Mayo coastline as a valuable tourism asset, it is noted that Downpatrick Head is not the subject of, or the source of any a designated scenic views within the MCDP. However, the location is noted as a Signature Discovery point along the Wild Atlantic Way, which has been noted for its scenic value in the MCDP.

Downpatrick head is considered as part of the visual impact assessment reported in this chapter (see Section 14.7.3 below). However, considering its important as a landscape feature along the coast, the headland is also considered in relation to potential landscape effect and is fully assessed below for landscape effects in Section 14.7.3.

14.4.1.6 **Summary of Potential Landscape Receptors- Landscape Designations and Sensitivity**

As outlined above, County Mayo landscape designations were identified within the 20km LVIA Study Area. Landscape designations within the study area include several LPAs, and several designated landscape features, including ridgelines, riverbanks and lakeshores. The ZTV map overlaid on the identified landscape receptors (Figure 14-5 above) was used to conduct a preliminary assessment to discern if there was theoretical visibility of the proposed turbines from each landscape receptor or from locations where each landscape receptor was viewed from. Knowledge attained from site visits and desk-based analysis was used to assess if there is likely to be any actual visibility of the Proposed Development and the nature of this visibility from the designated landscape receptors. This visibility (theoretical and actual) in the LPAs is discussed in Table 14-3 below.

Table 14-3 Landscape Receptors – Landscape Policy Areas

Description	Landscape Designation	Theoretical Visibility (ZTV)	Screened in for Further Assessment?
Up to 5km			
Landscape Policy Area 3	Area of High Landscape Sensitivity to Wind Farms	Mainly full to partial visibility.	Yes
Landscape Policy Area 1	Area of High Landscape Sensitivity to Wind Farms	Mainly no visibility with some areas of partial visibility.	Yes
5 to 10km			
Landscape Policy Area 4	Area of High to Moderate Landscape Sensitivity to Wind Farms	Mainly full to partial visibility.	Yes
15 to 20km			
Landscape Policy Area 4A	Area of High to Moderate Landscape Sensitivity to Wind Farms	Mainly full to partial visibility.	No
Landscape Policy Area 2	Area of High Landscape Sensitivity to Wind Farms	No Visibility.	No

As exhibited in Table 14-3, LPAs 3 and 4 are the only designated LPAs likely to have any substantial visibility of the Proposed Development. The ZTV indicates that there will be widespread visibility of the proposed turbines from the flat and open landscape to the south. LPAs 3 and 4 are screened in for further assessment as a result. LPAs 2 and 4A are primarily located outside of the LVIA Study Area and therefore are not assessed further in this report. In LPA 1 there is partial to no visibility anticipated within the majority of this policy area, particularly in the areas located in closest proximity to the Proposed Development. There is full theoretical visibility within LPA 1 in the area around Downpatrick Head as well as within a portion of LPA 1 approximately 15 km to the west of the Proposed Development. Given the sensitivity of this LPA in general and the theoretical visibility indicated on Figure 14-1, LPA 1 is screened in for further assessment.

The other landscape receptors (skylines, ridgelines, riverbanks, and lakeshores) noted above as screened in for further assessment based on a preliminary assessment of the potential for the Proposed Development to interfere with character, integrity and uniformity of these vulnerable features when viewed from the surroundings, are listed below in Table 14-4.

Table 14-4 Vulnerable Landscape Receptors Screened **In** for Further Assessment

Landscape Receptor	Description
Ridgeline or Skyline	Cloghmoyle
	Maumakeogh mountain
Riverbanks or Lakeshore	Oweninny River
	Keerglen River
	Glencullen River
	Glenulra River
Wild Atlantic Way Signature Discovery Point	Downpatrick Head

14.4.2 Landscape Character of the Proposed Development Site

Landscape character refers to the distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how people perceive this. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement, and creates the particular sense of place found in different areas.

14.4.2.1 Site Visit Findings

The Proposed Development Site was visited during 2020, 2021, and 2023 where a preliminary assessment of topography, drainage, landcover and land use was conducted in conjunction with other LVIA surveys. Information gathered during these visits have informed the following site descriptions.

Topography and Landform

As shown in Figure 14-8 below, the proposed turbines are located on a sloped hill, at elevations below 230m above ordnance datum (AOD). There are areas of higher elevations surrounding the proposed turbines to the west, north, east and southeast, as seen on Figure 14-9 below. The proposed turbines are located on the lower regions of the slopes of the hills and mountains surrounding them, and are, in effect, saddled by the surrounding topography. As seen on Figure 14-9 below, the proposed met mast is located on the lowest regions of the slopes of the hills, along the southern border of the site boundary. The proposed underground cable route, marked by the EIAR Site Boundary follows forest tracks between two peaks to the northeast of the Proposed Development Site, and joins the R315 regional road northeast of the site, at a relatively lower elevation than the proposed turbines, and follows this road until it reaches Tawnaghmore substation to the east, which is located within a larger area of flat topography.

The heightened elevated lands, and in particular those surrounding the proposed turbines to the north and west allow for shortened, localised views towards the site. The local topography of the area is relatively mountainous and undulating, with an elevation range of 117m AOD in the southwest to 320m AOD in the north.

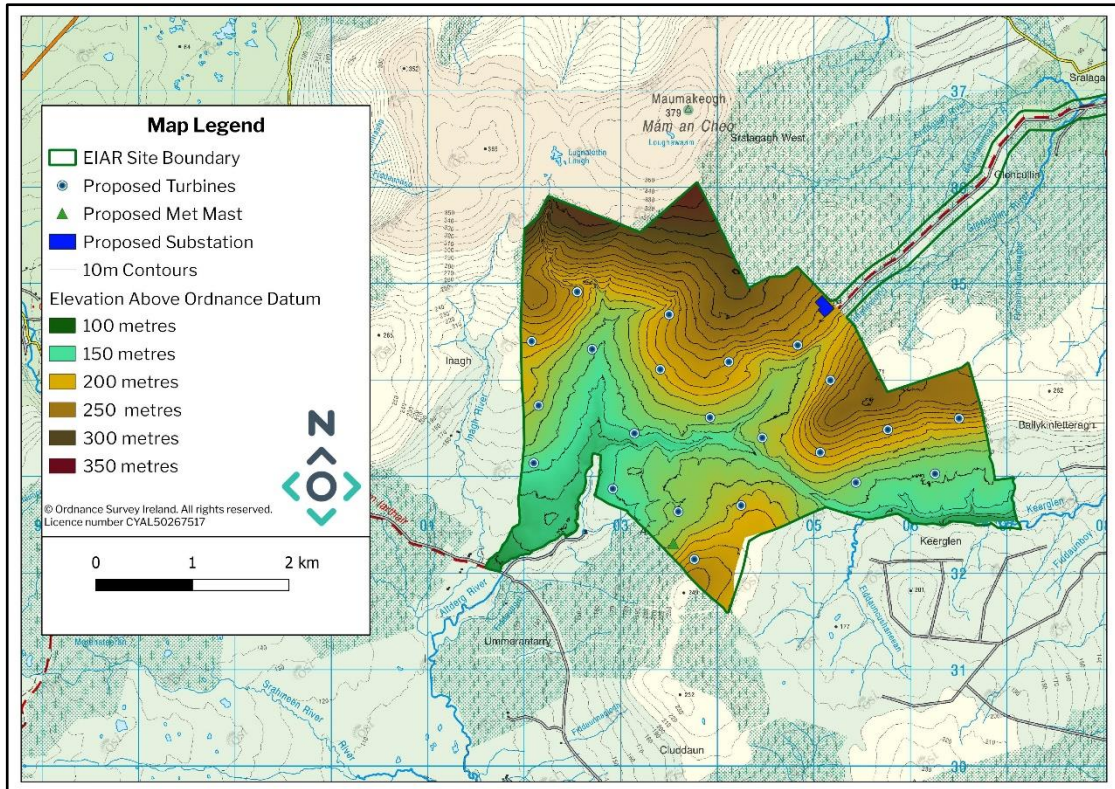


Figure 14-8 Topography of the Proposed Development Site

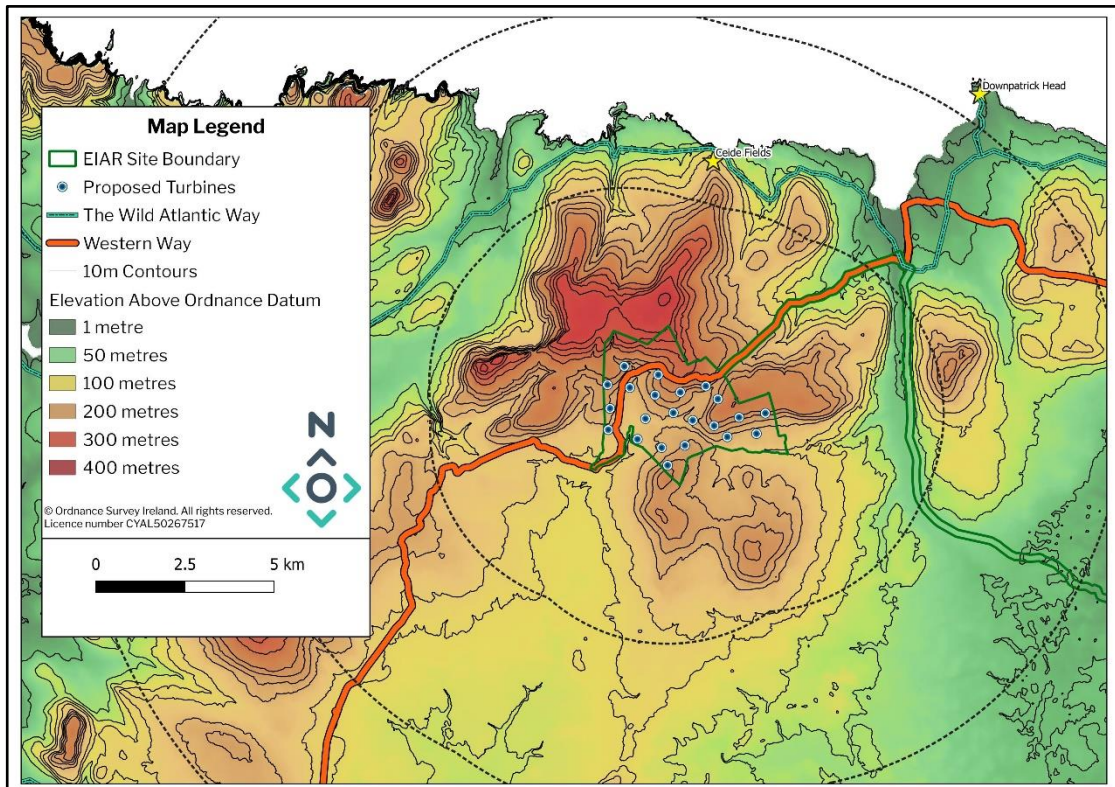


Figure 14-9 Topography Surrounding the Proposed Development Site

The topography of the Proposed Development Site and its surrounds is a key feature in the landscape, limiting visibility of the Proposed Development from large areas and key sensitive visual receptors in the LVIA Study Area. Due to the topographical profile of the surrounding landscape, visibility of the

Proposed Development will mainly be concentrated to the lower elevated lands (flat bogland plain) to the south and east.

The majority of open views found to be directed towards the site are limited to this area of open flat bogland. In other direction views around the site are very limited in extent. The majority of the views within the EIAR Site Boundary are rural and remote in character and the landscape is characterised by undulating topography with a mix of scrub vegetation and mature coniferous forestry plantation. See Plate 14-6 below.



Plate 14-6 Image indicating the topography of the Proposed Development Site.

Drainage

The majority of the Proposed Development Site is within the Owenmore River catchment and includes tributaries/headwaters of Altderg Lough and Altderg River (Glennafrankagh and Piddaunfrankagh) in the west and the Glenora Stream in the east. The south-eastern portion of the Site is within the Ballinglen River catchment and contains a tributary of the Keerglen River (Ballykinlettragh). The Inagh River is also in close proximity to the western boundary, flowing through the Inagh Bog NHA to the west. The key hydrological features within the site are the Alterg River and Glenora Stream which ultimately drain into the Owenmore River.

The watercourses outlined here define the topography of the Proposed Development Site, following the depressions in the topography throughout the site. The confluence of the Alterg River and Glenora Stream watercourses is located at the south-western corner of the site, and this is the point which the topography of the site generally slopes downwards towards. The south-eastern part of the site drains into the Keerglen River which discharges into Bunatrahir Bay.

Further details regarding site drainage are set out in Chapter 9 of this EIAR: *Hydrology and Hydrogeology*. The watercourses outlined here define the topography of the Proposed Development

Site, following the depressions in the topography throughout the site as well as influencing the localised undulations in topography.

Landcover

Landcover is the term used to describe the combinations of vegetation and land-use that cover the land surface. It comprises the more detailed constituent parts of the landscape and encompasses both natural and man-made features.

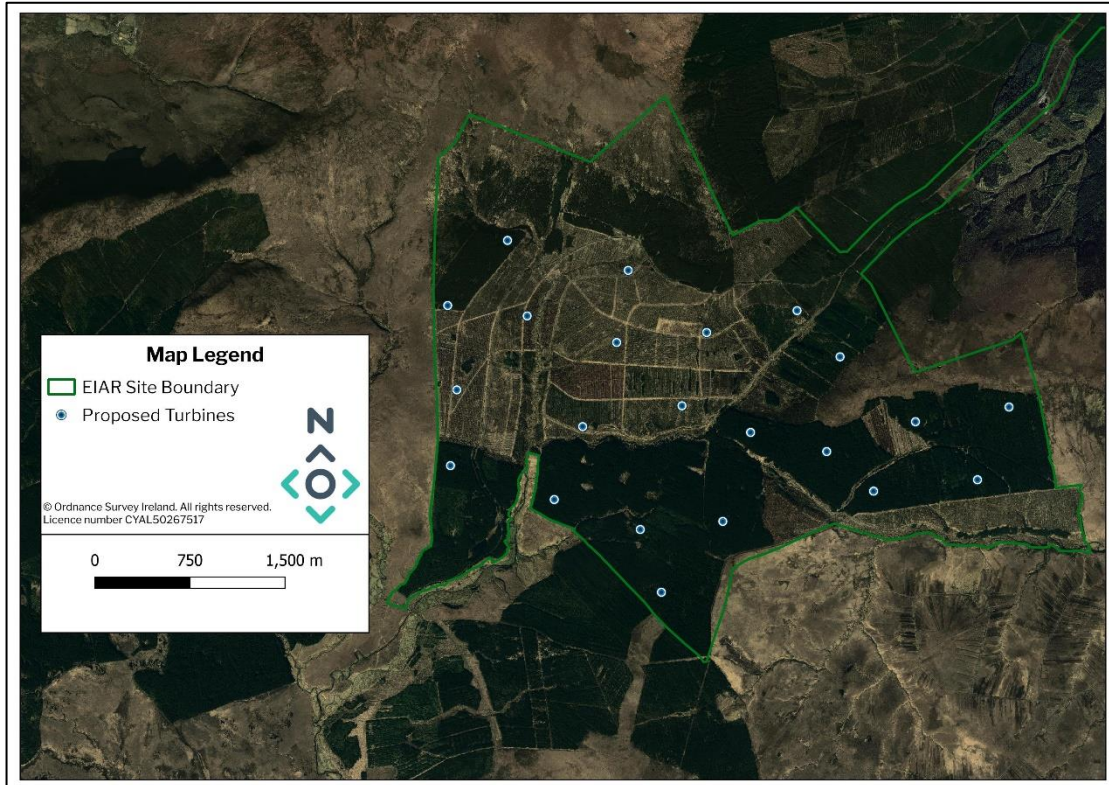


Figure 14-10: Aerial view of the Proposed Development Site showing the landcover.

The land cover of the vast majority of the site comprises of young to mature forestry coverage and low scrub vegetation, and example of which can be seen in Plate 14-7 below. The remainder of the site is dominated by degraded upland blanket bog. Due to forestry activities, there are large areas of the site where tree felling has occurred, with the landcover in these areas comprising low scrub vegetation, bare earth and the remnants of the coniferous trees that have been removed, shown below in Plate 14-8. There are also a number of forest tracks throughout the site which are primarily comprised of gravel, as seen in Plate 14-6 above.



Plate 14-7: Low scrub vegetation and coniferous forestry plantation within the Proposed Development Site.



Plate 14-8 View of a recently felled area of forestry on the Proposed Development Site

Land Use

The primary land use at the Proposed Development Site is commercial forestry, with widespread young to mature forestry coverage. The forestry operations make the site a modified working landscape, however, it is a remote and isolated upland area, substantially distanced (> 5 km) from any substantial human settlement. The Western Way walking track traverses through the site from north to south, as seen on Figure 14-9 above.

Wind energy is also a significant land-use in the wider landscape setting and includes the operating Bellacorick and Oweninny I, and Oweninny II Wind Farms, and the consented ABO Sheskin Wind Farm. The locations of the existing, permitted, and proposed wind farms are listed and shown below in Section 14.6 – *Cumulative Context*. All existing and permitted wind farms within 20 km of the proposed turbines are considered to form part of the likely future receiving environment, these are

detailed below in Section 14.6. As further detailed below in Section 14.6, proposed wind farms are also included within the assessment of cumulative effects.

In addition to forestry and wind energy, other land-uses in the wider surrounding area include agriculture, peat-cutting and low-density residential areas. Grid infrastructure in the area includes the Bellacorick 38kV and 110kV substation located approximately 13 km south of the Proposed Development Site off the N59 national road. The nearest 110kV lines run from the Bellacorick substation and terminate at the Moy 110kV substation 13 km south of the EIAR Site Boundary. A 110kV line runs from the Tawnaghmore peaker plant 14km east of the site and joins the Moy substation 8 km to its south.



Plate 14-9: View showing the current land use conditions of the site.

Views and Aesthetic Qualities

Within the Proposed Development Site, including from the Western Way walking route that passes through the site, there are several types of views, as shown in Plate 14-10 and Plate 14-11 below. The site can predominantly be described with having restricted small-scale views, as much of the Site is defined by mature coniferous forestry as shown in Plate 14-10 below. Open and unrestricted views with very little screening are common outside the EIAR Site Boundary to the north and south. The local road network adjacent to the site to the north and south allow for more open views towards the site as there is very little vegetation present along these roadways. Given that the roads and Western Way access track travelling through the site are of low quality, there will be very few visual receptors travelling through the site.

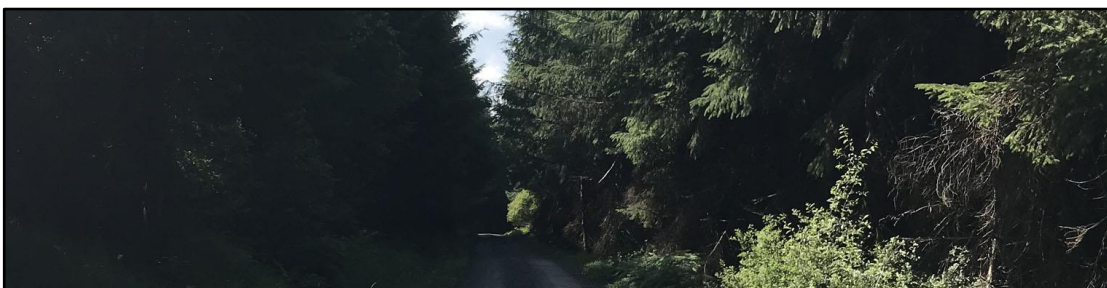


Plate 14-10 Restricted small-scale views within the site boundary defined by mature coniferous forestry.



Plate 14-11 More open, unrestricted view from the local road immediate south of the proposed site boundary.

The landscape of the Proposed Development Site can be described as that of a remote landscape setting. There are very few visual receptors within 5 km of the site including residential receptors and road networks. This is shown in Plate 14-12 and Plate 14-13 below, which illustrates the remote landscape setting characterised by one-off housing and agricultural fields as the defining landscape characteristic of the LVIA Study Area. The spatial extent and scale of the open, remote landscape, with very little development, is shown in Plate 14-12 and Plate 14-13.



Plate 14-12 View from the R315 looking west towards the proposed site.



Plate 14-13 View south-west towards the site from the village of Ballycastle

14.4.2.2 Landscape Value and Sensitivity of the Proposed Development Site

Landscape Values were assessed in order to determine the landscape sensitivity of the Proposed Development Site and its wider landscape setting and establish the capacity of the immediate landscape in which the Proposed Development will be built, as is prescribed by best practice guidance: “as part of the baseline description the value of the potentially affected landscape should be established” (Page 80, GLVIA, 2013). Comprehension of landscape value and its susceptibility to change enables determination of the sensitivity of the landscape at a micro level (the development site) and its capacity to absorb the infrastructure of a wind farm development.

Determination of landscape value considers scenic amenity designations, sensitivity and value designations found in local landscape policy (MCDP), as well as other indications of landscape value attached to undesignated landscapes. Table 14-5 (below) describes various factors that help identify landscape value (Page 84, GLVIA, 2013). These factors and indicators were appraised collectively to determine a landscape value for the Proposed Development Site. The landscape value and susceptibility to change were then considered to form a landscape sensitivity classification of either Low,

Moderate, High or Very High for the Proposed Development Site (See Appendix 14-1 Methodology for the different classifications referred to here).

Table 14-5 Indicators of Landscape Value

Indicator	Description
Landscape Designations	<p>The Proposed Development Site is located in LPA 3 - Uplands, Moors, Heath or Bogs, which has a high landscape sensitivity to wind farm development, as they have a <i>“high potential to create adverse impacts on the existing landscape character.”</i> Although it should be noted that this designation is in contradiction to the RES for Mayo as there are large areas located within Policy Area 3 that have existing and consented wind farms, and large areas designated as <i>Tier 1 – Preferred</i> and <i>Tier 2 – Open to Consideration</i>. 4 No. of the proposed turbines fall within the classification areas <i>Tier 2 - Open to Consideration</i> and 3 No. turbines fall within the classification area of <i>Tier 1- Preferred (large wind farm)</i> within LPA 3.</p> <p>As noted above in section 14.4.1.4 there are a number of designated vulnerable landscape features located within or close to the Proposed Development Site. In particular, these include the Maumakeogh Mountain ridgelines. It is noted that the proposed turbines have been specifically sited at lower elevations (below 230m AOD) so as to minimise their impact on this feature (see Section 14.3.2).</p>
Landscape Quality/Condition	<p>Due to its nature as a coniferous plantation forest, the site is a modified working landscape. The condition of the landscape is degraded in several locations within the site due to the forestry operations.</p>
Scenic or Aesthetic Qualities	<p>The site can predominantly be described with having restricted small-scale views, as much of the proposed site is defined by mature coniferous forestry, and it is noted here that this is the case for the section of the Western Way that passes through the site. (see Plate 14-10 above which shows a view from along the Western Way within the proposed site).</p>
Rarity or Conservation Interests	<p>The majority of the Proposed Development Site is dominated by plantation forestry (including clear fells), comprising mainly of Lodgepole pine (<i>Pinus contorta</i>) with some Sitka spruce (<i>Picea sitchensis</i>) in areas which had been planted on Lowland Blanket Bog (PB3) and wet heath habitat (HH3). Remnants of this habitat are still found on the site in degraded form.</p>
Cultural Meaning/Associations	<p>No recorded monuments are located within the EIAR Site Boundary. The Céide Fields are defined in the statutory Record of Monuments and Places map on OS Sheet 6 (Site Number MA006-032). The Zone of Archaeological Potential measures 3km to the nearest proposed turbine (T15). As noted in Section 13.3.2 of Chapter 13 of this EIAR, the ZTV demonstrates that no proposed turbines are theoretically visible from the Céide Fields visitor centre. Similarly, wireline imagery shows that the proposed turbines are not visible from the highest observer location around the Céide Fields centre.</p>
Wildness/naturalness	<p>The Proposed Development Site is in a highly managed area of coniferous plantation forestry. The entirety of the Proposed Development Site is located within this forested area and so it is considered to be a landscape highly modified by human interference. The site is located in a remote area of isolated upland, therefore there is a degree of wildness considering the setback from human settlement and transport infrastructure.</p>

Indicator	Description
Recreation Value	The Western Way walking route passes through the site, in between proposed turbine locations. This section of the route passes through the Glenora forest where there is substantial screening from the mature coniferous forestry. It is noted in this regard that the Western Way access track travelling through the site is of relatively low quality compared to the entirety of the Western Way walking route.

