Planning and Environmental Consultants

Environmental Impact Assessment Report

Lemanaghan Wind Farm, Co. Offaly

Chapter 14 Landscape and Visual

Table of Contents

GLOSSARY OF TERMS

Term	Meaning
Draft DoHPLG 2019 Guidelines	The 2019 Draft Wind Energy Guidelines. The draft document of the updated Wind Energy Development Guidelines yet to be published.
DoEHLG 2006 Guidelines	The 2006 Wind Energy Development Guidelines. The current published wind energy development guidelines which addresses a variety of aspects relating to wind energy developments inclusive of noise, shadow flicker, setback distances and community obligations
Landscape Character Area	Units of the landscape that are geographically specific and have their own character and sense of place. Each LCA has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features
Photomontage	These are visualisations that superimpose an image of a proposed project upon a photograph or series of photographs from a specific location, termed the 'viewpoint'.
Route Screen Analysis	An exercise where transport routes were driven in real-time and the level of roadside visual screening, in the direction of the proposed turbines, was recorded to inform actual on the ground visibility.
Viewpoint	This is typically in reference to a select location where a photomontage has been captured, which is represented in the Photomontage Booklet
Zone of Theoretical Visibility	A map (digitally produced showing areas of land in which the proposed development is theoretically visible (based on topography rather than screening) to show a worst-case scenario

GLOSSARY OF ACRONYMS

Acronym	Meaning
AHA	Areas of High Amenity
DoAHG	Department of Arts, Heritage and the Gaeltacht
DoEHLG	Department of the Environment, Heritage, and Local Government
DoHPLG	Department of Housing, Planning and Local Government
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
GCDP	Galway County Development Plan
GLVIA	Guidelines for Landscape and Visual Impact Assessment Third Edition
IEMA	Institute of Environmental Management and Assessment
LCA	Landscape Character Area
LCDP	Laois County Development Plan

LCT	Landscape Character Type
LCU	Landscape Character Unit
LI	Landscape Institute
LI TGN	Landscape Institute Technical Guidance Note
LVIA	Landscape and Visual Impact Assessment
MTN	Midlands Trail Network
NMS	National Monument Service
OCC	Offaly County Council
OCDP	Offaly County Development Plan 2021-2027
OHL	Overhead Line
OSi	Ordnance Survey of Ireland
OUV	Outstanding Universal Value
PWVP	Photowire Viewpoint Locations
RCDP	Roscommon County Development Plan
RSA	Route Screening Analysis
TCDP	Tipperary County Development Plan
UNESCO	United Nations, Educational, Scientific and Cultural Organisation
VP	Viewpoint
WCDP	Westmeath County Development Plan
WES	Wind Energy Strategy
ZTV	Zone of Theoretical Visibility

14. LANDSCAPE AND VISUAL

14.1 Introduction

This chapter comprises a Landscape and Visual Impact Assessment (LVIA). The LVIA assesses the likely significant effects of the proposed Lemanaghan Wind Farm (the Proposed Project) on landscape and visual amenity. The LVIA reported in this chapter was informed by desktop studies and receptor mapping, site visits, verified photomontages, and an impact assessment methodology which follows best practice guidance for LVIA. The LVIA also includes assessment of cumulative landscape and visual effects. This chapter is accompanied by one volume and five appendices:

- *EIAR Volume 2: Photomontage Booklet*, A1 Banner Photomontage Booklet including verified photomontage visualisations from 20 No. representative viewpoints. Hereafter referred to as – 'Photomontage Booklet'
- *Appendix 14-1: LVIA Methodology*, outlining the detailed methodology and guidance used for the assessments reported in this Chapter
- *Appendix 14-2: LCA Assessment*, assessment of effects on designated Landscape Character Areas (LCAs)
- *Appendix 14-3: Photomontage Assessment Tables*, a visual impact assessment of the 20 No. representative viewpoints presented in the *Photomontage Booklet*
- *Appendix 14-4: A0 LVIA Baseline Map*, an A0 scale map showing all baseline landscape and visual receptors, ZTV mapping and viewpoints
- *Appendix 14-5: Photowire Visualisation Booklet*, draft photomontage visualisations from 16 No. viewpoint locations which were not selected for the final Photomontage Booklet
- *Appendix 14-6: Landscape Plan*

14.1.1 Statement of Authority

MKO has developed extensive expertise and experience over the last 20 years in the LVIA of large-scale infrastructure developments for Environmental Impact Assessment Reports (EIAR). The MKO Landscape and Visual team has produced LVIA across a diverse range of project types, including renewable energy and grid infrastructure; residential developments; transport infrastructure; extraction infrastructure; and a range of other projects requiring EIAR.

This chapter was written by Dija Mazonaite, with guidance and direction from Jack Workman, and oversight from Michael Watson. James Crean provided the technical support for the production of the LVIA including GIS mapping.

Field work was conducted by Dija Mazonaite, Jack Workman, Michael Watson, Jack Smith, Rachel Smith and Saoirse Fitzsimons.

Chapter Write Up

Dija Mazonaite is a Project Environmental Scientist - LVIA Specialist at MKO. Dija has a BSc (Hons) in Geography & Geosystems, PGCert in Marine Spatial Planning, and was recognised as a University Scholar at the University of Galway. Dija's primary role at MKO is producing and reviewing the LVIA chapter of EIA reports for large-scale infrastructure developments. Since joining MKO, Dija has conducted and project managed all aspects of LVIA for a broad range of commercial infrastructure developments including wind and solar energy projects, grid infrastructure, extraction industry and Strategic Housing Developments. Dija's key strengths include proficiency in GIS tools such as ArcGIS and QGIS, conducting landscape and visual impact assessments and capturing image data through drone surveys and photomontages. Dija is an affiliate member with the Landscape Institute and is an

active participant of the Irish National Landscape Forum. Dija also regularly delivers guest lectures for students on the topic of LVIA at top third level institutions in Ireland.

Jack Workman MSc., TMLI. is the Landscape & Visual Project Director at MKO and is chartered as a Technician Member of the British Landscape Institute. Jack is an environmental scientist and an LVIA specialist with an academic background in the field of Environmental Science and Geography. Jack's primary role at MKO is scoping and writing LVIA for EIARs with over 5 years' experience managing all aspects of LVIA for a broad range of commercial infrastructure developments. Jack holds a BSc. in Psychology, and an MSc. in Coastal and Marine Environments (Physical Processes, Policy & Practice). Jack is an active participant in the National Landscape Forum, presenting in 2023 and 2024 on the topic of LVIA, he also regularly delivers guest lectures for students on the topic of LVIA at top third level institutions in Ireland including University of Galway, Trinity College Dublin, University College Dublin and University College Cork. Jack holds a membership with the Chartered Institute of Water and Environmental Management and is also a member of the Landscape Research Group.