In consideration of the factors summarised in Table 14-5, the landscape value of the Proposed Development Site is deemed Low. There is some recreational value to the site as the Western Way walking route passes through the Proposed Development Site, although this section of the track is currently a commercial forestry plantation.

The heavily modified nature of the site, its remote location (large set back from settlements) and the existing presence of other wind farms suggests a Low susceptibility to the proposed change. In addition, it is noted that 4 No. of the proposed turbines fall within the classification areas ‘Tier 2 - Open to Consideration’ and 3 No. turbines fall within the classification area of ‘Tier 1- Preferred (large wind farm)’; and the remaining locations are located within 400m of this designation. On balance, the landscape sensitivity of the Proposed Development is deemed Low.

14.4.2.3 Landscape Characterisation in the Wind Energy Development Guidelines (DoEHLG, 2006; DoHPLG, 2019)

The following section considers both the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019). These guidelines offer guidance for the siting and design of wind energy developments in various landscape contexts by defining six landscape character types that represent most situations where wind turbines may be proposed. The guidance is intended to be indicative and general and notes that it, represents the ‘best fit’ solutions to likely situations.

The six landscape character types include ‘Mountain Moorland’, ‘Hilly and Flat Farmland’, ‘Flat Peatland’, ‘Transitional Marginal Land’, ‘Urban/industrial’ and ‘Coastal’ landscape character types. The guidelines note that where a wind energy development is located in one landscape character type but is visible from another, it will be necessary to decide which might more strongly influence the approach adopted for the assessment.

Landscape character types Flat Peatland, Urban/Industrial and Coastal could be ruled out from the beginning, leaving Hilly and Flat Farmland, Mountain Moorland and Transitional Marginal Land. Hilly and Flat Farmland was not applicable to the site as Glenora does not have “a patchwork of fields delineated by hedgerows varying in size”. The Proposed Development Site is similar to the characteristics of Transitional Marginal Landscapes however, the Glenora site cannot be described as “lower areas are usually cultivated and managed as fields” as there is no degree of agricultural fields present on the site. Therefore, Mountain Moorland most strongly influences the siting and design of the Proposed Development. Further details of this landscape character types are provided below.

Mountain Moorland



Plate 14-14 View showing Mountain Moorland landscape type within the Proposed Development Site.

The key characteristics of the Mountain Moorland landscape type are:

- *“Peaked, ridged or rolling mountains and upland with steep sides or gently formed valleys;*
- *Generally unenclosed;*
- *Landcover comprising blanket bog, a mottling of heather, wild grasses and some rush in wet flushes; and*
- *A landscape type of relative remoteness and often comprising pristine, unspoilt and remote landscapes.”*

“Given exposure and smoothness of terrain, these landscapes are often sought for wind energy development. The exposure of mountains and the preference for wind energy developments to be located at high elevations result in high visibility.”

According to the WEDGs and Draft WEDGs, Mountain moorland may be inappropriate for wind energy development for reasons of natural heritage and the fact that some of these landscapes are of rare scenic quality and/or support some of the last wilderness areas of relatively pristine, unspoilt and remote landscapes. However, many examples of these landscapes should be open for consideration subject to appropriate design and landscape siting to minimise adverse impact and optimise aesthetic effect.

The siting and design guidance given for ‘Mountain Moorland’ in both the Wind Energy Development Guidelines (DoEHLG, 2006) and the Draft Revised Wind Energy Development Guidelines (DoHPLG, 2019) is set out below:

Location

“It may be acceptable to locate wind energy developments on ridges and peaks. They may also be appropriate, in certain instances, in a saddle between two peaks where they will be partially contained or “framed”. A third acceptable location is lower down on sweeping mountainsides.”

In terms of **location**, the proposed turbines are located in a saddle between peaks, which provides visual containment of the turbines as well as framing them within views from the surrounding landscape. From the south, the turbines appear located on the lower sections of a sweeping mountainside slope, again framed by the adjacent topographical features.

Spatial Extent

“Given the typical extensive areas of continuous unenclosed ground, larger wind energy developments can generally be accommodated because they correspond in terms of scale. However, the spatial extent of a wind energy development would need to be reduced where a suggestion of smaller scale is provided by nearby landscape features.”

In terms of **spatial extent**, the wider landscape area within which the proposed turbines are located is a large-scale, remote landscape, capable of effectively absorbing a wind farm of this scale and spatial extent. The spatial extent of the wind turbines corresponds, in terms of scale, with the surrounding landscape in which they are viewed. The Proposed Development adheres to the mandatory four times tip height set back distance from residential buildings prescribed in the Draft WEDGs (DoHPLG, 2019), as well as the 500 metre set back distance noted in the current WEDGs (DoEHLG, 2006).

Spacing

“All spacing options are usually acceptable. Where a wind energy development is clearly visible on a crest or ridge there is considerable scope to vary the rhythm, though on simple ridges, regular spacing may be more appropriate. On sweeping and continuously even areas of mountain moorland or upland plateaux regular spacing may be most desirable.”

In terms of **spacing**, the proposed turbines have regular spacing. As the turbines are not located on ridges and are instead located at lower elevations than the surrounding ridgelines, regular spacing is appropriate in this landscape character type.

Layout

“All layout options are usually acceptable. However, the best solutions would either be a random layout, and clustered where located on hills and ridges, or a grid layout on sweeping and continuously even areas of moorland or plateaux. Where a wind energy development is close to a linear element, such as a river, road or long escarpment, a corresponding linear layout or staggered line might be most desirable.”

In terms of **layout**, the proposed turbines are located on a hillside, primarily the lower slopes of Maumakeogh and adjacent hills. The turbines are organised in a regular, clustered layout, which is appropriate for this landscape character type. In addition, the regular clustered layout of the turbines will relate to the geometric blocks of plantation forestry within which the proposed turbines are located.

Height

“There would generally be no height restrictions on mountain moorlands as the scale of landscape is so great. However, shorter turbines may be more appropriate where they are located on small peaks and outcrops in order to maintain an appropriate scale. Profile, whether even or uneven, is dependent on topography: the more rugged and undulating (e.g., knolls and crags) the more uneven it will be. The profile of the wind energy development should not necessarily run in parallel to that of the topography.”

In terms of **height**, within the scale of the landscape that the proposed turbines are located in, the 180m maximum tip height of the proposed turbines is appropriate. There are large scale peaks and ridgelines adjacent to the Proposed Development, which itself is located in a remote upland location, suggesting that no restrictions in terms of height is appropriate.

Cumulative Effect

“The open expanse of such landscapes can absorb a number of wind energy developments, depending on their proximity. The cumulative impact will also depend on the actual visual complexity of landform, whether steeply rolling, undulating or gently sweeping. The more varied and undulating an area is topographically, the greater its ability to absorb and screen wind energy developments. The aesthetic effect of wind energy developments in these landscapes is acceptable where each one is discrete, standing in relative isolation.”

In terms of **cumulative effect**, the Proposed Development is located within a topographically varied and undulating landscape area which provides screening of the Proposed Development, and other cumulative developments within the LVIA Study Area. The scale and expanse of the landscape is capable of absorbing a number of wind energy development, according to the above guidelines, and so it is acceptable that there will be cumulative visibility of the proposed turbines with other wind farms. The Proposed Development is viewed within the background of a large-scale expansive landscape from the south and east, which is capable of absorbing a number of wind energy developments. From the north and west, the Proposed Development is viewed within a large-scale, varied and undulating landscape which provides substantial screening from these directions. All of these types of views are acceptable, in accordance with the above guidance.

14.4.3

Landscape Character of the wider LVIA Study Area

The Proposed Development is located in a remote, rural and mountainous landscape setting. The Proposed Development is sited at the north-eastern periphery of an elevated range of moorland peaks that span north Mayo. Beyond the ridgelines to the north of the site, landform tapers down to the rugged and exposed north Mayo coastline which is aligned in an east-west orientation. The landscape transitions to rolling agricultural lowlands beyond the Ballinglen river and the town of Ballycastle to the northeast of the site. The landscape to the east and southeast of the LVIA Study Area comprises fertile farmlands and increased human settlement. Lough Conn is located in proximity to the town of Crossmolina in the southeast of the study area, the lough and surrounding farmlands are drained by the Cloonaghmore River and Moy River to Kilalla Bay in the north. Human settlement increases to the southeast of the LVIA Study Area towards the town of Kilalla and then the larger population centre of Ballina, which is located approximately 22km south-east, outside of the LVIA Study Area.



Plate 14-15 View north-east from the range of peaks southwest of the Proposed Development, showing the flat plateau south of the Proposed Development, as well as the range of peaks surrounding the Proposed Development

A flat basin of open moorland, seen in Plate 14-15 above extends away to the south and southwest from the mountainous landscape surrounding the Proposed Development Site. This flat plateau covers an extensive area and comprises boggy and rocky peatlands and large tracts of coniferous forestry plantations. The basin is enclosed by a linear range of mountains which arc south-westerly from the Proposed Development Site culminating in the peak of Slieve Fyagh, then south, then southeast to the northern margins of the extensive and mountainous Nephin Beg Range, which itself is located outside of the LVIA Study Area. This upland plateau is rural, remote and isolated with large set back distances from human settlement. Consequently, this area has been deemed as a suitable landscape for the siting of wind energy developments as is evident by the multiple existing and permitted wind farms in this area, See Section 14.6 - *Cumulative Context*. All existing and permitted wind farms within 20 km of the proposed turbines are considered to form part of the likely future receiving environment, these are detailed below in Section 14.6.

The surrounding topographical features provide visual screening from large areas of north Mayo, such as the sensitive coastal areas to the north and west. And the isolated characteristics of the site of the Proposed Development reduces potential for significant impacts upon residential receptors.

The N59 national road crosses the southern portion of the LVIA Study Area in an east-west orientation, with this stretch of the national road comprising the majority of the section between Ballina and Bangor-Erris. Carrowmore Lough, seen in Plate 14-16 below, lies just north of Bangor-Erris, at the western extent of the LVIA Study Area. This is located on the western side of the mountain range described above, with substantial topographical elements intervening between the area surrounding Carrowmore Lough and the Proposed Development. The landscape to the east and north of the Lough is remote moorland, with heavy coniferous forestry plantation. To the northwest the Glenamoy River (which is

partially sourced by the Maumakeogh range) and Muingnabo River (which is predominantly sourced by Tawnaghmore) are significant landscape features, defining the topography that, while gently undulating, is generally flatter than the mountain range to the east. Both of these rivers feed into Sruwaddacon Bay. The level of elevation begins to undulate more dramatically along the coastline to the north of these rivers, with the Purturlin and Tawnaghmore being the most substantial topographical features along this stretch of coastline to the northwest of the Proposed Development Site.



Plate 14-16 View of Carrowmore Lough and the topographical features to the west of the Proposed Development

Sensitive Landscape Receptors

There are a number of sensitive landscape receptors that are relevant contributors to the landscape character of the wider LVIA Study Area. Those most sensitive to the Proposed Development are noted in this section. Aside from those landscape features such as ridgelines, or riverbanks and lakeshores that have been designated in the MCDP and discussed above in section 14.4.1.4, the coastline of County Mayo “from Killala Bay to Killary Harbour” is designated as a vulnerable feature in the Landscape Appraisal of County Mayo, with the same policy from this document relating to this feature as the other landscape features discussed above. It is clear that the entire coastline of County Mayo within the LVIA Study Area is a sensitive landscape feature, acting as a key contributor to the scenic amenity offered within the LVIA Study Area. Along the coastline, approximately 11 km northeast of the Proposed Development is Downpatrick Head, a significant heritage site with excellent views of the Staggs of Broadhaven island and the Dún Briste sea stack. There are a number of topographical features and ridgelines located along the coastline, offering a dramatic transition from ridgeline to sea cliff along the coastline to the northwest of the Proposed Development Site. These include the peaks of Tawnaghmore, Glinsk, and Porturlin. ZTV mapping shows that there is extremely limited visibility of the Proposed Development in views of these peaks in the direction of the Proposed Development. Also located along the coastline within the LVIA Study Area are the Céide Fields, a significant heritage asset and important feature to the character and value of the wider landscape area. ZTV mapping shows that there will be no visibility of the Proposed Development from the Céide Fields due to the intervening topography of the Maumakeogh Mountains.

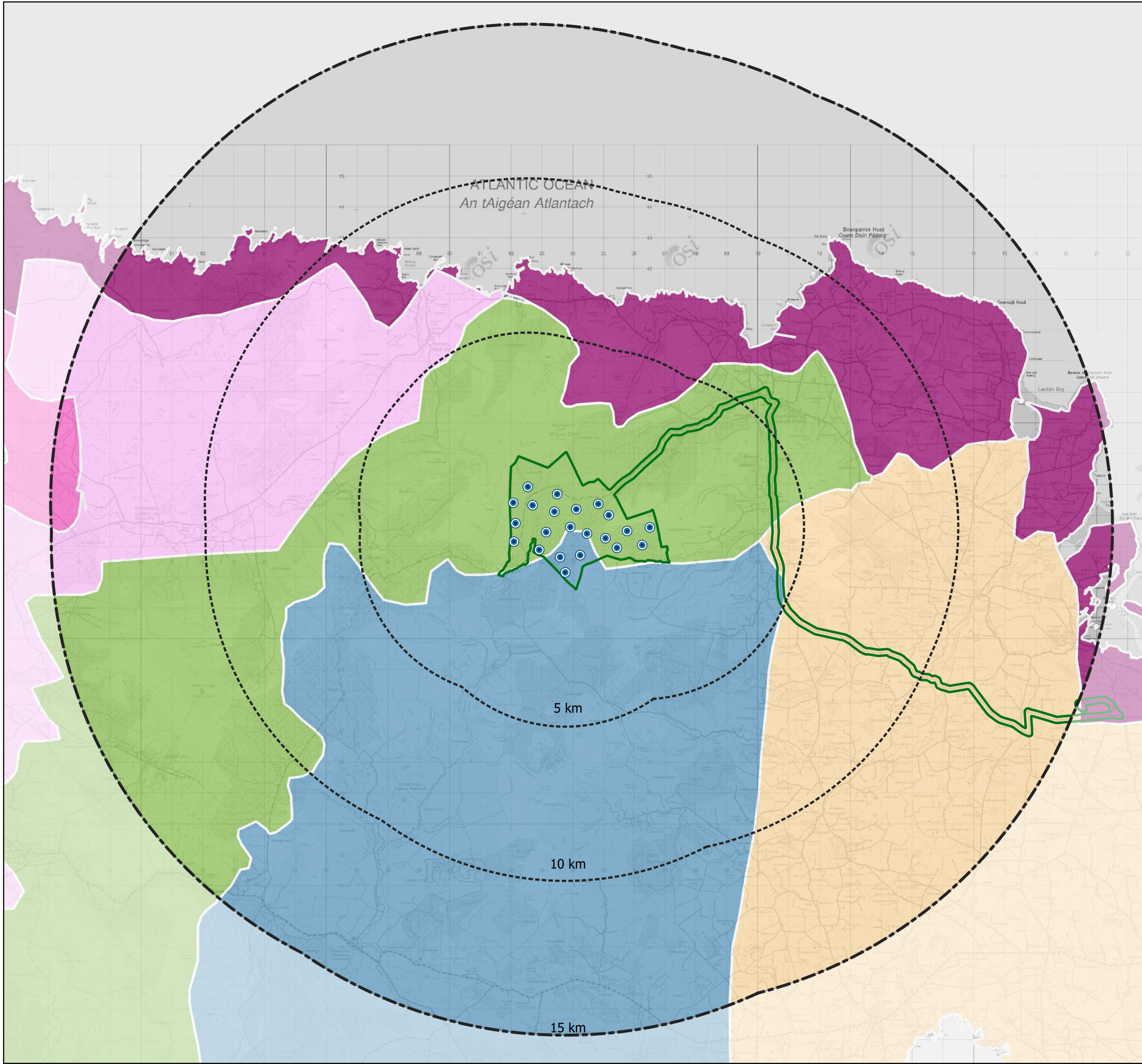
14.4.3.2 Landscape Character Units

As noted in Section 14.2.1 (and the Methodology Appendix 14-1), the LVIA Study Area for assessment of landscape character extends to 15 km from the proposed turbines. Six Landscape Character Units (LCUs) are located within this 15 km LVIA Study Area. These LCUs are described below and shown in Figure 14-11 below. A detailed description and comprehensive assessment of each LCU is outlined in Appendix 14-2. The following LCUs were identified as having full or partial theoretical visibility of the Proposed Development and are located within the 15 km LVIA Study Area for landscape character:










- LCU Area B- North-West Coastal Moorland
- LCU Area C- North-West Coastal Bog



- > LCU Area D- North Coast Plateaux
- > LCU Area E- North Mayo Mountain Moorland
- > LCU Area F- North Mayo Inland Bog Basin
- > LCU Area G- North Mayo Drumlins



Map Legend

-  LVIA Study Area for Effects on Landscape Character
 -  EIAR Site Boundary
 -  Proposed Turbine Locations
- Landscape Character Units
-  LCU B
 -  LCU C
 -  LCU D
 -  LCU E
 -  LCU F
 -  LCU G

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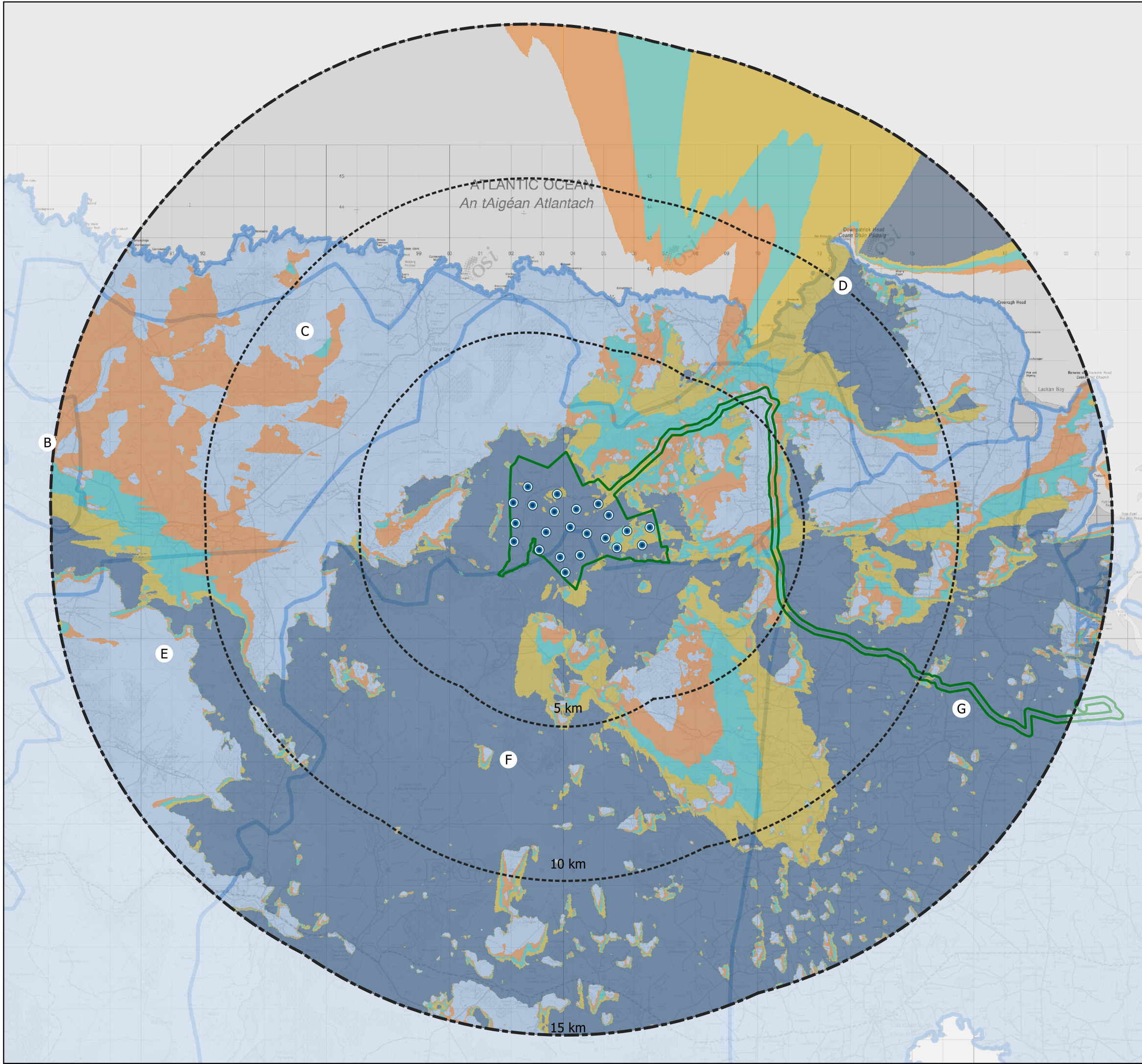
Drawing No.
Figure 14-11

Drawing Title
Landscape Character Units









Project Title
Glenora Renewable Energy Development

Scale 1:120,000	Project No. 201120	Date 15.11.2023	Drawn By JS	Checked By JW
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Map Legend

-  LVIA Study Area for Effects on Landscape Character
 -  EIA Site Boundary
 -  Proposed Turbine Locations
 -  Landscape Character Units
- Zone of Theoretical Visibility
-  1-5 Turbines Theoretically Visible
 -  6-10 Turbines Theoretically Visible
 -  11-15 Turbines Theoretically Visible
 -  16-22 Turbines Theoretically Visible

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Drawing No.

Figure 14-12

Drawing Title

Landscape Character Units and ZTV

Project Title

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Scale	Project No.	Date	Drawn By	Checked By
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14.4.3.3 Preliminary Assessment of Landscape Character Units

A map showing all LCUs within 15km and the distribution of theoretical visibility of the Proposed Development occurring in each LCA is shown in Figure 14-11 above. Each LCA is listed below in Table 14-6, as well as a description of theoretical visibility within each LCA, as indicated by the ZTV. Several LCAs identified in the LVIA Study Area (15km for landscape character) have very small areas of theoretical visibility indicated by the ZTV map in Figure 14-12.

The potential visibility of the Proposed Development was appraised on site (multiple surveys conducted during 2020 and 2021) from all LCUs with very limited or partial theoretical visibility.

Table 14-6 Landscape Receptors – Landscape Character Areas

LCU	Theoretical Visibility (ZTV)	Actual Visibility	Screened In for Further Assessment
LCU E - North Mayo Mountain Moorland	Full and partial theoretical visibility within 5 km of the proposed site. Mainly no theoretical visibility outside of 5km although with some patches of full theoretical visibility throughout.	Visibility of the proposed turbines very likely from within this LCA.	Yes
LCU F - North Mayo Inland Bog Basin	Mainly full theoretical visibility across the LCA.	Visibility of the proposed turbines very likely from within this LCA.	Yes
LCU D - North Coast Plateaux	Mainly partial to no theoretical visibility, with an area of full theoretical visibility indicated in the eastern part of this LCA.	Partial visibility of the proposed turbines likely from within this LCA.	Yes
LCU G - North Mayo Drumlins	Mainly full theoretical visibility across the LCA.	Visibility of the proposed turbines very likely from within this LCA.	Yes
LCU C - North-West Coastal Bog	Mainly partial to no theoretical visibility, with an area of full theoretical visibility indicated in the central part of this LCA.	Partial visibility of the proposed turbines likely from within this LCA.	Yes
LCU B – North-West Coastal Moorland	Mainly partial visibility indicated within the small part of the LCU that falls within the LVIA Study Area	Partial visibility of the proposed turbines likely from within this LCA.	No

A detailed description of the five LCUs screened in for assessment (Table 14-6) and the likely effects on landscape character as a result of the Proposed Development are presented in the Landscape Character

Assessment Tables that form Appendix 14-2. A summary of landscape effects on these LCUs are reported in Section 14.7.3 of this chapter - *Operational Phase Effects*.

14.5 Visual Baseline

14.5.1 Visual Receptors

The main purpose of establishing the visual baseline is to identify the key visual receptors that should be considered for viewpoint selection. Viewpoints are locations from which visual effects are assessed using photomontages (See Appendix 14-1 – *LVIA Methodology*). To this end the following have been identified:

- > Designated Scenic Routes and Scenic Views
- > Settlements
- > Recreational Routes and Tourist Destinations
 - Waymarked Walking Routes
 - Cycle Routes
 - Tourist Routes (e.g. Wild Atlantic Way)
- > Viewing Points (e.g. marked on OS Maps)
- > Transport Routes

All visual receptors identified in the visual baseline are shown on Figure 14-13 below. These visual receptors are listed in tables in the following sections along with theoretical visibility at those locations indicated by the Visual Baseline and Half-Blade ZTV map – Figure 14-14 below.

During site visits conducted during 2020, 2021, 2022, and 2023 the likely visibility of the Proposed Development was appraised from receptors where the ZTV has indicated theoretical visibility. Visual receptors are scoped out from further assessment when there is either no theoretical visibility of the Proposed Development or where on-site appraisal determined visibility of the Proposed Development to be very unlikely or very limited.



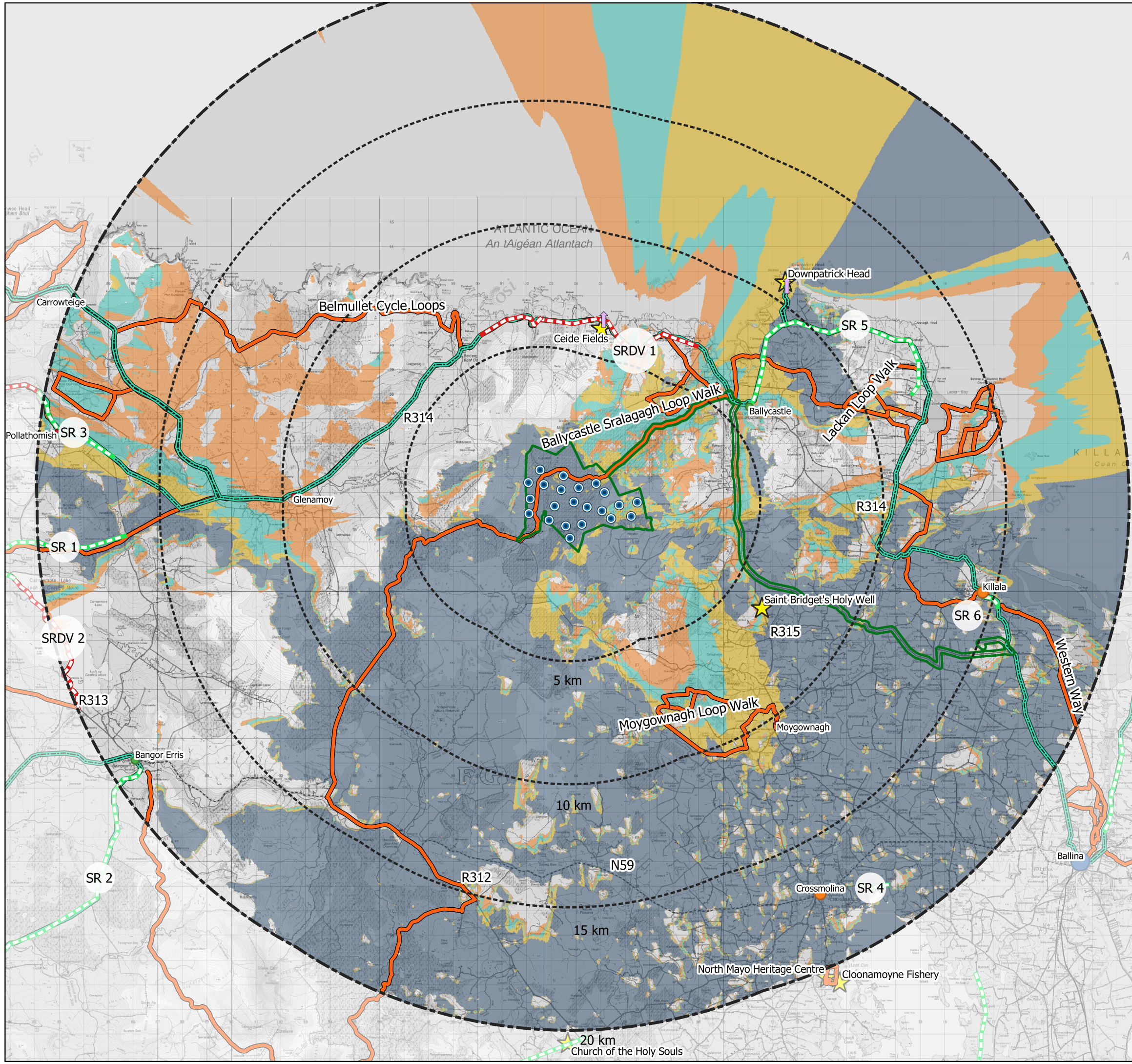
Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbine Locations
- Designated Scenic Routes**
- Scenic Route
- Designated Scenic Route
- OSi Viewing Points
- Settlement Hierarchy**
- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5
- The Wild Atlantic Way - Tourist Route
- Tourism Destinations
- Waymarked Walking Routes

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	Drawing No.	Figure 14-13		
Drawing Title		Visual Baseline		
Project Title		Glenora Renewable Energy Development		
Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW





Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbine Locations
- Designated Scenic Routes**
- Scenic Route
- Designated Scenic Route
- OSi Viewing Points
- Settlement Hierarchy**
- Tier 1
- Tier 2
- Tier 3
- Tier 4
- Tier 5
- The Wild Atlantic Way - Tourist Route
- Tourism Destinations
- Waymarked Walking Routes
- Zone of Theoretical Visibility**
- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible
- 16-22 Turbines Theoretically Visible

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Drawing No.

Figure 14-14

Drawing Title

Visual Baseline and ZTV

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW



14.5.1.1 Scenic Views and Scenic Routes

In addition to theoretical visibility, whether the focus of the scenic route or view is directed towards the turbines is also indicated in Table 14-7.

Table 14-7 Scenic Views and Scenic Routes within the 20km Study Area for Co. Mayo

Map Ref.	Comment on Visibility of Site	Views Directed Towards the Site?	Screened in?
SRDV 1	Primarily no theoretical visibility with one stretch of partial theoretical visibility.	Partially	Yes
SRDV 2	Primarily no theoretical visibility with one very small area of partial theoretical visibility.	Partially	No, considering the distance of the proposed turbines from this receptor and the very small stretch of theoretical visibility indicated, there will be very limited or no actual visibility of the Proposed Development from this receptor.
SR 1	Primarily full theoretical visibility indicated along the section of the route located within the LVIA Study Area	Partially	Yes
SR 2	No theoretical visibility	Partially	No
SR 3	Partial theoretical visibility indicated along the section of the route located within the LVIA Study Area	Partially	Yes
SR 4	Full theoretical visibility indicated. Site visits confirmed that no actual visibility of the proposed turbines would occur as a result of roadside screening	Partially	No, considering the distance of the proposed turbines from this receptor and the roadside screening in the landscape there will be no actual visibility of the Proposed Development from this receptor.
SR 5	Full to partial theoretical visibility indicated for the	Partially	Yes

Map Ref.	Comment on Visibility of Site	Views Directed Towards the Site?	Screened in?
	western half of this route, with no theoretical visibility indicated for the eastern half.		
SR 6	Full theoretical visibility indicated for the majority of the route.	Partially	No, considering the distance of the proposed turbines from this receptor and the roadside screening in the for of built infrastructure in Killala there will be no actual visibility of the Proposed Development from this receptor.

14.5.1.2 Settlements

Map 2.3 of the MCDP outlines the Settlement Hierarchy for the county, which is also shown on Figure 14-13 above. The following five classes below are outlined as the respective settlement hierarchy for County Mayo:

- > Tier 1 – Key Towns and Strategic Growth Towns
- > Tier 2 – Self-Sustaining Growth Towns
- > Tier 3 – Self-Sustaining Towns
- > Tier 4 – Rural Settlements
- > Tier 5 – Rural Villages

Table 14-8 below lists the settlements identified from the respective MCDP within the 20 km LVIA Study Area also noting their status within the settlement strategy and whether there is theoretical visibility indicated by the ZTV. There are no settlements within 5 km of the Proposed Development Site.

Table 14-8 Settlements within the 20km Study Area for Co. Mayo

Settlement	Settlement Hierarchy	Theoretical Visibility	Screened In?
5 to 10km			
Ballycastle	Tier 4 – Rural Settlements	Partial to None	Yes
Glenamoy	Tier 5 – Rural Villages	Partial	Yes
10 to 15km			
Moygownagh	Tier 5 – Rural Villages	Full to Partial	Yes
Killala	Tier 3 – Self-Sustaining Towns	Partial	Yes
15 to 20km			
Pollatomish	Tier 5 – Rural Villages	Partial	Yes
Crossmolina	Tier 3 – Self-Sustaining Towns	Full	Yes

Settlement	Settlement Hierarchy	Theoretical Visibility	Screened In?
Bangor-Erris	Tier 4 – Rural Settlements	None	No

14.5.1.3 Recreational Routes and Tourist Destinations

Recreation and tourist destinations were identified after reviewing the Tourism Strategy for County Mayo and identifying any Way Marked Walking routes within the LVIA Study Area. The routes are shown on and are listed in Table 14-9 below along with theoretical visibility shown on ZTV mapping for the routes.

Table 14-9 Recreational Routes and Tourist Destinations within the 20km LVIA Study Area

Route Name	Description	Theoretical Visibility	Screened In?
Up to 5km			
Western Way	125km cycle and walking route which runs north-south through Co. Mayo.	Mainly Full	Yes
Ballycastle Sralagagh Loop Walk	9.5km looped walking trail near Ballycastle	Partial	Yes
5 to 10km			
Lackan Loop Walk	11km loop walk west of Lackan Bay	Partial to None	No, the section of the route with theoretical visibility of the proposed turbines is located within forestry, with limited external views in the direction of the Proposed Development.
Ceide Fields	Archaeological site and visitors centre	None	No
Downpatrick Head	Tourist Destination along the Wild Atlantic Way	Partial	Yes
Blanemore Forest Walk	16km forest loop walk which begins in Moygownagh along the R315 and runs west	Partial	No, the section of the route with theoretical visibility of the proposed turbines is located within forestry, with limited external views in the direction of the Proposed Development.
Moygownagh Loop Walk	15km looped walking trail	Partial	Yes

Route Name	Description	Theoretical Visibility	Screened In?
	beginning near St. Cormac’s Church in the village of Moygownagh.		
Belmullet Cycle Loops	Waymarked looped cycle routes along the north-west coast starting in Belmullet and reaching as far as Ballycastle.	Full and partial theoretical visibility along the western half, and no theoretical visibility along the eastern half	Yes
The Wild Atlantic Way	Scenic Route along Irelands west coast	Partial to None	Yes
10 to 15km			
Kilcummin Loop Walk	8.5km loop walk east of Lackan Bay, which runs north towards Kilcummin Head	Partial to None	No, views will be directed toward the sea from the sections of this route with theoretical visibility, and will therefore not be directed towards the proposed turbines, which are located approx. 14km from the looped walking route.
15 to 20km			
Enniscroe House Loop	Looped forest walk in the grounds of Enniscroe House	Full	No, the looped walk is through a heavily wooded area with no visibility of the proposed turbines possible from this looped walk.
Bangor Trail	24.9km point-to-point trail located near Srahmore, County Mayo	None	No

14.5.1.4 OSi Viewing Areas

Two viewing areas were identified in an Ordnance Survey of Ireland (OSI) map of the LVIA Study Area, these viewpoints are described below in Table 14-10 and whether there is theoretical visibility indicated by the ZTV map and if the views are focused in the direction of the Proposed Development.

Table 14-10 OSi Viewing Areas

OSi Viewing Area Location and Description	Theoretical Visibility (ZTV)	Direction/Focus of View	Screened in for assessment?
---	------------------------------	-------------------------	-----------------------------

Viewpoint off the R314 near the Ceide Fields, directed north-east out towards the sea	No	Focused away from the Proposed Development	No
Viewpoint located at the parking area at Downpatrick Head, directed west along the coastline of north Mayo	Partial	Partially directed towards the Proposed Development	Yes

14.5.1.5 Major Transport Routes

For the purpose of viewpoint selection national primary and secondary roads were assessed in detail. Preference was given to viewpoint selection on regional routes in cases where they passed through settlement areas or coincided with scenic routes to increase the number of visual receptors represented. Transport routes within 5 kilometres of the site were also assessed as part of the route screening analysis.

Table 14-11 Significant transport routes within the 20 km study area for Co. Mayo

Transport Route	Theoretical Visibility	Screened In?
Up to 5 km		
R315	Mostly full theoretical visibility	Yes
5 to 10km		
R314	Full to partial visibility to the east and slight to no visibility to the west	Yes
10 to 15km		
N59	Mostly full theoretical visibility	Yes
R312	Mostly full theoretical visibility	Yes
15 to 20km		
R313	Primarily no theoretical visibility	No

14.5.2 Visual Receptor Preliminary Assessment

After identifying the visual receptors in the study area based on designated scenic routes, settlements, recreational and tourist destinations, recreational routes, OSi viewing areas and transport routes, a preliminary assessment was carried out to screen out visual receptors that will not be impacted by the Proposed Development.

Zone of Theoretical Visibility mapping and visibility appraisals conducted on site during surveys undertaken in 2021 were used to scope out visual receptors from further assessment. In the case of the visual receptors shown in Table 14-12 below, views towards the proposed turbines were either entirely screened or substantially screened from view. In some cases, the factor of distance to the Proposed

Development Site as well as the directional focus of views was included in the screening assessments and was a contributing factor precluding these locations being selected as viewpoints.

Directions have been indicated for viewpoints shown on OSi maps and designated scenic views and scenic routes by either written text or on accompanying maps in the MCDP. Therefore, the viewing points, protected views and scenic routes within the study area, listed in Table 14-12 that are not directed towards the proposed turbines have been screened out from further assessment.

Table 14-12 Visual Receptors Screened **Out** -No visibility indicated by ZTV map OR no visibility found on site OR not in the direction of the Proposed Development

Visual Receptor Category	Visual Receptor with no significant visibility found on site (or views focused away from the Proposed Development)
Designated Scenic Routes and Views	<ul style="list-style-type: none"> > SRDV 2 > SR 2 > SR 4 > SR 6
Osi Viewing Areas	Ciede Fields OSi Viewpoint
Settlements	Bangor-Erris, Killala
Recreational Routes and Tourist Destinations	Lackan Loop, Kilcummin Loop Walk, Ceide Fields, Enniscoe House Loop, Bangor Trail, Blanemore Forest Walk
Transport Route	R313

Following the pre-assessment exercise, the visual receptors shown in Table 14-13 below have been selected for assessment due to their significance within the study area and the potential visual effects they may experience due to the Proposed Development.

Table 14-13 Visual Receptors Screened **In** For Further Assessment – utilised to establish photomontage locations.

Visual Receptor Category	Description	Viewpoint No.
Designated Scenic Routes, Scenic Views and OSi Viewpoints	SRDV 1	VP1
	SR 1	VP2
	SR 3	VP2
	SR5	VP3
Settlements	Ballycastle	VP4
	Glenamoy	Photowire D
	Crossmolina	VP6
	Moygownagh	VP5
	Pollatomish	VP2
	Killala	VP7

Visual Receptor Category	Description	Viewpoint No.
Recreational and Tourist Destinations	Downpatrick Head	V3
	Wild Atlantic Way	VP2, VP1, VP3
	Western Way	VP4
	Ballycastle Sralagagh Loop Walk	VP4
	Moygownagh Loop Walk	VP5
	Belmullet Cycle Loops	Photowire D, VP2
Transport Routes	R314	Photowire D, VP1
	R315	VP9, Photowire E
	R312	VP8
	N59	VP6

Furthermore, in addition to the viewpoints listed above, which were selected according to the key visual receptors identified in the visual baseline additional viewpoints were selected within 10 km to assess the visual effects closer to the Proposed Development from various directions in view of the potential for cumulative interactions with other existing, permitted and proposed wind farms in the area – See Section 14.6 - *Cumulative Context*.






14.5.3 Photomontage Viewpoint Locations

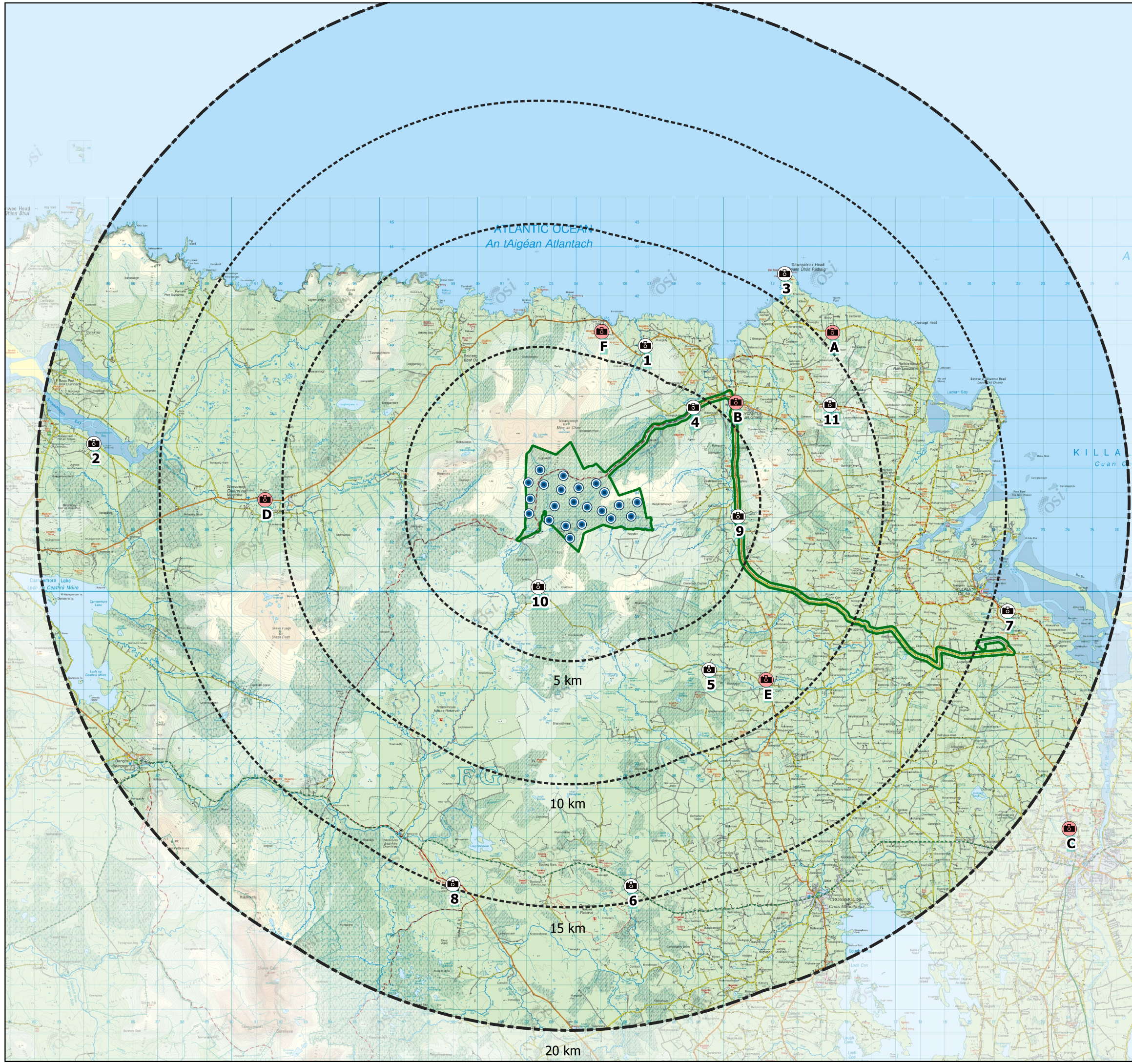
The locations of 11 photomontage viewpoints are illustrated in Figure 14-15 below. Photomontages will be used to assess the significance of visual effects arising from the Proposed Development from each viewpoint location. The viewpoint locations are representative, and, in some instances, imagery was not captured directly next to a visual receptor but in another location in close proximity where there may be superior line of sight towards the Proposed Development (e.g. higher elevation or less screening). A detailed description of the viewpoint selection process and photomontage assessment methodology is provided in Appendix 14-1.

Several additional viewpoint locations were visited during the field survey for which early-stage photomontages were generated (photowires). These photomontage viewpoints were not selected for inclusion in the final Volume 2 photomontage booklet due to their poor visibility or absence of prominent visual receptors. These early-stage photomontages do not form part of the assessment of visual effects contained in Appendix 14-3, however, several of these early-stage photomontages are presented and discussed in text to illustrate certain points later in this chapter of the report and their locations are marked as red icons on Figure 14-15.