Michael Watson is the Environment Division Director in MKO, he has over 25 years' experience in the environmental sector. Following the completion of his master's degree in environmental resource management, Geography, from National University of Ireland, Maynooth he worked for the Geological Survey of Ireland and then a prominent private environmental consultancy prior to joining MKO in 2014. Michael's professional experience includes managing Environmental Impact Assessments and Landscape & Visual Impact Assessments on behalf of clients in the wind farm, waste management, commercial and industrial sectors nationally. Michael worked on the capture and development of photomontages as well as compiling the Landscape & Visual Impact Assessments for some of the first wind turbines being proposed in Ireland in the early 2000's and has been compiling and reviewing LVIA chapters for multiple wind farm projects each year since 2014. Michael is a key member of the MKO senior management team and as head of the Environment Division has responsibilities to mentor various grades of team members, foster a positive and promote continuous professional development for employees. Michael also has a Bachelor of Arts Degree in Geography and Economics from NUI Maynooth, is a Member of IEMA, and a Chartered Environmentalist (CEnv).

James Crean is an LVIA practitioner with MKO. James holds BA (Hons) in Geography & English and Masters in Applied Coastal and Marine Management. James took up his position with MKO in 2023. James' key strengths and areas of expertise are in GIS, remote sensing and report writing. His primary role at MKO is conducting LVIAs and writing the Landscape and Visual chapter of EIA reports. Since joining MKO, James has worked widely on renewable energy infrastructure, commercial, recreational, and residential projects. James is a qualified Unmanned Aerial Vehicle Operator and holds an A1/A3 and A2 drone licence.

Record of Site Visits and Surveys

Jack Smith previously worked with MKO as 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.

Rachel Smith is a Project Environmental Scientist – LVIA Specialist who has been working with MKO since October 2023. Rachel is an Earth & Environmental Science consultant with more than 12 years of professional experience in producing and editing technical scientific reports, and collecting, analysing and reporting environmental data for regulatory compliance in both the US and Ireland, including the utilisation of QGIS mapping, organisation of field work, management of environmental databases and training of environmental science staff. Rachel's primary role at MKO is producing and reviewing the LVIA chapter of EIA reports accompanying planning applications for multi-scale onshore renewable energy and non-energy developments, as well as conducting research and analysis in Irish landscape

science and policy. Rachel is an affiliate of Landscape Alliance Ireland assisting with the Landscape Forum in 2025 and 2026 and has presented on topics related to LVIA at Irish universities since 2025. Rachel is a member of the Irish Geological Association as well as ProGeo, the International Association for the Conservation of Geological Heritage and a member of the 2026 ProGeo Geo conservation Glossary Thematic Working Group. Rachel holds an MSc. in Coastal and Marine Environments (Physical Processes, Policies & Practice) and a BSc. in Geology specialised in Hydrogeology.

Saoirse Fitzsimons is a Bat Ecologist with a strong background in LVIA having joined the company in January 2022. She holds a MSc. in Coastal and Marine Environments from the University of Galway, Ireland where she was awarded The Prof. Micheál O'Cinnéide Award for Academic Excellence. She has a range of experience including GIS and production of LVIA chapters of EIA reports for large infrastructure developments. Saoirse also holds an A1/A3 and A2 drone licence and is one of the lead drone pilots in MKO.

Table 14-1 Record of Field Work and Site Surveys

Site Survey	Year	Date Range	Personnel
Photomontage Capture and Site Walkover	2021	20th June– 30th June	Jack Smith, Jack Workman, Michael Watson, Saoirse Fitzsimons
Photomontage Capture and Site Walkover	2021	5th September– 10th September	Jack Smith, Jack Workman, Michael Watson, Saoirse Fitzsimons
Photomontage Capture	2022	1st November– 10th November	Jack Smith, Saoirse Fitzsimons
Route Screening Analysis	2022	1st May – 5th May	Jack Smith
Photomontage Capture	2023	10th August– 15th August	Jack Smith
Photomontage Capture	2024	10th June– 15th June	Dija Mazonaite
Photomontage Capture	2024	25th July– 31st July	Dija Mazonaite, Rachel Smith
Photomontage Capture	2024	15th September– 20th September	Dija Mazonaite
Photomontage Capture	2024	20th November – 25th November	Dija Mazonaite
Route Screening Analysis	2024	20th November – 25th November	Dija Mazonaite
Site Walkover	2024	20th November – 25th November	Dija Mazonaite
Photomontage Capture	2025	10th December – 15th December	Dija Mazonaite
Site Walkover and Monastic Complex Site Visit	2025	10th December – 15th December	Dija Mazonaite

14.1.2 Proposed Project Description

A full and detailed description of the Proposed Project can be found in Chapter 4: Description of the Proposed Project of this EIAR. Section 4.1 of Chapter 4 describes the Proposed Project and its component parts, including all works subject of a proposed application for planning permission to An Coimisiún Pleanála (ACP).

As detailed in Section 1.1.1 in Chapter 1, for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Wind Farm' 'Proposed Grid Connection', 'Proposed Project site', and 'site'. The Proposed Project encompasses the Proposed Wind Farm and the Proposed Grid Connection. For this chapter:

- Where the 'proposed turbines' are referred to, this includes the turbine components of the Proposed Project. The Proposed Project includes 15 No. turbines of the following dimensions:
  - Turbine Tip Height – 220 metres
  - Turbine Hub Height – 145 metres
  - Rotor Diameter – 150 metres

14.1.2.1 Essential Aspects of the Proposed Project from an LVIA Perspective

This LVIA follows '*The Guidelines for Landscape and Visual Impact Assessment Third Edition*' (hereafter, GLVIA3) published by Landscape Institute (LI) & Institute of Environmental Management and Assessment (IEMA) (2013) as well as 'Notes and Clarifications on Aspects of GLVIA3: Landscape Institute Technical Guidance Note 2024-01' (hereafter, LI TGN 24-01) published by the Landscape Institute (LI) (2024). This guidance states that:

> *"It is important to make sure that the project description provides all the information needed to identify its effect 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".*

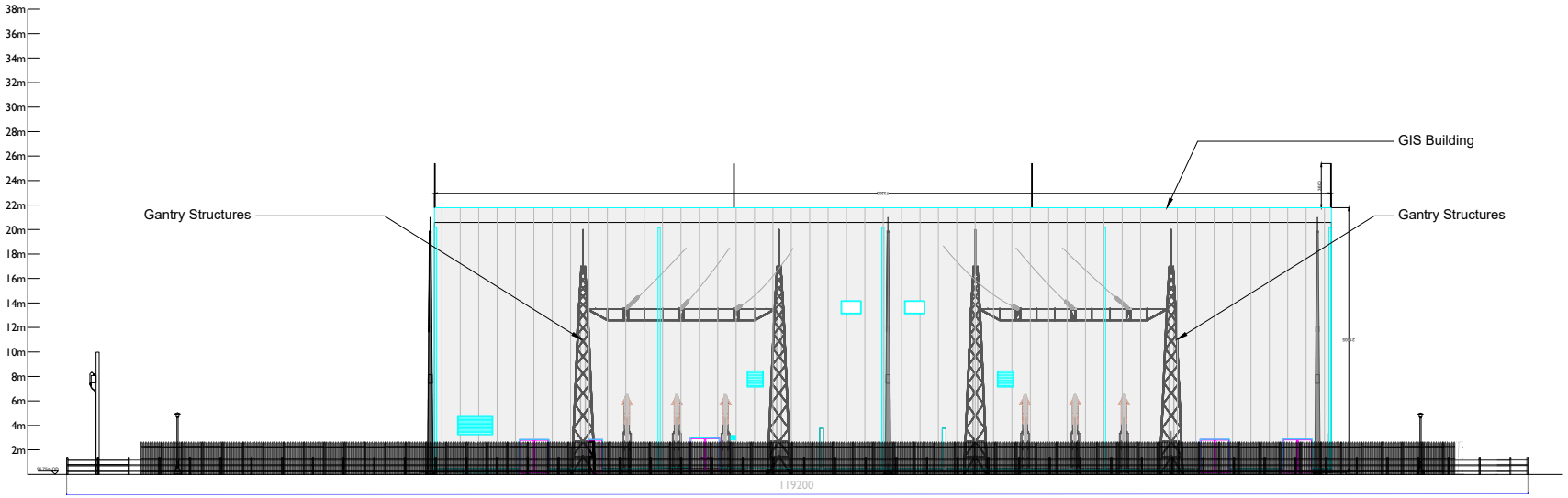
The tall, vertical nature of the proposed turbines make them the most prominent elements of the Proposed Project from a landscape and visual perspective and have the most potential to give rise to significant landscape and visual effects. In this regard, the proposed turbines are deemed to be the 'essential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