The photomontages are presented in the Volume 2 – *Photomontage Booklet* accompanying this EIAR. The likely or significant visual effects of the Proposed Development arising from each viewpoint location are reported in Section 14.7.3.3.2 of this Chapter. An extensive and detailed assessment of each photomontage is included in the photomontage assessment tables in Appendix 14-3.

Map Legend

-  LVIA Study Area
-  EIAR Site Boundary
-  Proposed Turbine Locations
-  Photomontage Viewpoint Locations
-  Photowire Viewpoint Locations (presented in text)



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Drawing No.

Figure 14-15

Drawing Title

Photomontage Viewpoint Locations

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	20.09.2023	JS	JW



Cumulative Context

The purpose of this section is to identify all wind farm developments in the LVIA Study Area which potentially contribute to assessment of cumulative and in combination landscape and visual effects. This chapter assesses the likely landscape and visual impacts of the Proposed Development, both independently, as well as in combination with all other existing and operational wind farm developments in the LVIA Study Area. This chapter also assesses the Proposed Development in combination with all 'likely future receiving environments' (EPA, 2022) which includes all existing and permitted wind farm developments in the LVIA Study Area.

The landscape of the site and its wider setting is a highly suitable area for the development of wind energy and consequently a variety of projects exist within differing stages of the wind farm life cycle (existing, permitted and proposed). All wind farm developments in the LVIA Study Area are identified in this section and within one of the following categories:

- **Existing** – Existing wind energy developments currently operational in the baseline landscape at the time of conducting this LVIA;
- **Do-Nothing Scenario** – Permitted wind energy developments, permitted (consented) at the time of conducting this LVIA. These developments have a high probability of being operational in a future receiving landscape.
- **Proposed** - All well-developed wind farm proposals with project specifications in the public domain at the time of conducting this LVIA. Cumulative effects between the Proposed Development and the other proposed developments within this category is more uncertain and is reliant on an outcome of the planning and consenting system.

These categories are a useful guide to enable understanding and structure when viewing the photomontage booklet and identification of developments in this section. However, irrespective of how a development is categorised, the assessments of cumulative landscape and visual effects includes all wind farm developments.

Presentation of Cumulative Wind Farms in the Photomontage Booklet

A description of how these various cumulative categories are presented in the photomontage booklet is comprehensively reported in Section 1.3.2.2 of the Appendix 14-1 – *LVIA Methodology*. All existing turbines are presented in the 'baseline view' and accompanying wireline. Also within the photomontage booklet, the 'proposed view with cumulative' shows all existing, permitted (Do-Nothing Scenario) and proposed turbines.

Assessment of Cumulative Landscape and Visual Effects

The effects reported both in this chapter and within the assessment appendices (Appendix 14-2 - *LCA Assessment Tables*; Appendix 14-3 - *Photomontage Assessment Tables*) uses appropriate and logical narrative to discuss cumulative interactions between the Proposed Development and all other wind energy developments irrespective of which category (Existing; Do-Nothing Scenario; Proposed) they occur. Discussion of cumulative interactions on specific landscape and visual receptors is relative to the effects on that receptor and proportionate to the likelihood of significant landscape and visual effects occurring.

In terms of cumulative landscape and visual effects, other wind energy projects are of primary focus, as only these would be described as very tall vertical elements in the landscape and therefore have greatest potential to give rise to significant cumulative effects. Other wind energy developments within 20 km of the Proposed Development were identified by searching past planning applications lodged through the various planning authorities (Mayo County Council and An Bord Pleanála) online planning portals. The information identified in the initial planning search was then used to verify, by means of a desk-based study and ground-truthing, whether the permitted wind energy developments had been

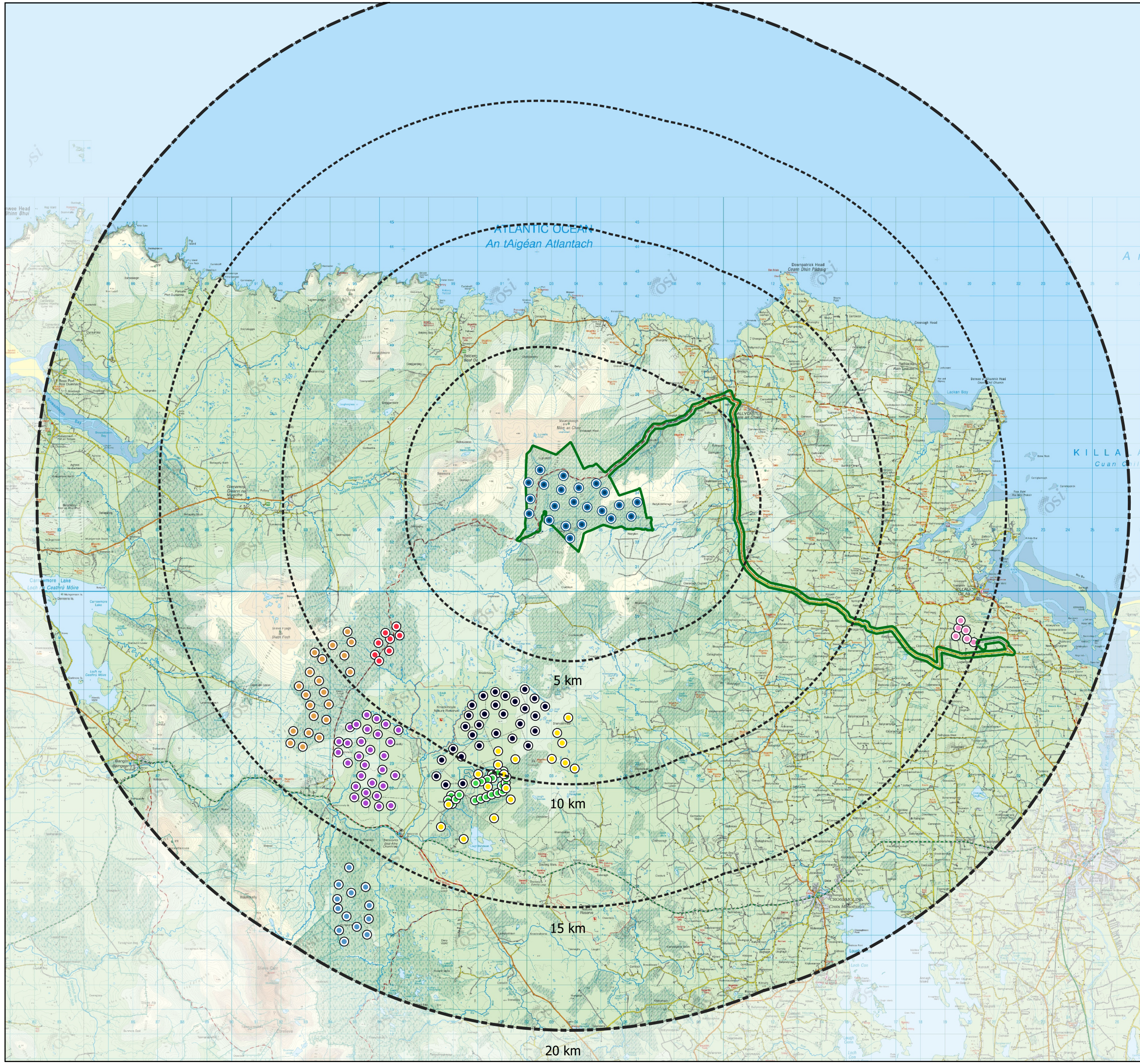
constructed. The list of existing, permitted and proposed wind turbines present within the study area are listed in Table 14-14 below:

Table 14-14 Cumulative Baseline: Other Wind Farms within 20km of the Proposed Glenora Wind Farm

Wind Farm	Status	No. of Turbines	Hub and Blade Dimensions
5 to 10km			
ABO Sheskin	Permitted (considered part of the Do-Nothing Scenario)	8	Tip Height 176m; Rotor Diameter 117m
Oweninny 1	Operational (considered part of Existing Scenario)	29	Tip Height 176m; Rotor Diameter 113m
Oweninny 3	Proposed (considered part of Proposed Scenario)	18	Tip Height 200m; Rotor Diameter 150m
Bellacorrick	Operational (considered part of Existing Scenario)	21	Tip Height 50.5m; Rotor Diameter 31m
Sheskin South	Proposed (considered part of Proposed Scenario)	21	Tip Height 200m; Rotor Diameter 170m
10 to 15 km			
Oweninny 2	Operational (considered part of Existing Scenario)	30	Tip Height 176m; Rotor Diameter 113m
Killala	Operational (considered part of Existing Scenario)	6	Rotor Diameter 103.2m; Tip Height 126m
15 to 20 km			
Kilsallagh	Proposed (considered part of Proposed Scenario)	13	Tip Height 200m: Rotor Diameter Not Yet Publicly Available



There are 8 No. existing, permitted and proposed wind farms within the 20 km boundary (comprising a total of 145 no. wind turbines), as shown in Table 14-14 above. The locations of the eight wind farms can be identified on the Cumulative Context map Figure 14-16, shown below.



Map Legend

- LVIA Study Area
 - EIAR Site Boundary
 - Proposed Turbine Locations
- Other Wind Turbines (Existing, Permitted, and Proposed)
- Existing Bellacorick
 - Existing Killala
 - Existing Oweninny 1
 - Existing Oweninny 2
 - Permitted ABO Sheskin
 - Proposed Oweninny 3
 - Proposed Sheskin South
 - Proposed Kilsallagh

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Drawing No.

Figure 14-16

Drawing Title

Cumulative Context

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
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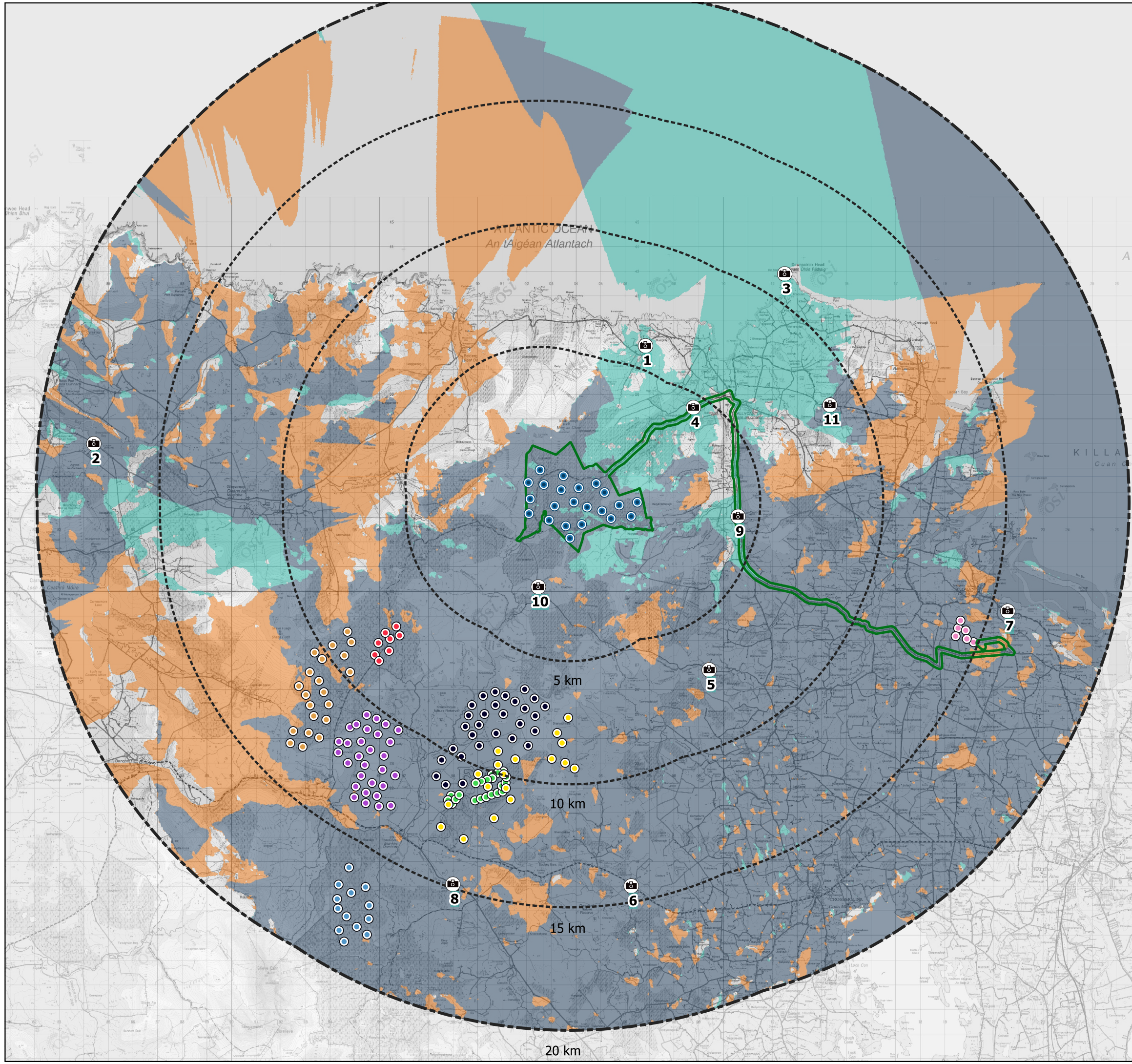
14.6.2 Comparative Cumulative Visibility to half-blade

Figure 14-17 compares the cumulative visibility of all existing, permitted, and proposed wind farms (represented in navy) with any additional visibility of turbines as a result of the Proposed Development turbines represented in blue. To the south of the Proposed Development there is little change in terms of visibility of turbines, with existing visibility in large sections of the LVIA Study Area in this direction. To the west of the proposed Glenora site there is some additional visibility, although in terms of visual receptors this is mainly applicable to a relatively small section of the R314 regional road. There is also some additional visibility of turbines in close proximity to the Proposed Development turbines, specifically to the northeast and east of the site within 5 km. This includes some relatively small sections of the R315 where there is now visibility of turbines. The main area where there is additional visibility of turbines is the area of coastline around Downpatrick Head, which is located approximately 10 km to the northeast of the Proposed Development Site. An assessment of landscape and visual effect of the Proposed Development at Downpatrick Head is reported in Section 14.7, also see a comprehensive assessment of photomontage 24 in Appendix 14-3.

Overall, the relatively small additional areas that would now have visibility of turbines are generally remote (additional areas where turbines will now be visible account for 15% of the overall LVIA Study Area, although the majority of this is a large area of the sea to the north), with few visual receptors. The visual receptors that are located within these areas are generally roads that are located further than 5km from the Proposed Development Site. A combination of the nature of the visual receptors (i.e. the speed road-users will be travelling at and the transitory nature of the views experienced), as well as the fact that there is existing visibility of turbines along large stretches of these roads, means that there will likely be very little additional visibility of turbines in areas where turbines were previously not visible as a result of the addition of the Proposed Development.

Assessment of Cumulative Visual Effects - Photomontages

Photomontages have been utilised to assess the cumulative interactions between the Proposed Development and the other existing, permitted and proposed wind farms identified in the LVIA Study Area. Cumulative visual effects are described in the photomontage assessment tables included in Appendix 14-3, and are a contributing factor considered in the significance of visual effects ratings determined for each viewpoint. A discussion of cumulative visual effects is presented in Section 14.7.3.4 – *Cumulative Visual Effects*.



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbine Locations
- Photomontage Viewpoint Locations
- Other Wind Turbines (Existing, Permitted, and Proposed)
 - Existing Bellacorick
 - Existing Killala
 - Existing Oweninny 1
 - Existing Oweninny 2
 - Permitted ABO Sheskin
 - Proposed Oweninny 3
 - Proposed Sheskin South
 - Proposed Kilsallagh
- Cumulative Comparative ZTV
 - Theoretical Visibility of the Proposed Development Only
 - Theoretical Visibility of other Cumulative Turbines Only
 - Theoretical Visibility of the Proposed Development and Cumulative Turbines

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Drawing No.

Figure 14-17

Drawing Title

Cumulative Comparative ZTV

Project Title

Glenora Renewable Energy Development

Scale	Project No.	Date	Drawn By	Checked By
1:150,000	201120	15.11.2023	JS	JW



14.7 Likely or Significant Landscape and Visual Effects

14.7.1 ‘Do-Nothing’ Scenario

The Do-Nothing option to developing a wind farm at the Proposed Development Site would be to leave the site as it is, with no changes made to the current land-use practices of commercial forestry. In the absence of the Proposed Development, and without dramatic changes to policy or economic drivers in the area, the established trends in respect of land use/landcover (see Section 14.4.2 and Section 14.4.3 above) and the baseline landscape and visual context are likely to remain largely consistent with the scenario described in the preceding sections of this chapter. It is considered that there would be likely future interest in developing this landscape for wind energy production, which is demonstrated given the level of existing and permitted wind farms outlined in Table 14-14 above (these wind farms are considered to form part of the Do-Nothing Scenario, see Section 14.6). Characteristic commercial forestry operations across the Proposed Development Site and adjoining areas are expected to continue. Should this occur, the impact would be neutral in the context of this EIAR.

14.7.2 Construction Phase Effects

It is estimated that the construction phase of the Proposed Development will last between approximately 18-24 months. The construction stage of the Proposed Development will involve construction of 22 no. wind turbines, one onsite substation, a met mast, all associated hardstand areas, construction of access roads, excavation and reinstatement of 3 no. borrow pits, all the associated excavation works for the cable connection to the on-site substation location, underground grid connection cabling to the 110 kV substation in Tawnaghmore and accommodation works along the turbine delivery route, as detailed in Chapter 4 of this EIAR. Construction phase effects also include the use of peat placement areas, temporary construction compounds and the associated effects resulting from the movement of construction and turbine transport vehicles into and out of the site, to allow the construction of the turbines and associated elements.

14.7.2.1 Landscape Effects (Construction Phase)

The felling and earthworks such as cut and fill required to facilitate construction of the Proposed Development will have a direct effect on the landscape. Where excavation is required within the Proposed Development Site, existing landcover, vegetation and spoil will be removed during the construction phase. In most instances, groundworks and excavation trenches will be re-instated upon completion of construction. Excavation will be visually contained by the surrounding forestry and will not be visible from the wider LVIA Study Area. The construction activities may potentially cause temporary impacts on the landscape such as the creation of temporary structures, dust and noise. In general, it is considered that the construction phase will have a Short-Term, ‘Slight’, Negative effect in terms of direct landscape effects.

The construction works will be short-term in nature and completed as soon as practically possible. All construction activities will follow best practice methods as set out in the Construction and Environmental Management Plan (CEMP) to reduce impacts upon the environment and landscape of the site. Further details are contained in the CEMP in Appendix 4-3 of this EIAR.

It is considered that this is a Short-term, Slight, Negative effect in terms of landscape effects, although these will be localised to the landscape of the site itself and the development footprint.

14.7.2.2 Visual Effects (Construction Phase)

The most substantial visual effects will arise from requisite construction activities such as building tower sections and erecting the turbines, these will be Short-Term, Slight, Negative visual effects. The equipment and vehicles required to transport and erect the wind farm components include large cranes and large haulage vehicles; these will cause Short-Term Slight, Negative visual effects.

General housekeeping measures, detailed in the CEMP, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase. A detailed description of all construction activities is included in Chapter 4 of this EIAR and within the CEMP.

14.7.2.3 Ancillary Project Elements including Grid Connection

Grid Connection – Construction Phase Effects

The intended grid connection will be located underground, therefore the greatest effects attributed to this element of the Proposed Development will occur during the construction phase. The majority of cable route works are to be carried out along existing the R315 regional road, a local road between the R315 and the Tawnaghmore 110kV substation, as well as forestry tracks. The construction phase of the proposed underground cabling will be temporary, localised and transient in nature, as the works move along the cable route. The works will include roadside vegetation removal, tar and soil stripping, excavation and other associated construction activities. These activities will cause temporary change to the physical landscape along the grid connection route. Changes will be localised to the immediate environment surrounding the grid connection route and will not affect the character of the landscape setting or visual amenity of the wider area. The proposed grid connection works are likely to cause temporary, negative landscape and visual effects of ‘Slight’ significance.

The following measures will be implemented in full to mitigate effects during the construction phase and operational phase of the proposed grid connection:

- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible (see the CEMP for additional details).
- Where the cable trench is to be located in the road verge, subsoil will be piled on site and re-used after cabling works. Should any vegetation be removed, it will be replaced with the same or similar species whenever it is not possible to salvage and reinstate.
- Any areas of bare soil remaining after the landscaping phase will be seeded as soon as possible with a grass seed mix to minimise sediment run-off.

Other Ancillary Project Elements

For the purposes of this LVIA, a number of individual elements of the Proposed Development, ancillary to the proposed turbines, have been grouped together for the assessment of effects in the construction phase, given the similar nature of the works required. The project elements to be constructed during this phase include the proposed roads and turbine hardstand areas, anemometry masts and the electricity substation compound (and ancillary elements thereto) may all give rise to potentially similar landscape and visual effects. Details of these components of the Proposed Development and the required works to construct them are contained in Chapter 4 of this EIAR. Due to the topography of the Proposed Development Site and surrounding areas, in addition to the coniferous forestry present on site, the lower ancillary project elements will be visible only in their immediate surroundings, hence, any visual effects will be localised and predominantly confined to within the Proposed Development Site.

Proposed Substation: The proposed substation site is located within forestry, adjacent to the north-eastern boundary of the Proposed Development Site, adjacent to an existing forestry road which runs through the western half of the site. Access to the substation will be off the existing road. The footprint of the proposed onsite electricity substation compound measures approximately 6,027m² and will include a wind farm control building and the electrical components necessary to consolidate the electrical energy generated by each proposed turbine and export that electricity from the wind farm to the national grid. The proposed substation location is surrounded by commercial forestry which will screen any potential long-ranging views of the substation, limiting any landscape and visual effects to the localised area around the substation and the adjacent forestry road. The construction of this facility will result in a High magnitude of change in the landscape but in a localised area within the site. Any landscape and visual effects are likely to be highly localised, Negative, Short-Term and will be of ‘Moderate’ significance.

Site Access Roads and Hardstand Areas: The proposed access roads and hardstand areas are flat features. Consequently, they will be most visible within their immediate surroundings, therefore any landscape and visual effects will be very localised. Every use will be made of the existing forestry access tracks on site. 15.4km of existing tracks will be upgraded appropriately whilst 10.5km of new internal roads will need to be constructed. Some vegetation clearance will occur as a result of this construction. The road construction design has attempted to minimise the excavation required and to minimise the disruption to peat hydrology. The impact of the construction of these flat and hard surfaces will be very localised. The landscape and visual effects arising from the access roads and hardstand areas are considered to be highly localised Negative, Short-Term effects of ‘Slight’ significance.

Meteorological (Met) Mast: One met mast is proposed as a part of the Proposed Development. This will be a slender structure, 99 metres in height, and in itself will not be an imposing structure in terms of visual impact. The landscape and visual effects of the construction of the proposed mast will be localised, considering that construction activities related to this will be most visible within their immediate surroundings. Within the site and its immediate landscape setting, the landscape and visual effects arising from the construction of the proposed met mast is considered to be of highly localised Negative, Short-Term effects of ‘Slight’ significance.

Peat and Spoil Placement Areas: It is proposed to store any excess peat and spoil generated through construction activities around turbines bases. These placement areas will reach a maximum height of 1m of peat placed around the turbine hardstands. The placement of peat will have a localised landscape and visual impact as a result of changing landcover from coniferous forestry at present to stored peat resulting from construction activities. The impact of these placement areas will be very localised. The landscape and visual effects arising from the peat and spoil placement areas are considered to be Negative, Long-Term, effects of ‘Slight’ significance.

14.7.3 Operational Phase Effects

14.7.3.1 Landscape Effects

14.7.3.1.1 Landscape of the Proposed Development Site

The landscape of the Proposed Development Site will undergo a change in character by the introduction of vertical structures in the landscape. There will also be localised change around the ancillary project infrastructure. There will be a substantial magnitude of change to the landscape in localised areas within the site where the landscape is materially altered (infrastructure footprint).

The Renewable Energy Strategy which has been adopted within the Mayo County Development Plan, has identified the site of the current proposal as containing areas designated as *Tier 1- Preferred (large wind farm)* and *Tier 2 - Open to Consideration*. 4 No. of the proposed turbines fall within the classification areas *Tier 2 - Open to Consideration* and 3 No. turbines fall within the classification area of *Tier 1- Preferred (large wind farm)* as set out in the RES for County Mayo. The landscape value and

sensitivity of the Proposed Development Site was deemed to be ‘Low’ in Section 14.4.2 above. Low sensitivity balanced with a substantial magnitude of change amounts to long-term landscape effects of Moderate significance upon the physical fabric of the landscape of the site (See LVIA Methodology, Appendix 14-1). These direct landscape effects will be highly localised to the footprint of the Proposed Development. Effects on the perceptual and aesthetic character of the Proposed Development Site are also deemed to be of Moderate significance.

Mitigation of Landscape Effects within the Landscape of the Proposed Development Site

The following measures have been included in the Proposed Development design in order to avoid or reduce direct effects on landscape receptors of the Proposed Development Site:

- The proposed turbines have been sited to avoid direct impacts on any sensitive landscape features such as nearby undeveloped boglands and the landscape value of the site in general is low.
- The proposed internal site road layout maximises the use of the existing forestry tracks wherever possible, to minimise the requirement for new tracks within the site.
- Dedicated public walking trails and public information signage are included as part of the Proposed Development in order to enhance the Western Way Walking Trail* where it traverses the site with an aim of improving the recreational value of the site and its landscape.

**The Western Way Walking Trail is representative of Visual Receptors and is therefore comprehensively assessed and discussed in Section 14.7.3.3 – Visual Effects*

Residual Landscape Effects

Considering the mitigation measures above, residual effects upon the landscape of the Proposed Development Site are deemed to be of ‘Slight’ significance, given that siting and design of the Proposed Development has avoided any sensitive landscape features.

14.7.3.1.2 Landscape Designations – Landscape Policy Areas

Landscape designations brought forward as landscape receptors with the potential to experience significant landscape effects include Landscape Policy Areas (LPAs) 1, 3 and 4.

Landscape Policy Area 3 (LPA3)– Uplands, Moors, Heath or Bogs, All proposed turbines and infrastructure of the Proposed Development (excepting the Grid Connection) are sited in LPA 3 and therefore the Proposed Development will have direct effects on the landscape of this LPA.

The landscape sensitivity matrix in the MCDP indicates (See Figure 14-7) that this landscape type has a high sensitivity to wind farm development. However, it is notable that there is widespread development of wind energy, either existing or permitted, in this LPA, and there are large parts of this LPA that are designated as ‘Tier 1 – Preferred’ and ‘Tier 2 – Open to Consideration’ in the Renewable Energy Strategy for County Mayo, particularly in the northern section of the policy area, including sections within areas where the Proposed Development is located (See Figure 14-7). It is therefore considered that the susceptibility to change of this LPA is ‘Low’ in mind of the renewable energy strategy designations in local planning policy. On balance, the sensitivity of this landscape receptor is deemed to be ‘Medium’. There will be localised ‘Moderate’ changes to this LPA at the Proposed Development Site resulting in localised direct Moderate landscape effects.

The key sensitivities and local landscape policy protections of LPA 3 relate to landscape character and the aesthetic visual appearance of the landscape. The policies (12, 13 and 14 – Landscape Appraisal for County Mayo) relate to protection of scenic amenity such as ‘scenic upland vistas’ and ‘linear sections

of primary ridge lines’ in particular when ‘visible from the public realm’. Policy 15 for LPA3 specifically relates to wind energy:

“Policy 15: Facilitate developments that have a locational requirement to be situated on elevated sites (e.g. telecommunications and wind energy structures). It is necessary however to ensure that adverse visual impacts are avoided or mitigated wherever possible.”

Notwithstanding the renewable energy designations and existing and consented wind energy development in LPA3, Policy 15 (above) indicates that the development of wind energy is acceptable in the landscape of LPA3. As the policy suggests, there are often locational requirements to site wind energy developments in upland landscape types. As well as high wind speeds at high elevation, upland landscape types are generally well suited for the development of wind energy as they are usually set back from visual receptors and population centre (the public realm) their large scale is capable of absorbing and accommodating wind energy developments of scale. It is considered that the Proposed Development will be visible in this landscape and will cause a ‘Moderate’ Degree of change to this localised areas of the LPA3 landscape which is deemed to be a landscape of ‘Medium’ sensitivity resulting in a ‘Moderate’ landscape effect. However, in line with Policy 15, the following section reports how the Proposed Development ensures ‘that adverse visual impacts are avoided or mitigated wherever possible’ in the context of other policies relating to the protection of ‘scenic upland vistas’ and ‘linear sections of primary ridgelines’ when visible from the public realm.

**The below discussion assesses the impact of the Proposed Development on this landscape receptor (LPA3) in the context of local landscape policy. These policies ultimately relate to protection of scenic amenity and consequently relate visual effects on visual receptors as well as effects on landscape character. The key points made below will therefore be of importance and relevance in the discussion of Visual Effects in Section 14.7.3.3, however, they are initially reported here as they are highly relevant and pertinent to the likely residual landscape effects on the character of LPA3 and other designated landscape receptors in the MCDP such as ‘vulnerable ridgelines’.*

Avoidance and mitigation of Landscape (and Visual) effects on the Upland Landscape and Ridgelines of LPA3

The locational siting of the Proposed Development and design of the final turbine layout of the Proposed Development was part of an iterative design process including early stage impact assessment work using tools such as ZTVs and photomontage visualisations. The site selection and final design aims to mitigate adverse impacts on the character of the landscape and adverse visual impacts on the public realm (effects on specific visual receptors are assessed in the following section – *Visual Effects*). Firstly, the following points relate to site selection:

- Strategic siting of the Proposed Development in a bowl of upland landscape enclosed by landform to the west, north and east, obscures visibility of the turbines from much of the ‘public realm’ in these directions. This is best demonstrated by the ZTV map where vast areas of the LVIA Study Area particularly to the north, east and west show no theoretical visibility of the proposed turbines;
- Strategic siting of the proposed turbines in this remote pocket of upland ensures substantial setback from visual receptors limiting the potential for adverse visual impacts as the turbines are consequently always visible at a substantial from visual receptors;
- The Proposed Development is not sited in highly sensitive landscape areas of LAP3 and it does not intrude upon the character and setting of distinctive upland landscape areas and features e.g. The Nephin Beg Range to the south;
- The Proposed Development is strategically sited in a landscape area where it will have no significant impact on any designated scenic routes protected in local planning policy;

In terms of design, several specific measures were implemented to avoid and mitigate landscape and visual effects and also align the visual aesthetic of the Proposed Development in the landscape with the guidance set out in the WEDGs (DoEHLG, 2006), and with regard to the guidance set out in the Draft WEDG's (DoHPLG, 2019). Firstly, all proposed turbines are sited at elevations lower than 230m AOD - a lower elevation relative to surrounding landform features and ridgelines (to the north, east and west resulting in the following outcomes which are demonstrated in the photomontages and pertinent to the determination of landscape and visual effects in this Chapter:

- In most instances when the Proposed Development is visible in the landscape from the north, east and west, a vast majority of the proposed turbines are obscured from view and visible turbines will only be partially visible (See Photomontage Viewpoints 9; 2; 1; 4; 11; 7; 5);
- As the turbines are sited within a slight bowl of lower elevation relative to the ridgelines enclosing them, when they are visible, they are always perceived as background features of the landscape beyond distant ridgelines (excepting from the south where large set back from any receptors and effects are mitigated by substantial distance See VPs 6 and VP8. Visual effects from the south are assessed in Section 14.7.3.3 – *Visual Effects*). Consequently, the proposed turbines do not obstruct views of primary ridgelines when viewed from the north, east or west.
- When some of the proposed turbines are visible from the public realm to the north, east and west, their lower tower sections are generally always screened from view reducing the prominence of the turbines in the landscape. The proposed turbines are never viewed to be standing tall upon the apex of any ridgeline from any receptors in the public realm.

ZTVs, photomontages and visibility appraisals determined that, in general, there is very limited visibility of the Proposed Development from the north and west, and only distant visibility from receptors to the south. Consequently, most open visibility from sensitive receptors in proximity to the Proposed Development only occurs from the east and northeast. From these directions the visible proposed turbines will be seen in combination with the 'primary ridgelines' which enclose it to the north and east. Early stage impact assessment work (including the production of photomontage visualisations of earlier turbine layouts) resulted in micro-siting of turbines to ensure that the proposed turbines read coherently in the landscape in combination with these ridgelines. Care was taken to ensure the final Proposed Development design aligns with specific and relevant guidance contained in *Aesthetic Considerations in Siting and Design* that comprises Chapter 6 of the WEDGs (DoEHLG, 2006). In terms of Topographic Profile, Chapter 6 of the WEDGs state:

“A wind energy development should be located so as to optimise the aesthetic qualities of the surrounding landscape and those of the wind energy development itself. It should, therefore, respond to topographic profile, achieving visual balance and accentuation of landform.”

Also as demonstrated in Figure 1 and 2 in Chapter 6 of the WEDGs, staggered linear arrangement of turbines both *“Located on a peak”* and within *“a saddle between two peaks”* results in visual balance or accentuation with landform and ridgelines. In alignment with the guidance, careful micro siting of the most elevated turbines, ensures that their form and arrangement is mostly seen as a staggered linear array sympathetic and aligned with the shape of the ridgelines when they are visible from the east and north-east where the turbines will actually be visible from sensitive receptors in the LVIA Study Area. This occurs when turbines are visible both on peaks (See VP9 – view from the east) and when framed within saddles of lower land (VP3 view from the north-east).



Figure 14-18 Extract from the Volume 2 Photomontage Booklet: Viewpoint 9. The proposed turbines are visually balanced with the profile of the ridgeline when viewed from the east



Figure 14-19 Extract from the Volume 2 Photomontage Booklet: Viewpoint 3. The proposed turbines are framed within the saddle of lower ground when viewed from the northeast.

As seen in the photomontage visualisations (Volume 2 Booklet) where the proposed turbines are visible from the east and north-east (the nearest areas of the public realm where turbines are visible), they are always visible beyond the most elevated ridgelines visible in the landscape. In this regard, the proposed turbines are always visible in the background of views and do not obstruct views of any landscape features from key sensitive receptors, mitigating the potential for interference and visual confusion with views of ‘linear sections of primary ridgeline’ or ‘scenic upland vistas’.

Considering the alignment with both the WEDGS and specific policies in relation to LPA3, the proposed Development has been designed to “ensure that adverse visual impacts are avoided or mitigated wherever possible”. Taking all the factors discussed above into account, Residual effects on the key sensitivities of the LPA landscape are deemed to be ‘Slight’.

Landscape Policy Area 4 – Drumlins and Inland Lowlands is an area of high to moderate landscape sensitivity to wind farm development as indicated in the landscape sensitivity matrix from the MCDP, shown in Figure 14-7 above. This is the lowest sensitivity rating given to any policy area within the MCDP. The ZTV mapping shows widespread full theoretical visibility in this LPA, with areas of widespread partial visibility to the north and west of this LPA. The Proposed Development is located approx. 5 km from this LPA (LPA 4) at its closest point and therefore no direct effects to the physical fabric of this landscape will occur. Sections of LPA 4 that fall within the LVIA Study Area contain a number of areas designated as ‘Tier 1 – Preferred’ and ‘Tier 2 – Open to Consideration’ in the Renewable Energy Strategy for County Mayo, particularly in the northern section of the policy area, which is in close proximity to the area where the Proposed Development is located. The Proposed Development will not obstruct, and only slightly interfere, with views upon the landscape and its character, particularly regarding key landscape characteristics such as those mentioned in the policies relating to this LPA in the Landscape Appraisal of County Mayo. Specifically, the Proposed Development is commonly viewed above and beyond distant ridgelines, reducing the level of interference with views of these ridgelines. an example of this is shown in the overlaid wireframe shown

below – Figure 14-20, which shows a view towards the Proposed Development from a location the R315 regional road within LPA 4, approx. 8.6 km south-east of the nearest proposed turbine. There are also substantial levels of screening provided both by vegetation throughout this LPA and as a result of the topography surrounding the Proposed Development in the intervening space between the Proposed Development and the parts of this LPA within the LVIA Study Area. The Proposed Development will also appear appropriately sited and designed in relation to this LPA, and the factors detailed previously in relation to mitigation of effects of LPA3 are mostly relevant and applicable to likely effects on LPA4. Taking all the factors discussed above into account, there will be no significant landscape effects in relation to Landscape Policy Area 4 as a result of the Proposed Development.



Figure 14-20 Photowire E

Landscape Policy Area 1 – Montaine Coastal Zone is an area of high landscape sensitivity to wind farm development, as indicated in the landscape sensitivity matrix from the MCDP, shown in Figure 14-7 above. The ZTV mapping shows large areas of no theoretical visibility within 10 km of the Proposed Development, with some areas of partial theoretical visibility indicated around Downpatrick Head. In addition, the ZTV shows a large area of partial and full theoretical visibility between 10-20 km west of the Proposed Development. The nearest proposed turbine to LPA 1 is approximately 2.5 km away at its closest point. Sections of LPA 1 that fall within the LVIA Study Area contain a number of areas designated as ‘Tier 2 – Open to Consideration’ in the Renewable Energy Strategy for County Mayo, particularly in the eastern section of the LPA 1, which is in close proximity to the area where the Proposed Development is located. The Landscape Appraisal of County Mayo provides a number of policies relating to LPA 1.

Policy 4 provides that Mayo County Council will “consider development that does not significantly interfere or detract from scenic coastal vistas, as identified in the Development Plan, when viewed from areas of the public realm.” This is most relevant in relation to VP 3, shown in the Photomontage Booklet - Volume 2, which shows a long-distance view from Downpatrick Head over a scenic stretch of coastline or scenic coastal vista. A comprehensive visual impact assessment of this viewpoint and scenic amenity from Downpatrick head (VP3) is included in Appendix 14-3, however, it is noted that the Proposed Development is seen beyond a distant ridgeline approximately 11 km away. The turbines appear as background elements within the view, causing minimal visual confusion and interference with the above noted scenic coastline view. In relation to this view, it is also noted that *Policy 6* of the Landscape Appraisal of County Mayo provides that it is the policy of Mayo County Council to preserve “any areas that have not been subject to recent or prior development and have retained a dominantly undisturbed coastal character.” It is noted in the part of the view in VP3 where the proposed turbines are visible, that there are levels of human development on the lower slopes of the hills above which the turbines are visible. This is primarily residential and agricultural development, however, it is clear that the sense of wildness of the view in this direction is reduced as a result. The longer-distance view of the coastline that is available to the right of the Proposed Development in this view has an undisturbed coastal character that the Proposed Development does not obstruct or interfere with.

Policy 5 of the Landscape Appraisal of County Mayo provides that development should not “interrupt or penetrate distinct linear sections of primary ridge lines and coastlines.” When the proposed turbines are visible above primary ridgelines From LPA 1, the mitigating factors reported previously in relation to LPA3 are highly relevant. Also, VP2 and VP1 (fully assessed in Appendix 14-3) are both examples of the relatively insignificant interference that the Proposed Development has with views of primary ridgelines and coastlines from within the LPA. In the case of VP1 the Proposed Development is almost completely screened from view, and is only partially visible above the ridgeline, substantially reducing the level of visual confusion and interference with the ridgeline caused by the addition of the Proposed Development. It is also noted that from this location there are more scenic views of the coastline available in the other direction, away from the Proposed Development. In the case of VP2, which is located within the area of theoretical visibility 10-20 km to the west of the Proposed Development noted above, the Proposed Development is so well screened, and located at such a distance from the viewpoint, that the level of interference with the primary ridgelines visible within the view is insignificant, particularly considering that there are more dramatic ridgelines seen to the left of the Proposed Development in this view, that naturally draws the viewers’ attention away from the Proposed Development.

Finally, Policy 7 states that Mayo County Council will “consider development on steep slopes, ensuring that it will not have a disproportionate or dominating visual impact on the surrounding environment as seen from areas of the public realm.” The Proposed Development is located on steep slopes visible from within LPA 1. It is located on the far side of ridgelines as seen from locations within the LPA, reducing the visual impact of the visible turbines, and resulting in no occurrence of a domineering effect, given that from the majority of the LPA the proposed turbines are viewed as background elements located a substantial distance from the viewer, and are located on the opposite side of ridgelines.

Overall, there are substantial levels of screening throughout this LPA provided by the topography surrounding the Proposed Development, and the topography located in the intervening space between the Proposed Development and the parts of this LPA within the LVIA Study Area. The Proposed Development will also appear appropriately sited and designed in relation to this LPA and the policies discussed above. Taking all the factors discussed above into account, there will be no Significant landscape effects in relation to Landscape Policy Area 1 as a result of the Proposed Development.

14.7.3.1.3

Landscape Designations – Downpatrick Head

Section 14.4.1.5 above outlined the identification of Downpatrick Head as a sensitive landscape receptor within the LVIA Study Area. In particular, the location is noted as a Signature Discovery point along the Wild Atlantic Way, which has been noted for its scenic value in the MCDP. Plate 14-17 to Plate 14-20 below show views in various directions from Downpatrick Head, showing the expansive panoramic view available from the headland. The Proposed Development will not directly alter the physical landscape of Downpatrick Head and therefore any landscape effects are only likely to impact its character or setting. The Proposed Development will be seen from this location (see VP3), 11.4km southeast to the closest proposed turbine. The Proposed Development will therefore have an effect on the landscape character of the headland, as it will introduce novel elements into the background of the view.

As seen from VP3 the proposed turbines will only be partially seen as small vertical features in the background of the view, above a ridgeline to the southeast of the headland. The proposed turbines do not obstruct or intrude upon the key scenic sensitivities of this landscape such as the sea cliffs, sea stacks and immediate seascape setting of Downpatrick Head itself. The field of view comprising the Proposed Development includes approximately 19° (5.2%) of the expansive panoramic vistas (360°) available from Downpatrick Head. The proposed turbines are partially visible beyond a distant ridgeline approximately 11.48km from VP3 and are consequently seen as small features in the background of the landscape view. The most iconic and sensitive scenic views from most locations at Downpatrick Head include views of the Dún Briste Sea Stack, as well as the rugged dramatic coastline to the west (as is indicated by Osi Viewing Area icons on Osi maps). These key sensitive views are mostly oriented

directly west and north from most locations at Downpatrick Head, not in the direction of the Proposed Development which is located to the southwest. The longest ranging views of the coastline and sea are available to the west, north and east, not in the direction of the Proposed Development.



Plate 14-17 View to the west from Downpatrick Head



Plate 14-18 View to the northwest from Downpatrick Head



Plate 14-19 View to the east from Downpatrick Head

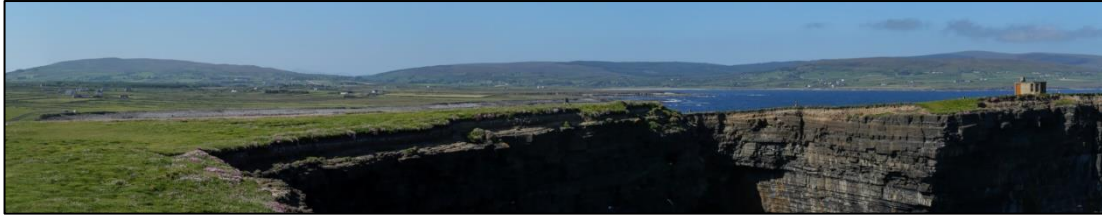


Plate 14-20 View to the southeast from Downpatrick Head

Whilst this location is protected as a valuable tourism asset in the MCDP, Downpatrick Head is not part of a designated scenic route in local planning policy (MCDP). The proposed turbines are visible in the background of this view. However, it is considered that by virtue of the setback distance (<11km) and their positioning in the landscape, the proposed turbines are unlikely to detract value from visitor and tourism experiences of Downpatrick Head.

It is also noted that the proposed turbines are strategically sited at lower elevations relative to the ridgelines enclosing them to the north and west. The strategic siting of turbines at lower contours beyond the distant ridgeline reduces their visual prominence in the landscape, mitigating effects on landscape character at this location. In addition, Chapter 6 of the WEDGs (DoEHLG, 2006) reports ‘Aesthetic Considerations in Siting and Design’ for Wind Energy Developments and includes the following text:

“It is preferable to avoid locating turbines where they can be seen one behind another, when viewed from highly sensitive key view points (for example, viewing points along walking or scenic routes, or from designated views or prospects), as this results in visual stacking and, thus, confusion.”

Through an iterative design process (including production of early-stage photomontage visuals and turbine micro-siting), the proposed turbine layout results in a lack of visual stacking from this high sensitivity viewpoint, mitigating the potential for visual confusion created by the Proposed Development, therefore aligning with the siting and design guidance in the WEDGs.

Overall, Downpatrick Head is considered a High sensitivity landscape receptor and a Moderate effect on landscape character at this location is deemed to arise as a result of the Proposed Development. An assessment of visual effects on visual receptors at Downpatrick Head is also outlined below in Section 14.7.3.2.3.

14.7.3.1.4 **Landscape Designations – Vulnerable Landscape Features**

A number of designated vulnerable landscape features were identified in the Landscape Baseline – Section 14.4.1.4, within the LVIA Study Area. These include ridgelines, and lakeshores and riverbanks.

Ridgelines

Of the 13 designated ridgelines identified, two were screened in for further assessment using ZTV mapping and consideration of those ridgelines with the potential to experience significant landscape effects, taking into account factors such as distance from the Proposed Development and likely views of the landscape feature within views where the Proposed Development would likely be seen, informed through site visits and desktop studies. It is to be noted that the mitigating factors reported previously in relation to discussion of effects on LPA3 are highly relevant to the effects on these protected ridgelines.