Other components of the Proposed Project 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 this LVIA, these elements are given full consideration throughout this Chapter. These include elements such as:

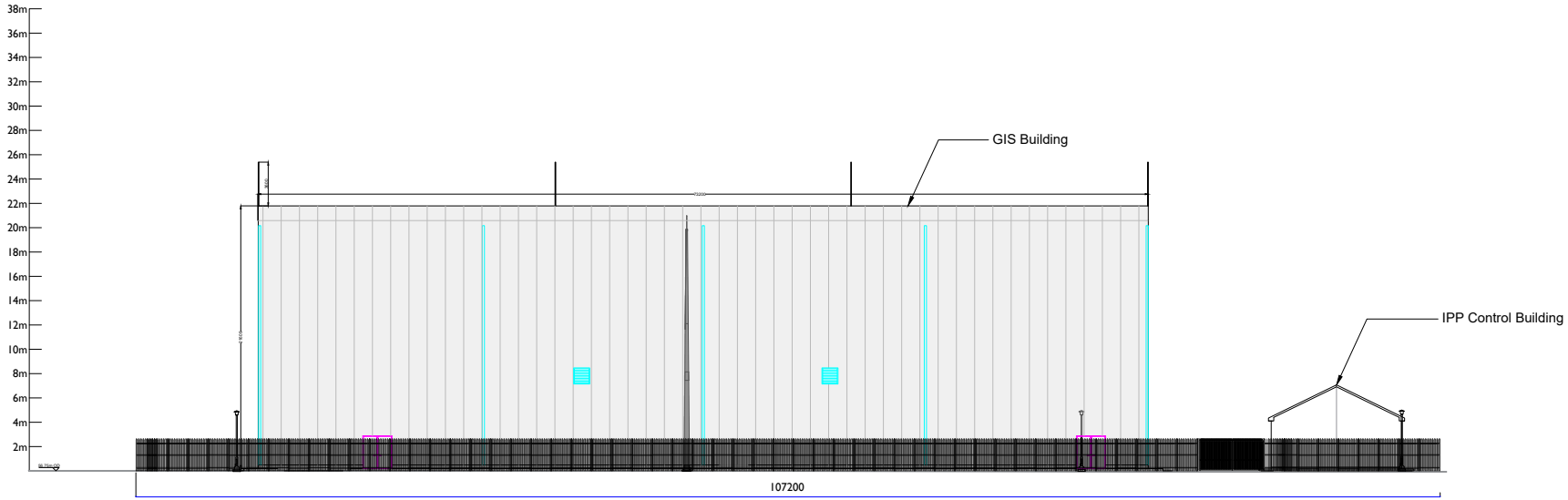
- The proposed 145m anemometry mast (referred to as the met mast) which is also a tall vertical structure, thus is included in the *EIAR Volume 2: Photomontage Booklet* accompanying this chapter and is fully considered throughout this chapter. Given the height of the mast, it is considered to be an essential aspect of the Proposed Project from an LVIA perspective. However, it will be substantially less visible than any turbine given its shorter and slender lattice form.
- The proposed 220kV GIS Substation is a tall structure with an above ground height of 21.065m, and covering an area of approximately 3,521m^2. The steel masts, which will carry the overhead cables to connect into the existing 220kV OHL, are also tall vertical structures with an above ground maximum height of 28m. Given the height of these elements, they are considered to be essential aspects of the Proposed Project from an LVIA perspective. As such,

both the proposed onsite 220kV substation and steel masts, have been included in the photomontage booklet in the *EIAR Volume 2: Photomontage Booklet* (see Viewpoint (VP) 17 and VP18) and are fully considered throughout this chapter.

An extract from the planning pack provided as part of this application (Drawing: 200804-34, 200804-35, 200804-35.1, and 200804-43) of the substation and steel masts are reproduced below to show the scale and mass of these infrastructure elements under assessment:



ELEVATION A-A



ELEVATION B-B

Notes:

1. MEASUREMENTS SHOWN ARE IN MM, UNLESS INDICATED OTHERWISE
2. DRAWING FOR PLANNING PURPOSES ONLY
3. BUILDING COLOURS WILL RANGE WITHIN A MUTED MID-DARK GRAY AND GREEN SPECTRUM. REFER TO EIAR VOL. II, APPENDIX 10A FOR INDICATIVE DETAIL
4. FINAL DETAIL OF BUILDING FINISHES TO BE AGREED WITH PLANNING AUTHORITY IN ADVANCE OF DEVELOPMENT COMMENCING

PROJECT TITLE:

Lemanaghan Wind Farm, Co. Offaly

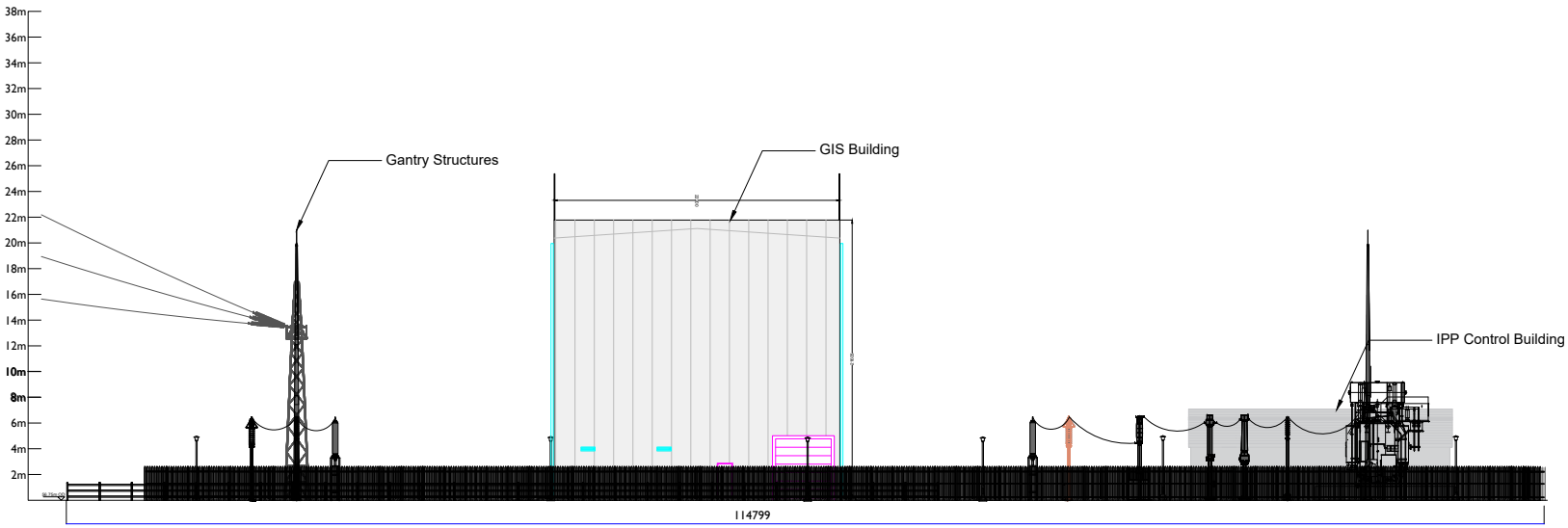
DRAWING TITLE:

220kV Substation Compound Elevations

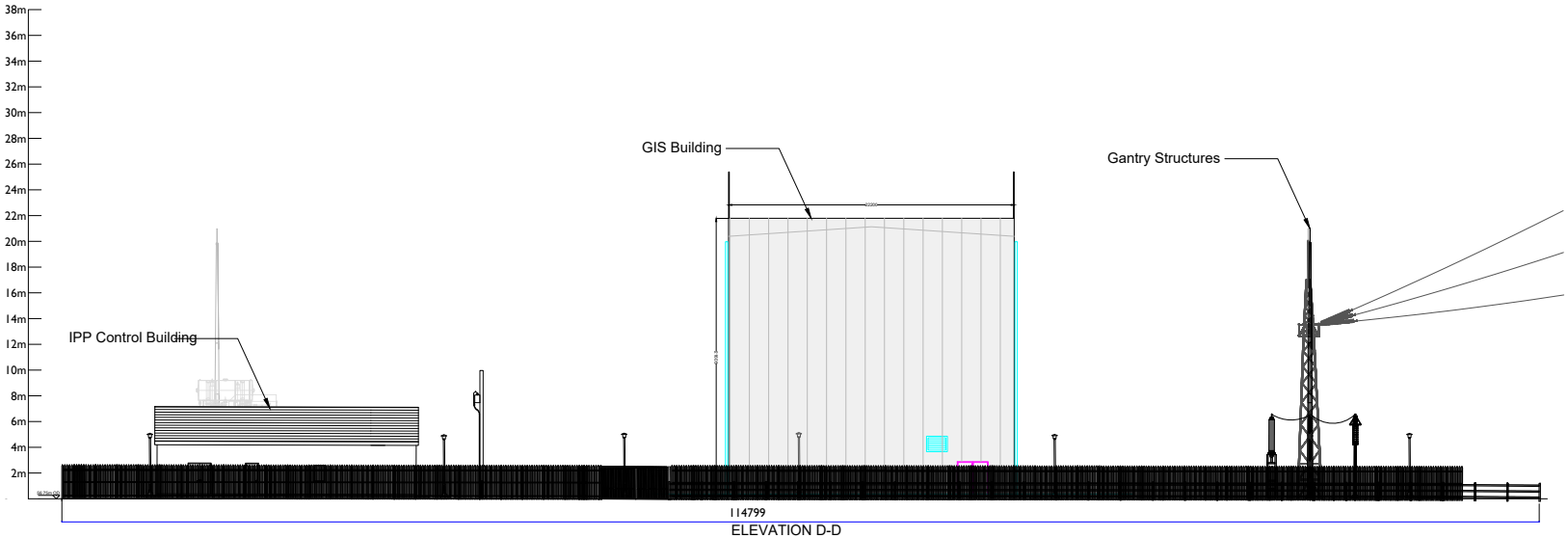
PROJECT No.:	DRAWING No.:	SCALE:
200804	200804-34	1:200 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
FB	GO	24.03.2026	P01

Email: info@www.mkoireland.ie /Website: www.mkoireland.ie



ELEVATION C-C



ELEVATION D-D

Notes:

1. MEASUREMENTS SHOWN ARE IN MM, UNLESS INDICATED OTHERWISE
2. DRAWING FOR PLANNING PURPOSES ONLY
3. BUILDING COLOURS WILL RANGE WITHIN A MUTED MID-DARK GRAY AND GREEN SPECTRUM. REFER TO EIAR VOL. II, APPENDIX 10A FOR INDICATIVE DETAIL
4. FINAL DETAIL OF BUILDING FINISHES TO BE AGREED WITH PLANNING AUTHORITY IN ADVANCE OF DEVELOPMENT COMMENCING

PROJECT TITLE:

Lemanaghan Wind Farm, Co. Offaly

DRAWING TITLE:

220kV Substation Compound Elevations

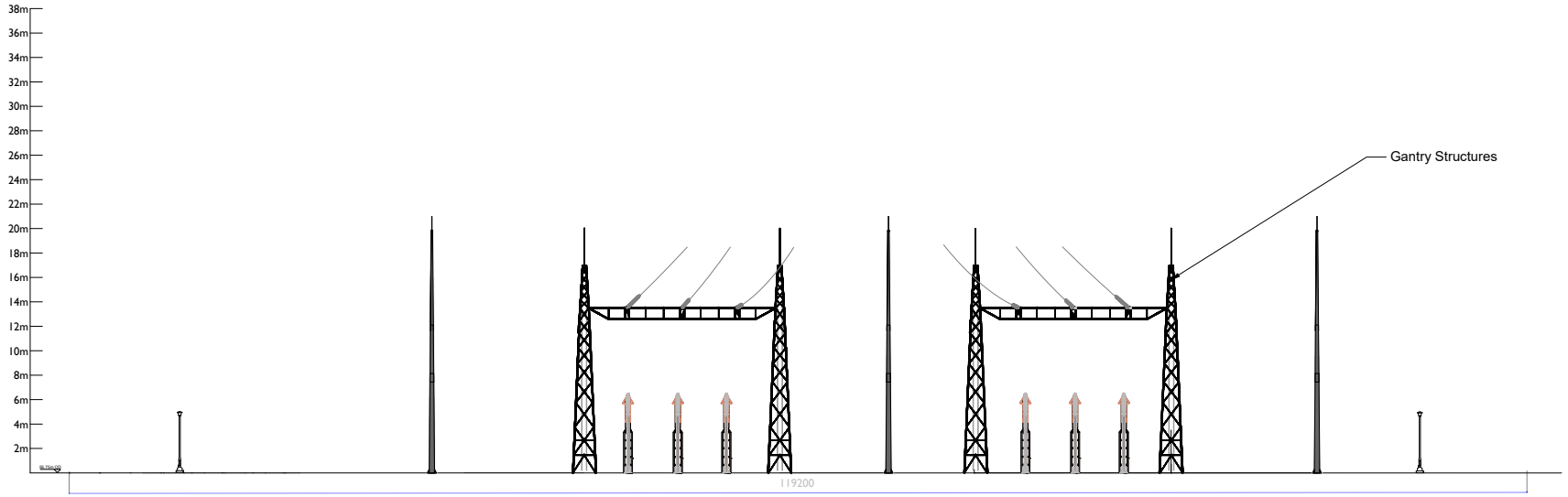
PROJECT No.:	DRAWING No.:	SCALE:
200804	200804-35	1:200 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
FB	GO	24.03.2026	P01