Cloghmoyle – is a ridgeline located to the east of the Proposed Development, as seen on Figure 14-4 above, reaching a peak of 237m AOD. The Proposed Development will be viewed in the same viewshed as this peak from locations to the south and east of the ridgeline. The Proposed Development will appear behind and above the ridgeline, reducing the level of visual confusion caused by the addition of the proposed turbines in the view. VP11 shows a view from a location northeast of the

Cloghmoyle ridgeline. The turbines are seen to the right of the ridgeline from this view, located on the other side of the skyline that joins the Cloghmoyle ridgeline with the surrounding topography. The proposed turbines are perceived to be framed in a saddle of lower land between the two most elevated peaks. The turbines increase the vertical extent of this skyline, although not above the peak of Cloghmoyle. As a result, the turbines appear appropriately scaled within the view. It is likely that from locations further south from this area the proposed turbines would be seen above the lower regions of the Cloghmoyle ridgeline, adding some small amount of visual confusion and interruption to what is at present an uninterrupted ridgeline. However, as the proposed turbines are strategically sited at elevations below 230m AOD (see Section 14.3.1), it is unlikely that they will appear above the highest point along the ridgeline, providing a measure of scale to the turbines and protecting the character of the ridgeline as the defining feature within the skyline, a key feature of the surrounding landscape. In addition, it is likely that from locations where the turbines of the Proposed Development are located directly behind the hill in the view, there will be no or very limited visibility as the turbines will be almost completely screened by the Cloghmoyle ridgeline. VP11 is representative of view of the designated scenic route (map ref: SR5 on Figure 14-13) located to the northeast along the coastline, although there is an increased distance from this scenic route, it is at a similar orientation as VP11. Views of the Proposed Development and the Cloghmoyle ridgeline will be similar as those seen in VP11.

Taking all of the above factors into account, including the sensitivity of the ridgeline and the policy relating to it in the Landscape Appraisal for County Mayo, it is considered that no Significant landscape effects will arise on this landscape feature as a result of the Proposed Development.

Maumakeogh Mountain – is a large ridgeline located adjacent to the Proposed Development to the north. The proposed turbines are sited on the lower slopes of the Maumakeogh Mountain, and are strategically sited at lower elevations, below 230m AOD (see Section 14.3.1). As a result of their placement on the slopes of this mountain, the Proposed Development will be seen within the same viewshed as the Maumakeogh ridgeline from a number of directions. VP10 is located to the south of the Proposed Development site along a low-trafficked local road. The ridgeline is partially seen in the left background of this view, with the remaining sections screened by the intervening local topography and commercial plantation forestry. The turbines cause minimal interference with the ridgeline from this location, as they are seen to the right of where the ridgeline is visible. VP1 is located along a designated scenic route (map ref: SRDV 1 on Figure 14-13) to the north of the ridgeline, which is seen to form the skyline of the background of the view. There is very limited visibility of the Proposed Development from this location as the Maumakeogh ridgeline provides substantial topographical screening of the turbines. VP9 shows a view from the east of the site, where the turbines of the Proposed Development are seen to the left of the eastern extent of the Maumakeogh Mountain ridgeline. The turbines seen are located along and behind the lower slopes of the ridgeline, with the highest points along this section of the ridgeline undisturbed by turbines. The turbines do increase the vertical extent of the skyline here noticeably, although again, they do appear appropriately scaled in relation to the ridgeline. From locations to the right, further north along the R315 regional road seen in the foreground of VP9, the Maumakeogh ridgeline will provide almost complete screening of the Proposed Development, which is located on the far side of the peak seen to the right of the turbines in this view. This is the case between this location and the village of Ballycastle approx. 4.5km to the north. These VP locations show the range of orientations in close proximity to the Maumakeogh Mountain ridgeline where it will appear as a substantial landscape feature. The proposed turbines of the Proposed Development are sited so as to avoid substantial landscape effects on this ridgeline from these locations. From locations to the west and northwest, the ZTV mapping (Figure 14-14) shows that there will be no visibility from locations in close proximity and partial to no theoretical visibility beyond 10km, where potential effects will be lessened by distance.

Taking all of the above factors into account, including the sensitivity of the ridgeline and the policy relating to it in the Landscape Appraisal for County Mayo, it is considered that no Significant landscape effects will arise on this landscape feature as a result of the Proposed Development.

Lakeshores and Riverbanks

Of the 13 designated lakeshores and riverbanks identified, four were screened in for further assessment using ZTV mapping and consideration of those with the potential to experience significant landscape effects, taking into account factors such as distance from the Proposed Development and likely views of the landscape features within views where the Proposed Development would likely be seen, informed through site visits and desktop studies.

Oweninny River – is located just south of the Proposed Development and runs in a north-south orientation. The river runs through the large flat basin of open moorland to the south of the Proposed Development site and so there will be limited opportunities to view this river from these surroundings, given the difficulties with accessing these areas. VP10 shows a view from a low-quality local road located to the east of the river, where views towards the river from along this road will not be in the direction of the Proposed Development. The closest public road where there are likely views of the river in the direction of the Proposed Development is located approximately 10km south of the Proposed Development, where the proposed turbines will appear as smaller background elements within the view. It is also noted that there is a substantial level of wind farm development around the river at this location along the local road, and while there will be some minor additional cumulative landscape effects as a result of the Proposed Development, it's addition to views of the river from its surroundings will not impinge in a significant way upon the character, integrity or uniformity of the river, particularly given that there is substantial wind farm development in much of the surroundings of the river from this location, in particular, the turbines of the existing Oweninny 2 wind farm are closer to the river than the turbines of the Proposed Development,. It is deemed that there will be no Significant landscape effects on this landscape features as a result of the Proposed Development.

Keerglen River – is located to the east and northeast of the Proposed Development and runs adjacent to the south-eastern EIAR Site Boundary. The ZTV mapping (e.g. Figure 14-14) shows that the majority of the river will have no theoretical visibility of the Proposed Development as a result of the intervening topography. There is some partial theoretical visibility indicated from some local roads that run adjacent to the river near to where it joins the south-eastern boundary of the site. The local road immediately south of this section of the river is where there will be most substantial visibility of the Proposed Development. From this road the proposed turbines of the Proposed Development will be substantially screened with only partial visibility likely as a result of intervening topography and roadside vegetation. The addition of turbines (albeit only partially seen) within this view will add incongruent elements to the rural character of the view within which the landscape feature is observed. However, the proposed turbines will be visible on the other side of a ridgeline, and at a distance such that there will be no domineering or overbearing effect occurring. Overall, the proposed turbines will appear as background elements, and the immediate surrounds of the riverbanks will maintain their character, integrity and uniformity. In addition, it is noted that there is only likely visibility of the Proposed Development from this small stretch of the riverbank and the vast majority of the river and its immediate surrounds will have no or very limited visibility of the Proposed Development. It is deemed that there will be no Significant landscape effects on this landscape feature as a result of the Proposed Development.

Glencullen River – is located in close proximity to the northeast of the Proposed Development Site, running adjacent to, or located close by, the Western Way walking trail northeast of the site, as seen in Figure 14-13. There is partial theoretical visibility indicated for the majority of this river. VP4 is located at the confluence of this river, the Western Way and the closest public local road to the Proposed Development Site. It is difficult to discern the river within this view, but it located just to the far side of the hedgerow seen adjoining the road in the foreground of the view. The proposed turbines are seen above the ridgeline in the background of this view and introduce some novel elements into the rural mountainous character of the existing view. However, the proposed turbines will be visible on the other side of a ridgeline, and at distance such that there will be no domineering or overbearing effect occurring. Overall, the proposed turbines will appear as background elements, and the immediate surrounds of the riverbanks will maintain their character, integrity, and uniformity. From locations in closer proximity to the site along the Western Way walking trail, there is generally heavy screening on

either side of the path, and it is difficult to discern the presence of the river itself in the first place, particularly given that it is still a relatively small river in terms of water levels and flow rates at this elevated location. At lower elevations the river becomes a more noticeable landscape feature, although at these locations, such as at the bridge of a local road 1 km northeast of VP4, the turbines of the Proposed Development are almost entirely screened by the intervening Maumakeogh Mountain ridgeline. Overall, it is deemed that there will be no Significant landscape effects on this landscape feature as a result of the Proposed Development.

Glenulra River – is located north of the Proposed Development Site, approximately 3.2 km from the nearest proposed turbine at its closest location. The river flows north from this point until reaching the coast, near the Céide Fields. The stretches of the river in closest proximity to the Proposed Development are relatively inaccessible given the lack of existing riverside paths and the moorland character of the terrain. The closest public road along the riverbanks is located approximately 5 km north of the nearest proposed turbine. This is a low-quality local road that likely sees very little traffic. There are also substantial levels of screening along the sides of the road in the form of gorse, making it difficult to discern the river in the direction of the Proposed Development. VP1 is located along the R314 approximately 1 km north of this location, along a designated scenic route (map ref: SRDV 1 on Figure 14-13). It looks down onto a valley created by the Glenulra river, which is discernible in the centre midground and background of the view. There is very limited visibility of the Proposed Development from this location as the Maumakeogh ridgeline provides substantial topographical screening of the proposed turbines. Overall, it is deemed that there will be no Significant landscape effects on this landscape feature as a result of the Proposed Development.

Of all the designated vulnerable landscape features assessed in this section, including ridgelines and riverbanks, there are no Significant landscape effects deemed to arise. This is a result of the generally remote nature of the Proposed Development Site meaning that there is limited access to areas where there will be substantial visibility of the Proposed Development. Also, the proposed turbines are strategically sited at elevations lower than 230m AOD, which substantially mitigates their impact on adjacent ridgelines and creates substantial topographical screening of the Proposed Development from the riverbanks that are identified as potentially experiencing significant landscape effects. Overall, the Proposed Development will have no more than minor landscape effects on the character, integrity and uniformity of the landscape features assessed in this section, particularly from scenic routes, which is noted as a particular concern in the Landscape Appraisal of County Mayo (see Section 14.4.1.4 above).

14.7.3.1.5 **Landscape Character Units**

An assessment of the effects on landscape character was undertaken for the five LCUs screened in for assessment (LCU B was not screened in for assessment in Table 14-6) within the LVIA Study Area for effects on landscape character (15km) that are listed in Table 14-6 of Section 14.4.3.2. The individual assessments for each LCU are summarised in Table 14-15 below and included in detail in Appendix 14-2 - Landscape Character Assessment Tables. The assessment criteria and grading scales which aided the assessment of landscape effects are detailed in Section 1.4.2 of the LVIA Methodology Appendix – Appendix 14-1. It is noted that, as clearly laid out in the landscape character assessment tables, that the assessment of cumulative effects on landscape character are also incorporated in the determination of significance summarised in Table 14-15 below. The effects on landscape character relating to introduction of the Proposed Development in the Existing, Do-Nothing, and Proposed scenarios (outlined above in Section 14.7) are considered in detail in these assessment tables. Section 14.7.3.2 below contains additional discussion of cumulative effects on landscape character.

Table 14-15: Landscape Character Effects of LCUs within the LVIA Study Area.

Landscape Character Unit (LCU)	LCU Sensitivity to Wind Farm Development	Magnitude of Change	Significance of Landscape Character Effect
LCU E – North Mayo Mountain Moorland	Medium	Moderate	Moderate
LCU F – North Mayo Inland Bog Basin	Low	Slight	Not Significant
LCU D – North Coast Plateaux	High	Slight	Moderate
LCU G – North Mayo Drumlins	Medium	Slight	Slight
LCU C – North-West Coastal Bog	Medium	Slight	Slight

As demonstrated by Table 14-15 no Significant landscape effects are likely to occur on the landscape in the LVIA Study Area. The Proposed Development is partially located in the northern portion of LCU E – North Mayo Mountain Moorland and in the northern portion of LCU F – North Mayo Inland Bog Basin. LCU E North Mayo Mountain Moorland has a ‘Moderate’ landscape character effect as a result of the Proposed Development, and LCU F – North Mayo Inland Bog Basin has a ‘Not Significant’ effect as a result of the Proposed Development. LCU D – North Coast Plateaux also recorded a ‘Moderate’ landscape effect. This can be attributed to its highly sensitive landscape receptors located on the coast. Likely landscape effects are significantly mitigated by topographical screening and distance from the Proposed Development. In particular it is noted that there no visibility from the Ceide Fields, a highly sensitive receptor in this LCU.

LCU E – North Mayo Mountain Moorland is an LCU of medium sensitivity due to valuable landscape resources located to the south of the unit, including a scenic route, as well as the prominent ridgelines which occupy the area. There is no or limited theoretical visibility of the Proposed Development from the scenic route in the south of the unit, which is also located outside of the LVIA Study Area. In terms of the prominent ridgelines within the LCU, which are noted as a visually vulnerable, and key characteristic of the LCU in the MCDP, the proposed turbines are well framed and screened by the surrounding topography, and where they are visible from within this LCU, mostly appear above the ridgelines and do not obscure or interfere with views of the ridgelines, reducing the impact on this visually vulnerable feature. Generally, the layout of the Proposed Development enables it to be absorbed effectively within the landscape as there is a screening effect provided as a result of the location of turbines within an area of lower elevation than the surrounding topography. The perceived scale of the proposed turbines will reduce substantially with distance and there are also large areas of this LCU where there is no theoretical visibility of the Proposed Development indicated by the ZTV, as a result of the surrounding topography.

LCU G – North Mayo Drumlins and **LCU C – North-West Coastal Bog** both have medium sensitivity to wind farm development as they contain visually vulnerable features, including waterways, scenic routes, and views. However, the LCUs also contain large areas designated as ‘Tier 1 – Preferred’ and ‘Tier 2 – Open to Consideration’ in the Renewable Energy Strategy for County Mayo. There is screening provided by vegetation in both of these LCUs and the intervening distance between the sensitive landscape receptors and the proposed turbines reduces the visual prominence of the proposed turbines. Therefore, both of these LCUs have a ‘Slight’ landscape effect.

The assessments detailed in full, in Appendix 14-2 determined that the Proposed Development is only likely to induce ‘Moderate’, ‘Slight’ or ‘Not Significant’ effects on the landscapes of the LCUs assessed within the LVIA Study Area.

14.7.3.2 Discussion of Cumulative Landscape Effects

Cumulative landscape effects will occur within the basin of open upland landscape where the Proposed Development is viewed from behind several existing, permitted and proposed wind farms. The Proposed Development will be separate from these other developments, but it will be an addition to a landscape that already comprises many wind turbines. In a general sense this is a large, open, remote and expansive landscape type with relatively simple landcover, making it an acceptable area to absorb and accommodate many wind farms. A description of the cumulative visual interactions between the proposed turbines and other cumulative projects from visual receptors to the south and east is included in the photomontage assessment tables - Appendix 14-3. As alluded to in the following text, most cumulative landscape effects are contained within the Landscape Character Units comprising this upland basin, as the prominent ridgelines surrounding it screen and contain both the Proposed Development and other wind farm developments within one visual unit.

Landscape Character Units – Cumulative Landscape Effects

After identifying the cumulative baseline and cumulative status for each LCU it was assessed to what extent the addition of the Proposed Development changes the status of the individual LCUs against a Do-Nothing Scenario (see Appendix 14-2). It was found that only in the LCU within which the majority of the Proposed Development is located (LCU E- North Mayo Mountain Moorland) does the cumulative landscape status change. In this case the Proposed Development will change the status from ‘2. Landscape Character Area with occasional wind turbines in it and/or intervisible in another landscape character area/s’ to ‘3. Landscape character area with wind turbines.’ However, it is noted that the topography surrounding the Proposed Development Site provides screening of the proposed turbines from much of the LCU. The ZTV and on-site appraisal indicate that visibility is primarily limited to within 5km of the proposed turbines, with the remainder of this large LCU having no theoretical visibility. This area in close proximity to the Proposed Development is also remote therefore has few receptors. It is noted that the proposed Sheskin South wind farm development is also located within this LCU, which, in the absence of the Proposed Development, would mean that the baseline status of this LCU would be ‘3. Landscape character area with wind turbines’. Both the proposed Sheskin South wind farm development and Proposed Development are substantially screened from large areas within this LCU by the topography surrounding these sites. Therefore, the cumulative effects of both will not change the landscape status of this beyond ‘3. Landscape character area with wind turbines.’

The cumulative landscape status of LCU F – North Mayo Inland Bog Basin remains unchanged despite the addition of the proposed turbines, as there are already a large number of existing and permitted wind farms within this LCU (Do-Nothing Scenario). It is noted here that the addition of the proposed turbines would not change the cumulative landscape status given that there are large areas of the LCU to the south where there are no turbines.

Although the addition of the proposed turbines does change the cumulative status of LCU E – North Mayo Mountain Moorland, it is noted that visibility of the proposed turbines within this LCU is actually quite limited as a result of the surrounding topography. There is no change to the cumulative status of the other LCUs located within the LVIA Study Area. Therefore, the cumulative landscape effects are considered to be Not Significant.

14.7.3.3 Visual Effects

14.7.3.3.1 Selection of Photomontage Viewpoints

An assessment of the visual effects arising as a result of the Proposed Development was undertaken using photomontages from 11 no. viewpoint locations. The locations chosen for photomontages follow a detailed and extensive process including review of baseline information, site visits and high-quality photo taking at multiple locations within the LVIA Study Area. Many other locations, which based on a desktop review had the potential for views of the Proposed Development Site, had complete intervening screening or were screened to such an extent that the development of photomontages was not considered useful in terms of the assessment process i.e. little or no visibility towards the Proposed Development. These 11 no. photomontage viewpoint locations are shown previously in Figure 14-15 as well as the A0 Map – *Appendix 14-4 LVIA Baseline Map*.

14.7.3.3.2 Summary of Viewpoint Assessment

An assessment of the visual effects of the Proposed Development was undertaken from the 11 viewpoint locations identified in Section 14.5.3 above using the assessment methodology described in Appendix 14-1. The locations of these viewpoints are shown in Figure 14-15 above. The individual assessments from the 11 viewpoints are presented in Appendix 14-3 and summarised in Table 14-16 below. Appendix 14-3 and Table 14-16 should be read in conjunction with the Photomontage Booklet forming Volume 2 of the EIA.

Several additional viewpoint locations were visited during the field survey for which early-stage photomontages were generated (stitched photos with overlaid wirelines, termed - ‘photowires’). These photomontage viewpoints were not selected for inclusion in the final Volume 2 photomontage booklet due to their poor visibility or absence of prominent visual receptors. These early-stage photomontages do not form part of the assessment of visual effects (Appendix 14-3), however, several of these early-stage photomontages are presented and discussed in text to illustrate certain points later in this section of the report and their locations are marked as red icons on Figure 14-15 above.

The visual effect of the Proposed Development was assessed from each viewpoint in terms of the sensitivity of the visual receptors, along with the magnitude of change, as recommended in the GLVIA3 (Li & IEMA, 2013) guidelines. This, in conjunction with a detailed review of the photomontages themselves as well as the likely visibility of the Proposed Development within the LVIA Study Area informed the assessment of visual effects.

Visualisations such as photomontages are tools that can represent the likely effect of a development and are used to inform the reader’s prediction of how that development will appear in the landscape. In terms of the predicted visual quality of the proposed turbines, however, whether a visual effect is deemed to be positive, negative or neutral, this involves a degree of subjectivity. What appears to be a positive effect to one viewer could be deemed to be a negative effect by another viewer. All predicted visual effects of the viewpoints below are Long Term and Direct effects.

Key reasons enabling the Proposed Development to be effectively absorbed by the landscape of the Proposed Development Site and surrounding area are outlined below and are evident in the photomontages:

- **Strategic Siting of the Proposed Development in a saddle between peaks.**
The Proposed Development is sited on the lower regions of the overall elevated landscape within which it is located, adjacent to the high elevation point of the Maumakeogh peak and associated ridgeline, which provides substantial screening of the Proposed Development from most areas within the LVIA study area to the north,

north-east, and north-west, reducing visibility and mitigating visual effects in an extensive area. With the siting of the proposed turbines in locations at a lower elevation than adjacent ridgelines to the north, east and west, as well as Slieve Fyagh to the south-west, the Proposed Development is partially contained or ‘framed’ by the surrounding landform. The siting of the Proposed Development within this elevated landscape where it is contained by the surrounding ridgelines increases the remoteness of the proposed turbines, separating them from other complex landscape features in the surrounding area such as farmland and settlements. This mitigates the potential for overbearing or domineering effects whilst providing adequate setback from visual receptors. The large-scale and simple landform of the elevated moorland landscape enables the Proposed Development to be absorbed by the surrounding landscape.

➤ **Strategic Siting – of the proposed turbines in locations at a lower elevation (below 230m AOD) than adjacent ridgelines**

To the west, as well as other topographical elements to the north-east, the Proposed Development is partially contained or ‘framed’ by the surrounding landform. The large-scale and simple landform of the elevated moorland landscape enables the Proposed Development to be effectively absorbed by the surrounding landscape.

➤ **The Proposed Development does not obstruct landscape views of the North Mayo coastline and does not materially impact scenic amenity attributed to the coast.**

Many valuable scenic views and scenic routes located in the LVIA Study Area are predominantly attributed to the coastal sector of the region, providing significant amenity for recreation and tourism. The proposed turbines will not substantially impact most sensitive scenic amenities attributed to the coast.

➤ **The Proposed Development is located in an isolated area with a limited number of residential dwelling and settlements located throughout the landscape area surrounding the site.**

The sensitivity of the residential visual amenity in the area surrounding the Proposed Development is reduced by the lack of settlements and limited numbers of residential dwellings in close proximity to the Proposed Development Site, and within the wider landscape area. This is particularly true of areas where there is likely to be most visibility of the Proposed Development, such as to the south and south-east, where the screening effect of the topography surrounding the site is reduced. It is evident from the photomontages produced that these areas, and those in the general landscape area surrounding the site, are sparsely populated. This mitigates the potential for the proposed turbines to have a domineering effect on residential receptors, as well as mitigating the impact of the Proposed Development on residential visual amenity.

Table 14-16: Viewpoint Assessment Summary

VP No	Description	Grid Ref.	Approx. distance & direction to nearest turbine	Visual Sensitivity of Receptor(s) (at viewpoint)	Magnitude of Change	Residual Significance of Visual Effect
1	View from the R314 regional road in the townland of Glenulra, approximately 5.9 km northeast of the nearest turbine. This viewpoint is located along a Co. Mayo Scenic Route with Designated Views.	E 506,808 N 839,995	5.9 km NE	High	Negligible	Not Significant
2	View from the L1202 in the townland of Aghoos, approximately 17.8 km west of the nearest proposed turbine. This viewpoint is located along a Co. Mayo Scenic Route.	E 484,379 N 836,017	17.8 km W	High	Negligible	Slight
3	View from Downpatrick Head in the townland of Knockaun, approximately 11km northeast from the nearest proposed turbine. This viewpoint is located near an OSi viewpoint. This viewpoint is also located near a Co. Mayo Scenic Route.	E512,466 N842,917	11 km NE	Very High	Slight	Moderate
4	View from a local road in the townland of Ballyglass, west of Ballycastle, approximately 4.5 km northeast of the nearest proposed turbine.	E508,757 N837,488	4.5 km NE	Medium	Moderate	Slight
5	View from a local road in the townland of Carnclogh, approximately 7km southeast of the nearest proposed turbine.	E509,395 N826,826	7 km SE	Medium	Slight	Not Significant
6	View from the N59 in the townland of Coolturk, approximately 14.4km south of the nearest proposed turbine.	E506,228 N817,047	14.4 km S	Medium	Slight	Slight
7	View from a local road near Killala in the townland of Kilroe, approximately 15.7 km east of the nearest proposed turbine.	E 521,534 N 829,215	15.7 km E	Medium	Slight	Slight



VP No	Description	Grid Ref.	Approx. distance & direction to nearest turbine	Visual Sensitivity of Receptor(s) (at viewpoint)	Magnitude of Change	Residual Significance of Visual Effect
8	View from the R312, which is also located along the Western Way, in the townland of Derry Lower, approximately 14.8 km south of the nearest proposed turbine.	E498,976 N818,122	14.8 km S	Low	Moderate	Slight
9	View from the R315 regional road in the townland of Annagh More, approximately 4.1 km east of the nearest proposed turbine.	E 510,572 N 833,061	4.1 km E	Medium	Slight	Slight
10	View from a local road in the townland of Cluddaun approximately 2.3 km southwest of the nearest proposed turbine.	E 502,451 N 830,198	2.3 km SW	Medium	Moderate	Slight
11	View from a local road, which is also located along the Western Way, in the townland of Carrowmore, approximately 8.7 km northeast of the nearest proposed turbine.	E 514,306 N 837,588	8.7 km NE	High	Slight	Slight

The assessment of visual effects determined the residual significance of the visual effects to range from ‘Not Significant’ to ‘Moderate’, with the number of findings at each level of significance listed in Table 14-17 below.