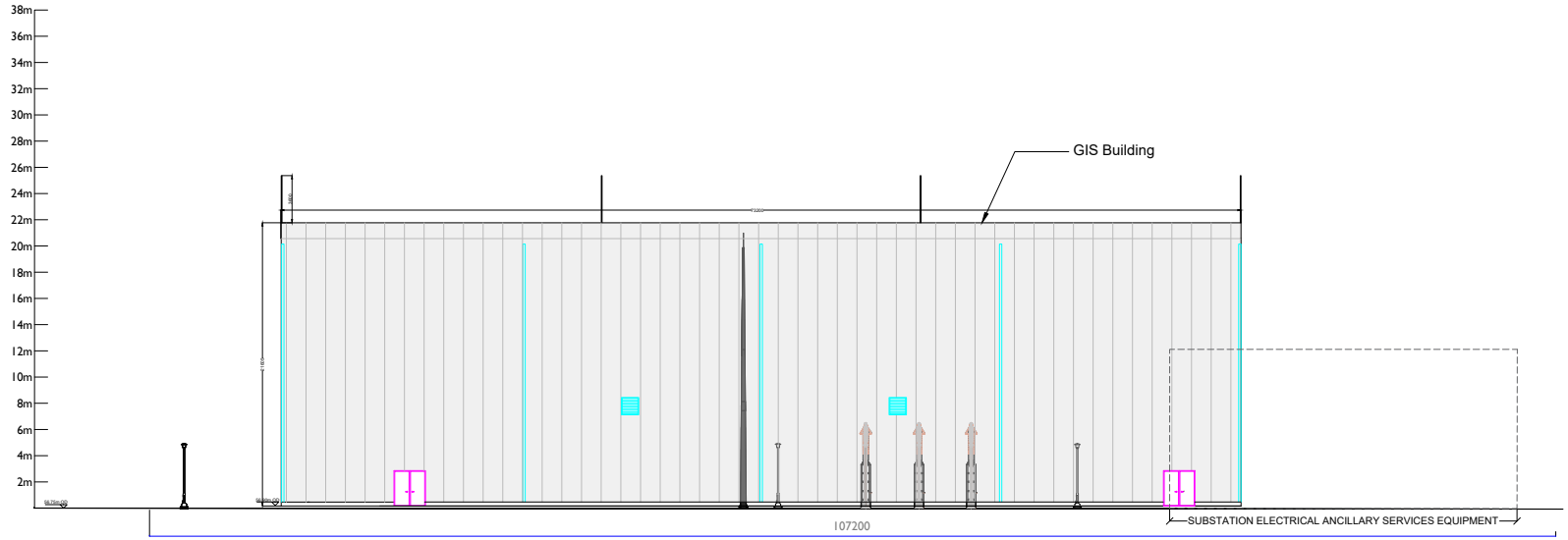
Email: info@www.mkoireland.ie /Website: www.mkoireland.ie

Notes:

1. MEASUREMENTS SHOWN ARE IN MM, UNLESS INDICATED OTHERWISE
2. DRAWING FOR PLANNING PURPOSES ONLY
3. BUILDING COLOURS WILL RANGE WITHIN A MUTED MID-DARK GRAY AND GREEN SPECTRUM. REFER TO EIAR VOL. II, APPENDIX 10A FOR INDICATIVE DETAIL
4. FINAL DETAIL OF BUILDING FINISHES TO BE AGREED WITH PLANNING AUTHORITY IN ADVANCE OF DEVELOPMENT COMMENCING



ELEVATION E-E



ELEVATION F-F

PROJECT TITLE:
Lemanaghan Wind Farm, Co. Offaly

DRAWING TITLE:
220kV Substation Compound Elevations

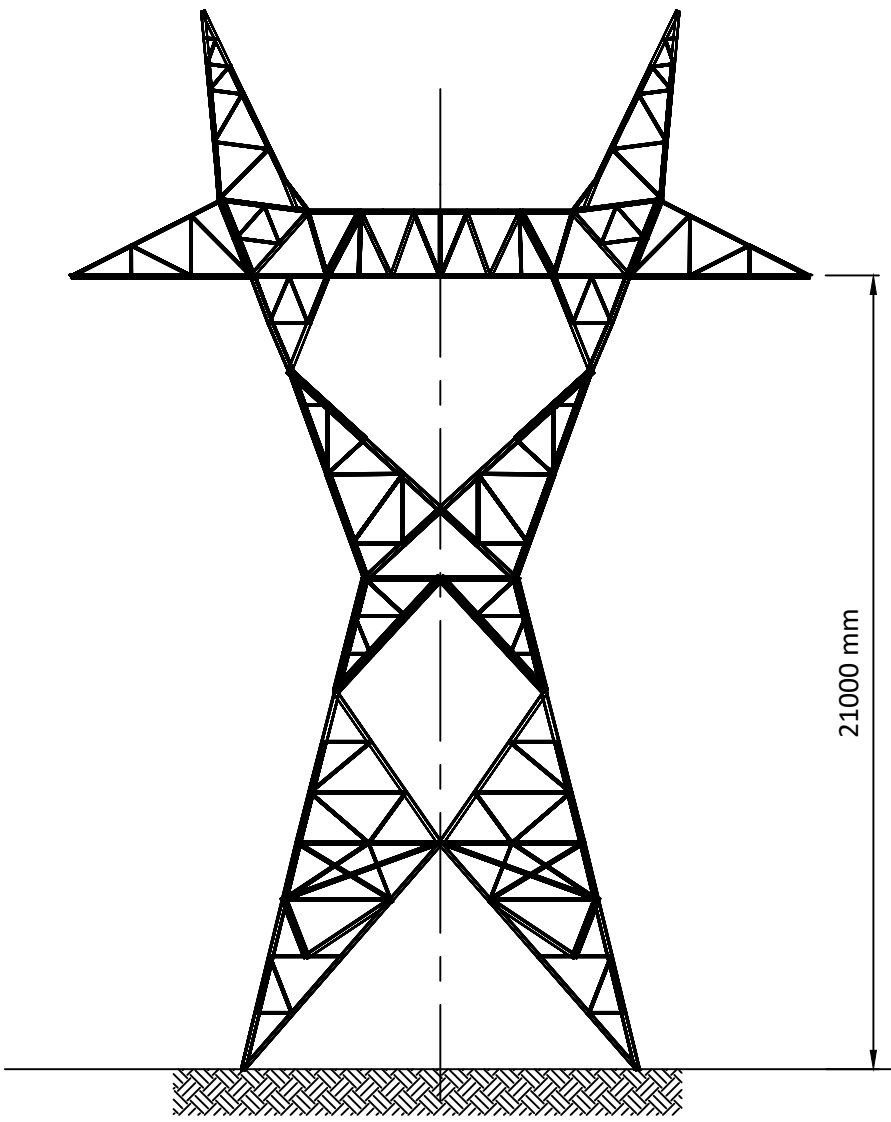
PROJECT No.:	DRAWING No.:	SCALE:
200804	200804-35.1	1:200 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
FB	GO	24.03.2026	P01

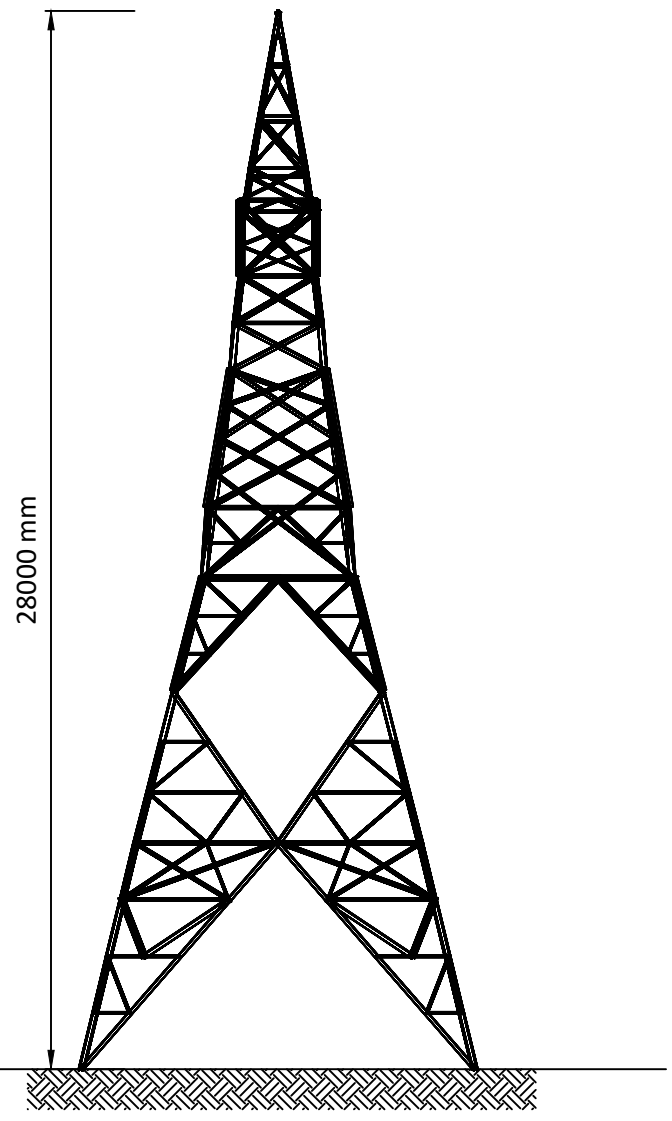
Email: info@www.mkoireland.ie /Website: www.mkoireland.ie

NOTES:

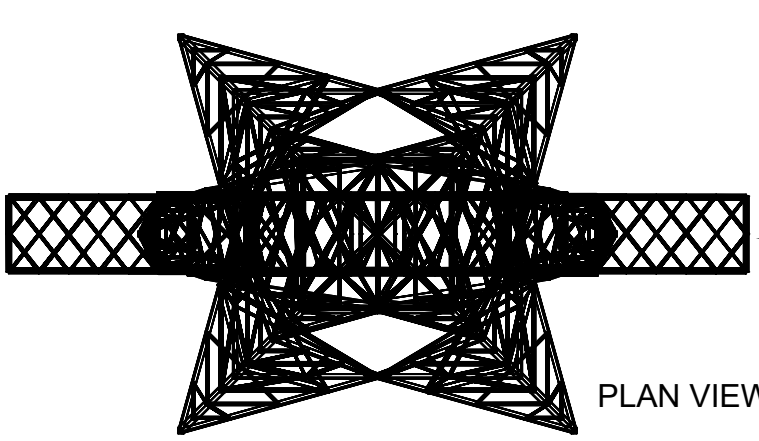
1. ALL DIMENSIONS NOTED ARE IN MM
2. DRAWING IS FOR PLANNING PURPOSES ONLY
3. TOWER INSULATOR ANGLE WILL VARY TO SUIT APPLICATION
4. EQUIPMENT/STRUCTURE DETAILS ARE INDICATIVE AND WILL BE FINALISED DURING DETAILED DESIGN
5. DETAILED DESIGN SHALL BE CARRIED OUT IN LINE WITH SYSTEM OPERATOR AND ASSET OWNER SPECIFICATIONS



FRONT ELEVATION



SIDE ELEVATION



SIDE VIEW

PLAN VIEW

PROJECT TITLE: **Lemanaghan Wind Farm, Co. Offaly**			
DRAWING TITLE: **220 kV Overhead Line 28m Tower**			
PROJECT No.: **200804**		DRAWING No.: **200804-43**	SCALE: **1:200 @ A3**
DRAWN BY: **FB**	CHECKED BY: **GO**	DATE: **23.03.2026**	REVISION.: P01

Email: info@www.mkoireland.ie /Website: www.mkoireland.ie

14.1.3 Mitigation by Design

The Proposed Project site was strategically selected as a landscape highly suitable for the development of wind energy. Through the iterative project design process, various best practice tools for assessing the landscape and visual impact of a proposed wind farm development were utilised to bring forward the optimum design for the Proposed Project with respect to landscape and visual factors. These tools include landscape modelling, Zone of Theoretical Visibility (ZTV) mapping and the preparation of photomontage visualisations.

The iterative design process was informed by the siting and design guidance for wind farms in specific landscape types, as set out in the Wind Energy Development Guidelines for Planning Authorities (Department of the Environment, Heritage, and Local Government [DoEHLG], 2006), hereafter the 'DoEHLG 2006 Guidelines', and regard to the Draft Revised Wind Energy Development Guidelines (Department of Housing, Planning and Local Government [DoHPLG] 2019), hereafter the 'Draft DoHPLG 2019 Guidelines'.

The evolution of the Proposed Project design included careful micro-siting of infrastructure with the aim of preventing the potential for significant landscape and visual effects. Details of the various turbine layout iterations included as part of this design process are included in Section 3.2.5.2 of Chapter 3: Site Selection and Reasonable Alternatives' of this EIAR. The following factors were key to appropriate site selection and design of the Proposed Project in mitigating potential landscape and visual effects and are of key relevance to the impact assessments in this chapter.