Table 14-17: Summary of Viewpoint Impact Assessment Results

Significance of Residual Visual Effect	Description	No. of Viewpoints
Profound	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment	0
Very significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment	0
Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment	0
Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends	1
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities	8
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.	2
Imperceptible	An effect capable of measurement but without significant consequences	0

The significance of the residual visual effect was not considered to be ‘Profound’ ‘Very Significant’ or ‘Significant’ at any of the 11 viewpoint locations. A residual effect of ‘Moderate’ was deemed to arise at 1 of the viewpoint locations, at VP3 the residual effect of ‘Moderate’ is due to the sensitivity of the visual receptor and the quality of the baseline view, although the turbines do appear as relatively small elements in the background of this view. A residual visual effect of ‘Slight’ was deemed to arise at eight of the 11 viewpoint locations. All other viewpoints were assessed as resulting in Not Significant (2) residual visual effects.

The viewpoint assessment results will be summarised and discussed in more detail in the following sections.

14.7.3.3.3 **Visual Effects on Visual Receptors**

Generally overall visual effects are strongly guided by ZTV mapping (based purely on topography), which indicates vast areas of the LVIA Study Area where the Proposed Development will not be visible, as comprehensively discussed in Section 14.3. The following section discusses the visual effects arising at key sensitive visual receptors within the zone of theoretical visibility and screened in for assessment previously in Section 14.5 – *Visual Baseline*.

Designated Scenic Routes and Views

Map 10.2 of the MCDP was consulted to identify a total of 7 designated scenic routes and scenic routes with designated views within the LVIA Study Area. 3 no. of these designated scenic routes were screened out for further assessment in Section 14.5 as the ZTV indicated there is no visibility and visibility during the site visits (conducted on 29th September 2021 and 21st May 2023) was difficult to establish due to screening by topography and vegetation. The remaining 4 scenic routes were brought forward for viewpoint assessment. In addition, one OSi Viewpoint was identified within the study area. This viewpoint (located at the Ceide Fields) was screened out as the ZTV indicated that there is no theoretical visibility, and the view is directed away from the Proposed Development. This was confirmed following a site visit (conducted on 29th September 2021) and can be seen in Plate 14-21 below. The other OSi Viewpoint is discussed below.



Plate 14-21 Photowire F - View from the Ceide Fields towards the Proposed Development, showing no visibility due to screening by the topography.

Scenic Route with Designated Views: R314 at Ceide Fields (looking towards the Atlantic Ocean). (Map Ref. SRDV 1)

The focus of the views at this location is indicated as to the north, out to sea, and directed away from the Proposed Development. VP 1 shows an expansive view of the valley of the Glenulra River. This location is also the closest location along the R314 to the Céide Fields where there is likely to be visibility of the proposed turbines. Visibility is limited to just partial visibility of 4 of the proposed turbines. No more than blade tips of several turbines will be visible above the ridgeline, providing a measure of scale to the turbines and protecting the character of the ridgeline as the defining feature within the skyline. Overall, as detailed in full in Appendix 14-3, a 'Slight' residual visual effect is deemed to arise.

Scenic Route: R314 from Ballanaboy to Barnatra. (Map Ref. SR 1)

This scenic route has theoretical visibility of the Proposed Development and is located 16.5km from the nearest proposed turbine. VP 2 represents views from this visual receptor as it is at a similar geographic orientation and distance. As detailed in full in Appendix 14-3, a 'Slight' residual visual effect is deemed to arise at this viewpoint. From SR 1 the proposed turbines will be viewed as small vertical elements partially visible above a ridgeline in the background.

Scenic Route: Local road from south of Pollatomish to Barnatra. (Map Ref. SR 3)

VP2 is located along this scenic route, only part of which is located within the LVIA Study Area, there are impressive views of the ridgeline formed by various topographical features across north Mayo. The proposed turbines are mostly screened by the ridgeline and appear in a very small spatial and horizontal extent within an open and expansive view. They are readily absorbed into the landscape as a result. Overall, as detailed in full in Appendix 14-3, a 'Slight' residual visual effect is deemed to arise.

Scenic Route: Local road northeast of Ballycastle passing Downpatrick Head. (Map Ref. SR 5)

VP3 is located at Downpatrick Head, adjacent to this scenic route and is representative of the types of views available from one stretch along this scenic route where there is full theoretical visibility of the proposed turbines indicated. However, given the distance of approx. 11 km between the turbines and the viewpoint, they take up a limited horizontal extent within the view and appear as small elements in the background. Visual effects were deemed to be 'Moderate', although this is related to the sensitivity of Downpatrick Head which is considered higher than this scenic route. From this scenic route the

proposed turbines are readily absorbed in this view, seen within a saddle between two peaks and appropriately scaled as a result. Views from along the scenic route are also expansive and in general are focused towards the coast, away from the Proposed Development.

OSi Viewpoint: Downpatrick Head

VP3 is located at Downpatrick Head, a residual visual effect of Moderate was deemed to arise at this viewpoint, as outlined in full in Appendix 14-3. From the viewpoint 15 No. proposed turbines are partially visible beyond the distant ridgeline in the background of the view. 10 No. proposed turbines are clearly visible with their nacelles seen above the horizon, their lower tower sections are screened from view by the intervening landform. Only blades are visible of the other 5 No. proposed turbines visible. The introduction of turbines into the background of this view is novel and slightly alters the character of the background landscape. All visible proposed turbines will be seen above the horizon with no landscape as a backdrop and the development is framed by the horizon where the ridgeline drops slightly between two hill crests, providing some visual balance.

The proposed turbines do not obstruct or intrude upon the key scenic sensitivities of this landscape such as the sea cliffs, sea stacks and immediate seascape setting of Downpatrick Head itself. The field of view comprising the Proposed Development includes approximately 19° (5.2%) of the expansive panoramic vistas (360°) available from this location and elsewhere on Downpatrick Head. Whilst this location is protected as a valuable tourism asset in the MCDP (see Section 14.4.1.5), Downpatrick Head is not part of a designated scenic route in local planning policy (MCDP).

The proposed turbines are visible in the background of this view, however, it is considered that by virtue of the setback distance (<11km) and their positioning in the landscape, the proposed turbines are unlikely to fundamentally detract value from visitor and tourism experiences of Downpatrick Head. The most iconic and sensitive scenic views from most locations at Downpatrick Head include views of the Dún Briste Sea Stack, as well as the rugged dramatic coastline to the west (as is indicated by Osi Viewing Area icons on Osi maps). These key sensitive views are mostly oriented directly west and north from most locations at Downpatrick Head, not in the direction of the Proposed Development which is located to the south-west.

The proposed turbines are strategically sited at lower elevations relative to the ridgelines enclosing them to the north and west. The strategic siting of turbines at lower contours beyond the distant ridgeline reduces their visual prominence in the landscape, mitigating visual effects. Chapter 6 of the WEDGs (DoEHLG, 2006) reports 'Aesthetic Considerations in Siting and Design' for Wind Energy Developments and includes the following text:

"It is preferable to avoid locating turbines where they can be seen one behind another, when viewed from highly sensitive key view points (for example, viewing points along walking or scenic routes, or from designated views or prospects), as this results in visual stacking and, thus, confusion."

Through an iterative design process (including production of early-stage photomontage visuals and turbine micro-siting), the proposed turbine layout results in a lack of visual stacking from this high sensitivity viewpoint, mitigating the potential for visual confusion created by the Proposed Development, therefore aligning with the siting and design guidance in the WEDGs. The visual balance afforded by the framing of the Proposed Development between two crests on the ridgeline serves to effectively accommodate and absorb the proposed turbines in this large scale landscape view.

Other Visual Receptors - Settlements

Of the 7 settlements identified in the LVIA Study Area, 1 was screened out in the 'Visual Receptor Preliminary Assessment', as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site, or the settlements were located at such a substantial distance from the Proposed Development that Significant effects were deemed not likely to

arise. Hence, viewpoints were selected for the remaining six settlements: Ballycastle, Glenamoy, Moygownagh, Crossmolina, Killala, and Pollatomish.

Ballycastle: There is mostly partial visibility indicated for the village of Ballycastle by the ZTV, site visits also confirmed that the proposed turbines will be substantially screened by the intervening topography, despite the settlement’s proximity to the Proposed Development. Viewpoint 4 is located approximately 1.7 km from the village and shows more visibility of the proposed turbines than will be available from Ballycastle. Photowire B, which is shown below in Plate 14-22, is taken from within Ballycastle and indicates that there will be primarily no visibility from within the village. This is due to the built infrastructure from within the village centre and the intervening topography between the Proposed Development Site and Ballycastle itself.



Plate 14-22 View from Photowire B, in Ballycastle, showing no visibility of the Proposed Development

Glenamoy: There is partial theoretical visibility indicated for Glenamoy on the ZTV. Plate 14-23 below shows a view from the R314 regional road in Glenamoy, and while a large tract of commercial forestry can be seen to screen views towards the proposed turbines, it can also be seen from the wireline in the image that only the blade tips of the proposed turbines will be seen above the ridgeline from locations where the forestry will not have the same screening effect. At this distance (approx. 10km) there will be no Significant visual effects arising on this settlement as a result of the Proposed Development given the limited visibility indicated on the ZTV and the photowire shown below.



Plate 14-23 View from Photowire D showing that only blade tips of the proposed turbines are theoretically visible above the ridgeline

Moygownagh: There is partial visibility from the village of Moygownagh, as indicated on the ZTV. However, as seen in Plate 14-24 below there is additional screening provided by mature treelines and localised topographical undulations in the direction of the Proposed Development that substantially screen the proposed turbines from view from this location. In Viewpoint 5, as discussed in Appendix 14-3, the Proposed Development was deemed to have a ‘Not Significant’ residual visual effect. This viewpoint is in the same orientation as Moygownagh but is located approx. 3 km closer to Proposed Development. Given the finding of ‘Not significant’, and the increased distance and levels of screening provided, there will be no Significant visual effects arising in relation to Moygownagh as a result of the Proposed Development.



Plate 14-24 View to the northwest towards the Proposed Development from within Moygownagh

Crossmolina: There is full theoretical visibility indicated from the town of Crossmolina. However, as seen in Plate 14-25 below there is additional screening provided as a result of the built infrastructure and mature vegetation present throughout the intervening landscape, even when the built infrastructure of the town centre is passed. Viewpoint 6 is located at a similar orientation and distance from the Proposed Development as Crossmolina. The proposed turbines appear in a small horizontal and vertical extent within this view. Given the levels of screening observed within the town of Crossmolina, and the likely similar appearance of the turbines in a bare-ground scenario to Viewpoint 6, there will be no Significant visual effects arising in relation to Crossmolina as a result of the Proposed Development.



Plate 14-25 View to northwest from the R315 leaving the northern side of Crossmolina.

Killala: Viewpoint 7 is located to the south of Killala, within an area of full theoretical visibility, with areas of partial and no theoretical visibility also present within the settlement itself. From within the settlement, there will be very limited or no actual visibility of the proposed turbines as a result of screening provided by built infrastructure or vegetation present in the immediate landscape. Viewpoint 7 shows an open view towards the Proposed Development where the proposed turbines appear as very small background features within the view. A residual visual effect of Slight was deemed to arise at this location.

Pollatomish: There is partial theoretical visibility of the proposed turbines indicated for Pollatomish. Viewpoint 2 is located just outside the settlement, to the east. A residual visual effect of ‘Slight’ was deemed to arise in relation to this viewpoint. The proposed turbines are substantially screened from this location, with primarily blades visible above the ridgeline in the background of the view, a distance of approx. 18km from the viewpoint. There will be some additional screening elements within the settlement itself that will obstruct views but the type of view shown in Viewpoint 2 is generally available from the settlement. There will be no Significant visual effects arising in relation to Pollatomish as a result of the Proposed Development.

Other Visual Receptors – Recreational and Tourist Destinations

Of the 12 recreational and tourist destinations identified within the LVIA study area, 6 were screened out in the ‘Visual Receptor Preliminary Assessment’, as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site. Hence, viewpoints were selected for the remaining 6 recreational and tourist destinations.

Downpatrick Head: Viewpoint 3 is discussed in some detail above in relation to the OSI viewing area. Visual effects were deemed to be ‘Moderate’ from this location, as discussed. This finding takes into account the tourism aspect to this location, and therefore, a ‘Moderate’ residual visual effect will be likely. For further discussion see Appendix 14-3.

Wild Atlantic Way: The Wild Atlantic Way (WAW) runs through a large part of the northern half of the LVIA Study Area. Theoretical visibility is mostly limited to a portion of the WAW to the west of the LVIA Study Area, represented by Viewpoint 2, where the Proposed Development was deemed to have a ‘Slight’ impact, and to a portion of the WAW to the northeast of the site, close to Downpatrick Head. This part is represented by Viewpoint 3, where the Proposed Development was deemed to have a ‘Moderate’ impact. Viewpoint 3 offers open views towards the Proposed Development which are not necessarily representative of views commonly experienced along the length of the route. For example, much of the route is located within areas where there is no theoretical visibility and even in areas where there is visibility indicated by the ZTV, other screening elements often interfere with views towards the Proposed Development. An example of this is shown in Plate 14-26 below, where the mature hedgerow adjoining the road screens views in the direction of the Proposed Development.



Plate 14-26 View from Downpatrick Head peninsula showing screening elements in the direction of the Proposed Development along the WAW

Viewpoint 1 is also located along the WAW, showing a view towards the Proposed Development from the north of the site, within a small patch of partial theoretical visibility close to the Ceide Fields (the site of the Ceide Fields themselves have no theoretical or actual visibility of the Proposed Development). A residual visual effect of ‘Not Significant’ was deemed to arise from this viewpoint. Viewpoint 1 and 3 show the most open views towards the site from the section of WAW with theoretical visibility within 10km of the nearest proposed turbine. A large stretch of the WAW within 10km will have no visibility of the proposed turbines as a result of the intervening ridgelines, screening views of the proposed turbines. Visual effects from Downpatrick Head specifically, which is a Signature Discovery Point along the WAW are detailed above. It is considered that given the large stretches of no theoretical visibility within 10km of the Proposed Development, and the limited visibility

from the majority of the area within the ZTV (see VP1 for example), there will be a ‘Not Significant’ residual visual effect overall on the WAW as a result of the Proposed Development.

Western Way: The Western Way runs through a large part of the LVIA Study Area, including through the Proposed Development Site itself, with a total length of approx. 76km within the LVIA Study Area. There is also mainly full theoretical visibility along most of the route within the LVIA Study Area. As stated, the Western Way runs through the Proposed Development Site itself and within this section there is likely to be a substantial magnitude of change in terms of the visual effects given that there will be a change in character of the baseline in such close proximity to the visual receptor. Given that this is a recreational route and users will be using it in a recreational capacity, this will result in a ‘Significant’ visual effect on the section of the route within the Proposed Development Site. Further from the Proposed Development the visual effects on the walking route will lessen. Viewpoints 4 and 8 are both located along the Western Way, with Viewpoint 4 located 4.5 km northeast of the nearest proposed turbine, and Viewpoint 8 located 14.8 km south of the nearest turbine. Both of the visual effects from these viewpoints were deemed ‘Slight’, and this is generally the case outside of sections of the route in close proximity to, or within, the Proposed Development Site.

The section of the route that is located within the Proposed Development Site goes through the commercial plantation forestry that covers most of the site. While this section does have recreational value, this aesthetic value and naturalness of this part of the route is reduced by human interference in the form of plantation forestry, that also heavily restricts views. This commercial forestry may be felled at some point in the future although it is likely that the site will remain fundamentally the same in terms of the character of the Proposed Development Site as a commercial forestry site. It is noted that the Western Way also traverses the boundary of the permitted ABO Sheskin and proposed Sheskin South wind farm developments, which are located approx. 10km further along the route and will contribute to the cumulative impact on the route, specifically with regards to additional sequential views of turbines now available along certain sections of the route. The existing Oweninny 2 Wind Farm is also located along the Western Way, adjacent to the proposed Sheskin South development, and so the presence of turbines along the route is not a novel element, however, there will be additional turbines, and in the case of the Proposed Development they will be located in an area which currently has no wind turbines. Overall, taking into consideration all of the factors above, including the overall length of the route and the relatively small section where the proposed turbines are located, the Proposed Development will give rise to a ‘Moderate’ visual effect on the Western Way.

Ballycastle Sralagagh Loop Walk: The ZTV indicates that there is partial theoretical visibility along most of this route. Viewpoint 4 is located along the route, and the visual effects were deemed ‘Slight’, which is representative of the overall effect on this route as a result of the Proposed Development.

Moygownagh Loop Walk: There is full to partial theoretical visibility indicated for the majority of this walking route. Viewpoint 5 is located close by this walking route and the visual effects of the Proposed Development were deemed ‘Not Significant’ from this location. There is likely to be additional levels of screening along the walking route than what is seen in Viewpoint 5, particularly in the section closest to the proposed turbines as this goes through a forest where visibility will be heavily contained by the mature trees.

Belmullet Cycle Loops: These cycle loops occupy a large section of the northwest of the LVIA Study Area, with mostly partial or no theoretical visibility, although there are sections with full theoretical visibility indicated. Viewpoints 1 and 2 are both located along these routes, with both of the visual effects from these viewpoints deemed to be ‘Slight’. The locations of these viewpoints are also those where there was limited screening in the direction of the Proposed Development. This will not always be the case along these routes and there will be screening elements such as mature roadside vegetation that will further decrease the visibility of the Proposed Development, and an example of this is seen in Plate 14-27 below, where the tall roadside hedgerow screens views in the direction of the proposed turbines. The ZTV indicates that there is primarily no or partial theoretical visibility from along the Belmullet cycle loops, and views of the Proposed Development are substantially screened by the

intervening ridgelines and landform. There will be no Significant effects on the route as a whole, or on any individual section of the routes.



Plate 14-27 Photowire D, from the Belmullet Cycle Loop, showing screening from roadside vegetation.

Other Visual Receptors – Major Transport Routes

Of the five major transport routes identified within the LVIA Study Area, one was screened out in the ‘Visual Receptor Preliminary Assessment’, as the ZTV indicated that there was no theoretical visibility and/or no visibility of the Proposed Development could be established on site. Hence, viewpoints were selected for the remaining four transport routes. All the viewpoints below are discussed in greater detail above and in the photomontage assessment tables contained in Appendix 14-3. The Route Screening Analysis undertaken above in Section 14.3.4 details the likely visibility of the roads surrounding the site, including smaller local roads, there are no Significant effects deemed likely to arise in relation to these transport routes.

R315 Regional Road: The R315 is located to the east of the Proposed Development Site, passing within 5km of the nearest proposed turbine. Viewpoint 9 is located along this road, where it passes within 5 km of the proposed turbines. This viewpoint offers some of the most open views along this road in terms of visibility of the proposed turbines. The visual effects from this viewpoint were deemed to be ‘Slight’. There is also a level of screening present along the roadside which can be seen in Plate 14-28 below and road users will be travelling at speeds close to the speed limit of 80 kmph on this straight section of road, hence any views are likely to be fleeting. Photowire E, shown below in Plate 14-28 is also located along this road to the south, 4km further away from the proposed turbines. The mature roadside hedgerows that are common along this road can be seen in this image. The turbines also appear as much smaller elements in the background of the view from this distance. There will be no Significant visual effects arising from the R315 as a result of the Proposed Development.



Plate 14-28 Photowire E, located along the R315

R314 Regional Road: the R314 traverses the northern half of the LVIA study area, with theoretical visibility indicated to the east and west of the proposed site. Viewpoints 1, and 7 are all located along this road with the highest visual effect arising from these being a ‘Not Significant’ effect, deemed to arise in relation to Viewpoint 1. The vast majority of this route within 10km of the site has no theoretical visibility of the proposed turbines as a result of the intervening ridgelines. Views of the proposed turbines will be fleeting from this road where they are available, and the sections of the route with large stretches of full theoretical visibility is located greater than 10km from the nearest proposed turbines. See Plate 14-29 below, for example.



Plate 14-29 Viewpoint 7, view to the northwest towards the proposed turbines, which are located over 15km away.

R312 Regional Road: The R312 is located in the southern part of the LVIA Study Area, approx. 14 km from the nearest proposed turbine at its closest point. There is primarily full theoretical visibility indicated for the majority of the route within the LVIA Study Area. Viewpoint 8 is located along this road with a ‘Slight’ visual effect deemed to arise. On-site appraisals and photomontages determined that there are generally open views across the flat bogland plain towards the Proposed Development from this route, particularly as receptors travel along the route in a north-westerly direction. The addition of the Proposed Development increases the density of turbines visible within the views available. However, the proposed turbines will be viewed as much smaller background features within the view than the other turbines visible from along this route, which are located much closer to the route than the Proposed Development.

N59 National Road: This is the main transport route in the LVIA Study Area, and a key transport route between Crossmolina and Bangor-Erris and the coastline beyond. There are large stretches of full theoretical visibility indicated along this road within the LVIA Study Area, although, to the west of the site, as the road approaches Bangor-Erris, there is a large stretch of no theoretical visibility. Viewpoint 6

is located along this road, and a ‘Slight’ visual effect was deemed to arise as a result of the Proposed Development. The turbines appear as small features in the background of this view and this will similarly be the case from everywhere along this route within the LVIA Study Area, given its distance from the Proposed Development.

Residential Visual Amenity

The Proposed Development is sited in an isolated, remote upland landscape, and consequently the proposed turbines are set back substantial distances from sensitive residential receptors. In this regard no Significant visual effects are likely to occur on residential visual amenity. The largest cluster of residential properties within 5km of the Proposed Development is located approximately 2 km to the east, on the opposite side of an intervening ridgeline, where theoretical visibility is indicated as a small area of partial visibility and a large area of no theoretical visibility, indicating that the intervening ridgeline provides substantial screening of the Proposed Development, in addition to localised screening elements such as vegetation present around the houses themselves. VP9 shows a view from the R315 regional road towards this cluster of houses, behind which the turbines of the Proposed Development are located. This view shows a more open view of the turbines than is available from these houses themselves, as the slopes upon which they are located begin to screen the Proposed Development from view more substantially closer towards the houses. In fact, the vast majority of these houses located along a small local road will have no visibility of the proposed turbines as a result of screening from the ridgelines. The nearest property is located 1.9km from the nearest proposed turbine, this set-back distance and the intervening topographical elements mean no Significant visual effects will arise. A ‘Slight’ residual visual effect was deemed to arise at VP9, which incorporates the likely effects on residential visual amenity for the properties seen within this view.