Siting in a Suitable Landscape for Wind Energy Development

During the initial site selection process, landscape sensitivity through guidance, was identified as a key constraint and so landscapes considered to be less sensitive are preferred over sites with greater sensitivity to change. The following factors detail why the Proposed Project site was strategically selected as a landscape highly suitable for the development of wind energy:

- The Proposed Project is sited within a large expanse of uninhabited peatland, set back from landscape and visual receptors in the wider landscape.
- The Proposed Project is strategically sited within a flat landscape of degraded cutover peatland, a landscape currently of low value and low sensitivity.
- The proposed turbines are strategically sited in a flat landscape bound by mature hedgerows and treelines. The wider landscape is also very flat and heavily vegetated with treelines and hedges, further restricting long-range visibility (discussed further in Section 14.3.2.2). Therefore, as demonstrated throughout this LVIA and by the photomontage visualisations in the Photomontage Booklet, visual exposure of the proposed turbines quickly declines with distance, limiting potential for any landscape and visual effects from vast areas within the LVIA Study Area and from a large number of sensitive receptors.
- Local planning policy specifically promotes the selection of cutover peatlands as landscapes suitable for the development of wind energy. Chapter 3 of the Offaly County Development Plan 2021-2027 (OCDP) further outlines the county's policy relating to peatlands and wind energy developments, stating that *'industrial peatlands in the midlands are a significant resource will transition to after uses ranging from amenity, tourism, biodiversity services, wild areas, flood management, climate mitigation,* ***energy development****, industry, education, conservation'.*
- The peatlands in which the site is located form part of a larger rural working landscape setting which has undergone substantial degree of modification through peat extraction and agriculture.

- The Proposed Project is sited in a location where Proposed Project infrastructure will not be the focus of any designated protected views or scenic routes in the local planning policy.

Project Layout and Design

- Details of the various Proposed Project layout iterations and the considerations related to potential landscape and visual effects are described in detail in Chapter 3. The Proposed Project layout that is the subject of this LVIA, already incorporates the following landscape and visual design considerations for best practice wind farm design:
    - Siting of the proposed turbines, located approximately 896m from the nearest proposed turbine, substantially exceeds the minimum 500m set-back distance from residential properties in the DoEHLG 2006 Guidelines and also adheres to the recommended 4-times-tip-height set-back distance from residential receptors explicitly set out for residential visual amenity by the Draft DoHPLG 2019 Guidelines.
- The Proposed Wind Farm layout has been designed to create a coherent arrangement of turbines, contiguous and connected to each other visually and with consistent spacing in line with the guidance for the design and siting of wind farms with the 'Flat Peatland' landscape type defined in the DoEHLG 2006 Guidelines and regard to the Draft DoHPLG 2019 Guidelines.
- As set out in the DoEHLG 2006 Guidelines, Peatland landscape type has the capacity for a large-scale design and tall turbines. This is due to the visual openness with few, dominant geometric elements which provides a certain freedom in the siting and design of wind energy developments.
- The iterative design process of the Proposed Project has ensured limited visibility from any local receptors of very high sensitivity, in particular, the high sensitivity Clonmacnoise Heritage Site has little to no theoretical visibility (Note the ZTV outputs in PWVP-B in the Photowire Booklet).
- The proposed turbines have an even height profile, which makes them appear as a visually coherent cluster in most of the photomontages presented in the *Volume 2: Photomontage Booklet* and the photowires in Appendix 14-5. This is clearly the case when seen from elevated vantage points within the wider landscape, such as Knockastia Hill in Co. Westmeath as seen in Photomontage Viewpoint (VP) 18, the turbines occupy an even horizontal height profile.
- A comprehensive Landscape Plan has been developed to minimise visual impacts of the proposed onsite 220kV substation on nearby residential receptors. This plan, discussed later in Section 14.7.2.4.1 and shown in Appendix 14-6 includes strategic planting of vegetation and the construction of berms to limit the visibility of the proposed onsite 220kV substation from nearby residences.
- The internal road layout makes use of the existing tracks and machine pass routes wherever possible (to be upgraded for construction and the delivery of wind turbine components), to minimise the requirement for new internal road within the site.
- The layout of the Proposed Project has been designed to ensure minimal loss of valuable landscape receptors such as areas of intact bog, woodland or valuable biodiversity corridors.
- The Proposed Project includes specific measures and interventions to improve the ecological and amenity value of the landscape within the site; including a Biodiversity Management and Enhancement Plan which is included in Appendix 6-5 and a Lemanaghan Wind Farm Amenity Plan which is presented in Appendix 4-2.
- The Proposed Grid Connection connects to an existing network and existing Shannonbridge-Maynooth 220kV overhead line (OHL) located approximately 0.4km north of the proposed onsite 220kV substation, therefore eliminating the need for substantial development to facilitate the connection to the national grid in the wider

landscape, consequently eliminating landscape and visual impacts beyond the vicinity of the Proposed Project site.
- The Proposed Wind Farm is set-back beyond the buffer specifically created to mitigate impacts on the Lemanaghan Monastic Site as set out in local planning policy through the 2021 amended Wind Energy Zoning (as per the Chief Executive's Report), with the exception of turbine T05, which is located on the boundary of an area designated 'not Deemed Suitable for Wind Energy Developments'.

14.1.4 Scoping and Consultation

A scoping and consultation exercise was carried out by MKO in May 2021 and October 2024, as detailed in Section 2.8 of Chapter 2: Background of the Proposed Project of this EIAR. A pre-planning consultation meeting took place with Offaly County Council in June 2021, and June 2025. No topics of note relating to LVIA were raised by OCC.

A pre-planning consultation meeting took place with ACP in September 2021, January 2025, and December 2026. No topics of note relating to LVIA were raised by ACP.

A meeting was held with the National Monuments Service (NMS) on the 11th of November 2025. Following this meeting, the NMS requested the inclusion of a *'winter view'* photomontage from the Lemanaghan Monastic Site, as well as an additional photomontage from the Lemanaghan Hermitage site.

In response, these viewpoints have been incorporated into the LVIA. A winter-view photomontage was prepared for the Lemanaghan Monastic Site, with both 90-degree and 53.5-degree fields of view provided (VP13 in Volume 2: Photomontage Booklet). In addition, a further photomontage was captured from the Lemanaghan Hermitage site (VP14 in Volume 2: Photomontage Booklet). A detailed summary of the topics discussed at each of these pre-planning meetings is included in Section 2.8 of Chapter 2 of this EIAR. All feedback and communications detailed in Chapter 2 have been addressed when compiling this chapter and assessment.

Table 14-2 Summary of LVIA Related Scoping Responses

Consultee	Description	Addressed in
National Monuments Service (NMS)	The NMS has requested the inclusion of 2 No. photomontage viewpoints from the following locations: - A 'winter view' from the Lemanaghan Monastic Site - A photomontage view from the Lemanaghan Hermitage	Appendix 14-3, Section 14.7.3.1.4 and Section 14.7.3.2.2 of Chapter 14

14.2 Brief Methodology and Assessment Criteria

This section briefly outlines the guidance and methodology used to undertake the LVIA of the Proposed Project; the full detailed description of the methodology is provided in *Appendix 14-1: LVIA Methodology*.

There are five main sections to this assessment:

- Visibility of the Proposed Project (e.g. ZTV mapping)
- Landscape Baseline
- Visual Baseline

- Cumulative context with respect to other wind farm developments within the 25km LVIA Study Area
- Likely Landscape and Visual significant effects – summarising all landscape, visual and cumulative effects of the Proposed Project determined by this LVIA

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

The Proposed Wind Farm is the key focus of the assessments in this Chapter as the proposed turbines are the primary essential aspect of the Proposed Project under assessment of the LVIA (as detailed previously in Section 14.1.2).