It is further noted in relation to residential visual amenity that the turbines of the Proposed Development adhere to the required set-back distances from residential properties set out in the WEDGs (DoEHLG, 2006), and Draft WEDGs (DoPHLG, 2019). In fact, the turbines are located over twice the required set-back distance from the nearest residential property. There are no Significant effects deemed likely to arise in relation to residential visual amenity as a result of the Proposed Development.

14.7.3.4 Discussion of Cumulative Visual Effects

There are many potential scenarios and interactions where cumulative visual effects may occur. These scenarios can include interactions between the Proposed Development, other energy developments (wind farms or grid infrastructure), as well as other man-made landscape features (quarries, transport networks, overhead telecommunication lines). Guidance for assessment of cumulative effects of onshore wind farms (SNH,2012) & (NatureScot, 2021) clearly states the following:

“At every stage in the process the focus should be on the key cumulative effects which are likely to influence decision making, rather than an assessment of every potential cumulative effect”

“The level of information generated can distract attention from the most significant cumulative effects which are likely to influence the consenting decision. Assessments should therefore focus on the most significant cumulative effects and conclude with a clear assessment of those which are likely to influence decision making”

Following this guidance, a primary focus is given to the cumulative effects likely to occur as a result of other wind turbines identified in the LVIA Study Area. Cumulative visual effects were assessed as part of the Photomontage Assessment Tables found in Appendix 14-3.

There are 8 other existing, permitted or proposed wind farms which are located within 20 km of the Proposed Development. The majority of these are located to the south and southwest of the Proposed

Development, within a flat bogland plain containing a large number of wind turbines which generally appear as one large wind farm from a number of orientations and locations. The topographical features located in between the other wind farms in this direction and locations to the north and northwest of the LVIA Study Area screen the majority of views of multiple wind farms in this direction.

The Proposed Development is located approximately 6.3 km from the nearest of the other turbines, which are part of the existing Oweninny 1 development. The proposed turbines are isolated from this large wind farm area by distance and topographical features. This is evident from the photowires displayed below in Plate 14-30 and Plate 14-31, where views from the same location (VP10) in both northerly and southerly directions show the separation between the Proposed Development and the other developments to the south. This visual separation increases the horizontal extent of turbines from a number of viewpoints (e.g. VPs 5, and 6) to the east and southeast of the Proposed Development Site. However, from these viewpoints there is substantial screening of the proposed turbines as a result of the topography surrounding the site. The proposed turbines are sited at lower elevations than the surrounding topography resulting in a particular aesthetic effect where they are saddled between peaks. There are very limited numbers of visual receptors in the intervening space between the proposed turbines and the large area of wind turbines located to the southwest, which reduces the potential for surrounding effects to occur as a result of the separation distance between the other cumulative turbines and the turbines of the Proposed Development.



Plate 14-30 Viewpoint 10 - directed north towards the proposed Glenora development.



Plate 14-31 Viewpoint 10 - directed south towards the other existing permitted and proposed wind farms.

Highly sensitive receptors to the north and northwest of the LVIA Study Area are unlikely to have substantial visibility of multiple wind farms and so significant cumulative effects are not anticipated, particularly along the coastline to the north (e.g. VPs 1 and 3). There will be some cumulative impact along transport routes (most notably the R315) given the increased sequential views of turbines along this route as a result of the proposed turbines, however these effects are not deemed to be Significant and are fully assessed from viewpoints along the transport route in Appendix 14-3.

In terms of general visibility throughout the parts of the LVIA Study Area where the proposed turbines will be seen in the same viewshed as other wind farms, it is relevant that the topography surrounding the proposed site is varied and undulating and the landscape is open and large scale, which increases the ability of the landscape within which the turbines are viewed to absorb the Proposed Development, further reducing the additional visual cumulative effects. For the landscape character type where the proposed turbines are located, Mountain Moorland, the character of the landscape as an expansive, wide-ranging landscape is accepting of cumulative effects, specifically where wind farms are seen as

discrete elements, standing in relative isolation. This is the case with the proposed turbines when they are viewed from certain directions where the topography does not screen visibility of either the Glenora turbines or the other wind farms in the LVIA Study Area.

A comparative ZTV (Figure 14-17 above) shows that the cumulative visibility over that of the proposed, permitted and existing turbines within the LVIA Study Area only increased in a small number of areas due to the addition of the Proposed Development. The main area where there is additional visibility of turbines as a result of the Proposed Development is at Downpatrick Head, and in the area north-east of the site. The visual effects on these locations have been assessed above with consideration given to cumulative impacts and no Significant effects were found. Therefore, it is considered that the Proposed Development will not have a Significant effect on the extent of cumulative visibility within the LVIA Study Area.

The landscape character of the area within which the proposed site is located is one of a large scale which contains open, expansive views, and these assist in allowing the landscape to accommodate a large number of turbines, which a detailed visual assessment outlined here and in the photomontage assessment tables contained in Appendix 14-3 has covered in detail. Overall, it is considered that a Long Term, Slight Cumulative Visual Effect is deemed to arise.

14.7.3.5 Ancillary Project Elements including Grid Connection

For the purposes of this LVIA, a number of individual elements of the Proposed Development, ancillary to the proposed turbines, have been grouped together for the assessment of effects in the operational phase. These operational project elements include the proposed roads and turbine hardstand areas, anemometry masts and the electricity substation compound (and ancillary elements thereto) may all give rise to potentially similar landscape and visual effects. Details of these components of the Proposed Development are contained in Chapter 4 of this EIAR. Due to the topography of the Proposed Development Site and surrounding areas, in addition, the coniferous forestry present on site the lower ancillary project elements will be visible only in their immediate surroundings, hence, any visual effects will be localised and predominantly confined to within the Proposed Development Site.

Proposed Substation: The proposed substation site is located within forestry, adjacent to the north-eastern entrance to the Proposed Development Site, adjacent to an existing forestry road which leads into the site. Access to the substation will be off the existing road. The footprint of the proposed onsite electricity substation compound measures approximately 6,027m² and will include a wind farm control building and the electrical components necessary to consolidate the electrical energy generated by each wind turbine and export that electricity from the wind farm to the national grid. The proposed substation is surrounded by commercial forestry which will screen any potential long-ranging views of the substation, limiting any landscape and visual effects to the localised area around the substation and the adjacent forestry road. Any landscape and visual effects are likely to be highly localised, Negative, Long-Term and will be of 'Slight' significance.

Site Access Roads and Hardstand Areas: The proposed access roads and hardstand areas are flat features. Consequently, they will be most visible within their immediate surroundings, therefore any landscape and visual effects will be very localised. Every use will be made of the existing forestry access tracks on site. 15.4 of existing tracks will be upgraded appropriately whilst 10.5km of new internal roads will need to be constructed. The impact of these flat and hard surfaces will be very localised. The landscape and visual effects arising from the access roads and hardstand areas are considered to be highly localised, Negative, Long-Term and will be of 'Slight' significance.

Meteorological (Met) Mast: One met mast is proposed as a part of the Proposed Development. This will be a slender structure, 99 metres in height, and in itself will not be an imposing structure in terms of visual impact. The landscape and visual effects of the proposed mast will be localised, considering that it will be significantly less visible than any proposed turbine given its shorter and slender lattice form and will fade from view at a distance of anything more than a few kilometres (approx. 5km) where it will have little to no impact. This area within 5km of the Proposed Development site is notably lacking

in visual receptors and consequently no Significant visual effects are deemed to arise in this area. Within the Proposed Development Site and its immediate landscape setting, the landscape and visual effects arising from the met mast is considered to be of ‘Slight’ significance.

Peat and Spoil Placement Areas: It is proposed to store any excess peat and spoil generated through construction activities around turbines bases. These placement areas will reach a maximum height of 1m of peat placed around the turbine hardstands. The placement of peat will have a localised landscape and visual impact as a result of changing landcover from coniferous forestry at present to stored peat resulting from construction activities. The impact of these placement areas will be very localised. The landscape and visual effects arising from the peat and spoil placement areas are considered to be highly localised, Negative, Long-Term and will be of ‘Slight’ significance.

Proposed Grid Connection: This underground cable connection will originate at the proposed onsite substation located within the north-eastern corner of the site, adjacent to an existing forestry road. The underground cable connection will run north-eastwards from the substation along the existing forestry road for approximately 4.7km before meeting the unnamed local road in the townland of Ballyglass.

The proposed grid connection cabling route will then continue south along the local road for approximately 1.6km before turning southeast onto the R314 regional road for 390m before turning south onto the R315 regional road. The cabling route will then head in a southerly direction along the R315 regional road for approximately 7.5km before turning east on to the local road in the townland of Creevagh More for 8.4km. The grid route then runs northward for approximately 600m before travelling east along the local road for 2.4km into the existing 110kV Tawnaghmore substation in townland of Tawnaghmore Upper. The grid connection cabling route measures approximately 26.1 kilometres in length.

As the proposed Grid Connection is located underground, landscape and visual effects of the proposed Grid Connection during the operational phase will be negligible. The landscape and visual effects occurring during the construction phase of the proposed underground Grid Connection are reported previously in Section 14.7.2.3. In general, the proposed ancillary infrastructure elements (discussed above) will cause landscape effects of ‘Moderate’ significance where the physical fabric of the landscape has been fundamentally altered, however, these landscape effects are very localised. The landscape character of the site will undergo a moderate degree of change, and long-term landscape effects of ‘Slight’ Significance will occur. As these ancillary features of the Proposed Development will remain largely unseen from outside the Proposed Development Site, effects on the wider landscape setting will be ‘Not Significant’. Visual effects arising from the proposed ancillary project elements will be ‘Slight’, localised and Long-Term where seen, but will remain largely unseen from outside the Proposed Development Site.

Aviation Lighting: As detailed in Chapter 15, the specific aviation lighting required for the Proposed Development will be agreed with the Irish Aviation Authority (IAA) in line with their requirements. At this stage there is no certainty regarding the specific type of aviation lighting that will be applied to the Proposed Development and uncertainty with regard to the number and layout of turbines required to host aviation lighting. However, Chapter 15 of this EIAR outlines various mitigation options for aviation lighting that will be applied to reduce any potential impact on residential visual amenity or visual receptors within the LVIA Study Area that might arise. Chapter 15 concludes, in Section 15.2, that there are “a number of options available which demonstrate that the proposed development will not give rise to a significant increase in turbine lighting in combination with other existing and permitted wind turbines in the area.”

The various options outlined Chapter 15 include:

- Reduced Intensity
- Shielding and Directional Intensity
- Obstacle Zone Agreement eliminating the need for turbines to be lit
- Cardinal or Perimeter Lighting

- > Reduced Lighting
- > Aircraft Detection System

These various types of mitigation will be applied when the lighting scheme is agreed with the IAA to reduce/eliminate the night-time visual effects that might arise in relation to residential visual amenity, or visual impacts on other visual receptors as a result of aviation lighting at night. Several of the measures listed above eliminate the requirement for lighting and therefore eliminate potential for landscape and visual effects. Irrespective of how many turbines of the Proposed Development may require lighting, several measures listed above will mitigate the likelihood of significant impacts.

Overall, the various mitigation measures outlined in Chapter 15 demonstrate that there are various measures that can be put in place to ensure that Significant effects do not arise in relation to residential visual amenity and impacts on other visual receptors, and the aviation lighting that is required.

14.7.4 Decommissioning Phase Effects

The landscape and visual effects during decommissioning are anticipated to be of a similar nature as those occurring during the construction phase.

The important element of decommissioning from a landscape and visual impacts perspective is the dismantling and removal of the wind turbines. This will occur for a limited period of time and will predominantly involve cranes adjacent the turbines during the dismantling process. Once dismantled, turbine foundations will remain in place underground and will be covered with earth and reseeded as appropriate (See Chapter 4 of this EIAR). Removal of the turbines and ancillary infrastructure from the site will result in a Short-term, Slight, Negative visual effect. A Decommissioning Plan is included as Appendix 4-7 to this EIAR.

14.8 Conclusion

The sensitive visual and landscape receptors with visibility of the Proposed Development were assessed based on site visits and using multiple tools and methods including the production of verified photomontages that follows best practice guidance for LVIA (see Appendix 14-1 for an overview of the methodology employed). Other tools such as ZTV mapping and Route Screening Assessment have also been employed to determine the likely potential and actual visibility of the proposal. No significant landscape or visual effects were recorded as a result of the Proposed Development.

The Proposed Development is located within an area that is surrounded to the north, west, and north-east by topographical features that provide substantial levels of screening in these directions. The siting of the proposed turbines at locations at a lower elevation than these features substantially reduce the visibility of the turbines. As a result, the visibility of the Proposed Development in these directions is limited to partial or no visibility, excepting areas in the immediate vicinity of the Proposed Development Site that are on the same sides of the hills that surround the proposed turbines, although there are extremely limited numbers of receptors at these locations. ZTV mapping and on-site surveys found that visibility of the Proposed Development is predominantly concentrated to the south and south-east of the Proposed Development Site, where flatter topography permits longer-ranging views. The ZTV map presented in Figure 14-1 illustrates the topographical screening described here.

The landscape area within which the Proposed Development is located is remote, with limited numbers of residential receptors and settlements. As a result, most locations, where there are both sensitive receptors and open visibility of the majority of the turbines in the Proposed Development, tend not to be located in close proximity, reducing the spatial extent and size of the turbines from sensitive locations where they are likely to be viewed from.

In terms of construction and operational phase landscape effects relating to designated landscape receptors (Landscape Policy Areas and Vulnerable Features – see Section 14.7.3.1.1 and Section

14.7.3.1.2), there were no significant landscape effects deemed to arise as a result of the Proposed Development and it was determined that the addition of the Proposed Development is consistent with the sustainable development of these areas and achieves the balance sought between the policies outlined in The Landscape Appraisal for County Mayo. As discussed in greater detail above, the Proposed Development will not fundamentally alter any of the key sensitivities of these LPAs, including any key scenic amenity attributable to the coastline or elsewhere.

In relation to Vulnerable Features, the Cloghmoyle and Maumakeogh Mountain ridgelines, and the Glenulra River, Keerglen River, Glencullen River, and the Oweninny River were assessed in order to determine whether the Proposed Development (Operational, Construction and Decommissioning Phase) would “*impinge in any significant way upon its character, integrity or uniformity when viewed from the surroundings*” (Section 3.1(b) of the Landscape Appraisal for County Mayo). Of all the designated vulnerable landscape features assessed in this section, including ridgelines and riverbanks, there are no Significant landscape effects deemed to arise. This is a result of the generally remote nature of the Proposed Development Site meaning that there is limited access to areas where there will be substantial visibility of the Proposed Development. Also, the proposed turbines are strategically sited at elevations lower than 230m AOD, which substantially mitigates their impact on adjacent ridgelines and creates substantial topographical screening of the Proposed Development from the riverbanks that are identified as potentially experiencing significant landscape effects. Overall, the Proposed Development will have no more than Slight residual landscape effects on the character, integrity and uniformity of the landscape features assessed in this section, particularly from scenic routes, which is noted as a particular concern in the Landscape Appraisal of County Mayo.

In terms of landscape character, the Proposed Development Site itself is of low landscape value and sensitivity given its current landcover and land use of commercial plantation forestry. In addition, the site is partially located within an area designated within the County Mayo RES as having areas of ‘*Tier 2 Open to Consideration*’ and ‘*Tier 1 Preferred (Large Wind Farms)*’. Overall, taking into account its current use and remoteness, the topographical features surrounding the site, and the policy contained within the WES, the landscape of the Proposed Development site itself has a low sensitivity to wind energy development and no significant landscape effects will arise as result of the Proposed Development (further detail above in Section 14.7.3.1).

In terms of the wider landscape character of the LVIA Study Area (15km study area for effects on landscape character – see Section 14.2.1), there will be no ‘Significant’ or higher landscape effects. Two LCUs will experience ‘Moderate’ landscape effects as a result of the Proposed Development. LCU E – North Mayo Mountain Moorland, in which the majority of the Proposed Development is located, will experience direct effects on landscape as a result of the Proposed Development. This is a large LCU (approx. 543km²), and the footprint of the Proposed Development will only materially alter a small proportion of the landscape area, and so landscape effects on the physical fabric of the LCU are very localised. In addition, the Proposed Development will not be visible from the vast majority of this LCU, with visibility restricted to the localised area around the Proposed Development and some relatively small areas to the southwest of the Proposed Development Site. Therefore, the effects on its landscape character will be ‘Moderate’. This is outlined in greater detail above in Section 14.7.3.1.5 and within Appendix 14-2).

The other LCU that will experience a ‘Moderate’ landscape effect as a result of the Proposed Development is LCU D – North Coast Plateaux. This can be attributed more to its highly sensitive landscape receptors located on the coast as opposed to actual visibility of the proposed turbines from within the overall LCU, which is quite limited. Likely landscape effects are substantially mitigated by topographical screening and distance from the Proposed Development. In particular it is noted that there is no visibility from the Céide Fields, the most sensitive receptor in this LCU.

The Proposed Development is also partially located within LCU F – North Mayo Inland Bog Basin. This LCU has a ‘Not Significant’ effect as a result of the Proposed Development, given the existing levels of wind energy development within this LCU, and the overall character and sensitivity of the

area. All other LCU's in the LVIA Study Area for effects on landscape character will experience a 'Slight' or 'Not Significant' effect.

In terms of cumulative landscape effects, only LCU E – North Mayo Mountain Moorland, where the majority of the Proposed Development is located, will experience a change in the cumulative status attributed to it, with a change in the status from '2. Landscape Character Area with occasional wind turbines in it and/or intervisible in another landscape character area/s' to '3. Landscape character area with wind turbines.' However, it is noted that the topography surrounding the site provides screening of the proposed turbines from much of the LCU. There is no change to the cumulative status of the other LCUs located within the LVIA Study Area. Therefore, significant cumulative effects on landscape character are not considered to arise.

The visual assessment concluded that residual visual effects of "Moderate" was deemed to arise at one of the eleven viewpoint locations. All other viewpoints were assessed as resulting in Slight (8) and Not Significant (2) residual visual effects. Furthermore, it was shown that the potential for actual visibility is greatly restricted by the strategic siting of the Proposed Development in a saddle between peaks, as well as commercial forestry and vegetated agricultural land to the southeast. As demonstrated in the Photomontage booklet (Volume 2) and photomontage assessment tables (Appendix 14-3), the proposed turbine locations, spacing, and heights have been appropriately selected for the Proposed Development Site, and design of the Proposed Development adheres to the guidance for the siting of wind farms in Mountain Moorland Landscape Types, as set out in the WEDGs (DoEHLG, 2006), & Draft WEDGs (DoPHLG, 2019). In addition, the majority of the areas where there is visibility of the proposed turbines are the least sensitive locations within the LVIA Study Area, and where there are already a large number of permitted and existing wind farms visible. In particular, it is noted that the Proposed Development does not obstruct landscape views of the North Mayo coastline and does not substantially impact scenic amenity attributed to the coast.

7 no. designated scenic routes and highly scenic vistas, along with a number of other sensitive visual receptors were assessed as part of this visual assessment. There were no significant effects found to occur at visual receptors in the LVIA study area. Viewpoint 3 – Downpatrick Head, which is a highly sensitive visual receptor as a result of its popularity as a tourist destination, and as an OSi viewpoint, was deemed to experience a 'Moderate' residual visual effect. From this location the majority of the proposed turbines are visible, however, given the distance of approx. 11 km between the turbines and the viewpoint, they take up a limited horizontal extent within the less scenic part of the view and appear as small elements in the background. The 'Moderate' effect finding here is primarily related to the sensitivity of the receptors represented by the viewpoint. All other scenic routes were deemed to experience no more than a 'Slight' visual effect.

In terms of other sensitive visual receptors, such as recreational and tourist destinations, settlements, and transport routes, the visual effects were found to be 'Slight' or 'Not Significant' for the majority of these. Downpatrick Head, also identified as a tourist destination was deemed to experience a 'Moderate' visual effect, as discussed above.

The Western Way walking route, which passes through the Proposed Development Site itself will also experience a 'Moderate' residual visual effect, including some cumulative effects as a result of the proposed Sheskin South and permitted ABO Sheskin wind farm developments, and the Proposed Development. There will be a substantial magnitude of change to the character of the section of the walking route that passes through the Proposed Development Site. Overall, however, considering the overall length of the route and the relatively small section where the proposed turbines are located, the Proposed Development will not cause significant visual effects on this route.

In relation to residential visual amenity, it is emphasised that the proposed turbines are located over twice the required set-back distance from the nearest residential property, with topographical screening also mitigating any effects on residential visual amenity. There are no significant effects deemed likely to arise in relation to residential visual amenity as a result of the Proposed Development.

Cumulative visual effect are likely to arise given the addition of the Proposed Development within a landscape area where multiple other wind farms are located. The proposed turbines will be seen in the same viewshed as other adjacent wind farms, with cumulative visibility tending towards views of the proposed Sheskin South turbines in combination with other turbines, as opposed to sequential views along routes (although these do occur along the R315, as detailed above). The addition of the Proposed Development increases the density of turbines visible within these typical combined views, although in general the Proposed Development is viewed as a much smaller background feature than the closer wind farms visible from the south and southeast. It is relevant that the topography surrounding the Proposed Development Site is large scale, which increases the ability of the landscape within which the turbines are viewed to absorb the development, mitigating the additional visual cumulative effects. For the landscape character type where the proposed turbines are located, Mountain Moorland, the character of the landscape as an expansive, wide-ranging landscape is accepting of cumulative effects, whether wind farms are seen as discrete elements, standing in relative isolation, or as collective units made up of two or more developments (see Section 14.4.3). The latter is the case with the proposed turbines when they are viewed from certain directions (south-east and east).

A Cumulative Comparative ZTV (Figure 14-17 above) shows that the additional cumulative visibility over that of the proposed, existing, and permitted turbines within the LVIA Study Area only increased in a small number of areas due to the addition of the Proposed Development. There are limited visual receptors in the additional areas indicated on the Cumulative Comparative ZTV map, aside from the stretch of coastline surrounding Downpatrick Head and visual effects on this location have been assessed (see VP3) above with consideration given to cumulative impacts and no Significant effects were found. Therefore, it is considered that the Proposed Development will not have a Significant effect on the extent of cumulative visibility within the LVIA Study Area.

The landscape character of the area within which the Proposed Development Site is located is one of a large scale which contains open, expansive views, and these assist in allowing the landscape to accommodate a large number of turbines, which a detailed visual assessment outlined above (Section 14.7.3.4) and in the photomontage assessment tables contained in Appendix 14-3 has covered in detail.

In conclusion, the Proposed Development is an appropriately designed and suitably scaled project, and likely landscape and visual effects are deemed to not be Significant.