The GLVIA3 guidance refers to the identification of the area of landscape that is to be covered while assessing landscape and visual effects. The GLVIA3 guidance states:

> *"The study areas should include the site itself and the full extent of the wider landscape around it which the proposed project may influence in a significant manner."*

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

- DoEHLG 2006 Guidelines (including reference to the Draft DoHPLG 2019 Guidelines)
- The Guidelines for Landscape and Visual Impact Assessment 3rd Edition – GLVIA3, (Landscape Institute & IEMA, 2013) and Clarifications in LI TGN 24/01 (LI, 2024).

The distance at which the Zone of Theoretical Visibility (ZTV) is set from a proposed wind farm development defines the parameters of the LVIA Study Area. The LVIA Study Area was chosen to be 25km from the proposed turbines for landscape and visual effects, due to the 'Hill of Uisneach', a landscape of national renown (located on Ireland's tentative list as a potential UNESCO Heritage Site), being located approximately 23km northeast from the nearest proposed turbine T15. The 25km LVIA Study Area was chosen as per both the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines:

> *"In areas where landscapes of national or international renown are located within 25km of a proposed wind energy development, the Zone of Theoretical Visibility should be extended as far (and in the direction of) that landscape. This reflects the fact that highly sensitive landscapes deserve extra special treatment by developers and planners."*

Through experience conducting LVIA for other wind energy developments, 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 secondary study area of 15km radius from the proposed turbines, hereafter the 'LCA Study Area', is deemed appropriate for effects on landscape character in relation to the assessment of effects upon designated Landscape Character Areas (LCAs).

Furthermore, as prescribed by best practice guidance set out in *Appendix 14-1 LVIA Methodology*, and the professional judgement of the assessment team, in addition to the results of initial visibility appraisals, the following topics 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 landscapes beyond a 25km radius from the proposed turbines, from where it is judged that potentially significant effects on key characteristics and/or special qualities, or views are judged unlikely to occur.
- Effects on designated LCAs beyond a 15km radius from the proposed turbines, where it is judged that potential significant effects on landscape character are unlikely to occur.
- Effects on visual receptors beyond 25km radius from the proposed turbines, where it is judged that potential significant effect are unlikely to occur.
- Cumulative landscape and visual effects beyond a 25km radius from the proposed turbines, where it is judged that potential significant cumulative effects are unlikely to occur.
- Cumulative effects in combination with single turbines with a tip height lower than 50 metres beyond 3km from the Proposed Wind Farm.

14.2.2 Guidelines

The legislation and general guidance on Environmental Impact Assessment is set out in Section 1.2.1 of Chapter 1 of this EIAR. The LVIA reported in this chapter was guided and informed by guidance documentation specifically pertaining to the LVIA. Details of the guidance used to conduct this LVIA are outlined in Section 1.3 of the LVIA Methodology Appendix – Appendix 14-1.

14.2.3 Baseline Landscape and Visual Information

In order to carry out this assessment, an initial desk study of baseline information was undertaken that has informed the LVIA, and this included the following:

Landscape Baseline

- Policies, objectives and designations contained in the relevant county development plans (Counties Offaly, Westmeath, Laois, Roscommon, Galway, Tipperary and Longford) pertaining to landscape and wind energy.
- Landscape character and description of the site and its immediate surroundings, determined by site surveys conducted in 2021, 2022, 2023 and 2024.
- Landscape sensitivity (derived from the appraisal of landscape value and susceptibility to change) of the site and its immediate surroundings, informed by the desk study and site surveys.
- Landscape character of the site as designated for planning authorities in *Section 6.9 'Landscape Character Types as a Basis for Guidelines'* of the DoEHLG 2006 Guidelines') and Draft DoHPLG 2019 Guidelines.
- Landscape character of wider landscape setting as designated by LCAs in county-level policies for Landscape Character Assessment.

Visual Baseline

- Identification of seven categories of visual receptors in the LVIA Study Area:
  - Designated Scenic Routes and Views
  - Ordnance Survey of Ireland (OSi) Viewing Areas
  - Settlements
  - Recreational Routes
  - Recreational, Cultural Heritage and Tourist Destinations
  - Transport Routes
  - Residential Receptors

- Preliminary analysis of visibility from visual and residential receptors for the Proposed Project according to ZTV mapping, Route Screening Analysis and on-site visibility appraisals.

14.2.4 Assessment of Potential Impacts

The LVIA process used in this Chapter is presented in *Appendix 14-1: LVIA Methodology* and includes clearly documented methods based on guidelines of the GLVIA3 as follows.

First, this LVIA considers landscape and visual 'Sensitivity' balanced with the 'Magnitude of Change' to determine the likely significance of effects. Second, mitigating factors are then considered to arrive at 'Residual' landscape and visual effects. Third, residual landscape and visual effects are graded upon an 'impact assessment classification of significance' scale, as defined in '*Guidelines on the Information to be contained in Environmental Impact Assessment Reports'* by the Environmental Protection Agency of Ireland (EPA, 2022) (hereafter referred to as EPA (2022)), ranging as follows: 'Imperceptible', 'Not Significant', 'Slight', 'Moderate', 'Significant', 'Very Significant' or 'Profound'.

Photomontages are used as an illustrative tool to assess potential impacts, whereby the potential landscape and visual effects arising as a result of the proposed turbines 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, based on ZTV mapping (see below Section 14.3.1 Visibility of the Proposed Project), and is assessed to compare 'theoretical' versus 'actual' visibility. The detailed methods used to produce ZTV maps and photomontages are included in *Appendix 14-1*.

14.2.5 LVIA: Wind Energy Context

Given Ireland's renewable energy targets which have been set by the State for onshore renewable wind energy development, i.e., 9GW of onshore wind[1], wind turbines will form a component in the working landscape for the foreseeable future. The focus for visual impact assessment of wind energy developments is therefore distance, arrangement, location and potential disruption to key scenic sensitivities rather than a commonly misconceived focus on whether turbines are visible or not from a particular vantage point. The outcome of the visual impact assessment, with regards to the EPA (2022) definition of significance, is calibrated in the overall context of LVIA of wind energy developments in Ireland and what is acceptable in the context of emerging baseline trends and the acceptability of wind turbines within views as a result of national policy.

Over time, wind turbines have, and will become, a more familiar and accepted component of the Irish landscape, particularly in working rural contexts. Accordingly, their presence may not carry the same level of perceived visual intrusion as less common or incongruous forms of development. In this context, the calibration of visual impact significance reflects both the policy-driven imperative for renewable energy development and the evolving visual baseline in parts of the Irish landscape. While the visibility of turbines remains an important consideration, it does not in itself equate to significant visual impact.

Key factors of focus in the overall impact assessment on visual receptors in relation to photomontages are:

- The scale of the turbines as a result of setback distance.
- The number of turbines visible.
- Full or partial visibility of turbines, e.g., are they partially screened by features.
- Horizontal extent, e.g., how do the turbines comprise the field of view

[1] *Department of Climate Energy and the Environment (2025) Climate Action Plan 2025*

- Overall visual coherency with regards to form and arrangement and how the turbines correspond to the landscape from a particular vantage point as per best practice siting and design guidance.

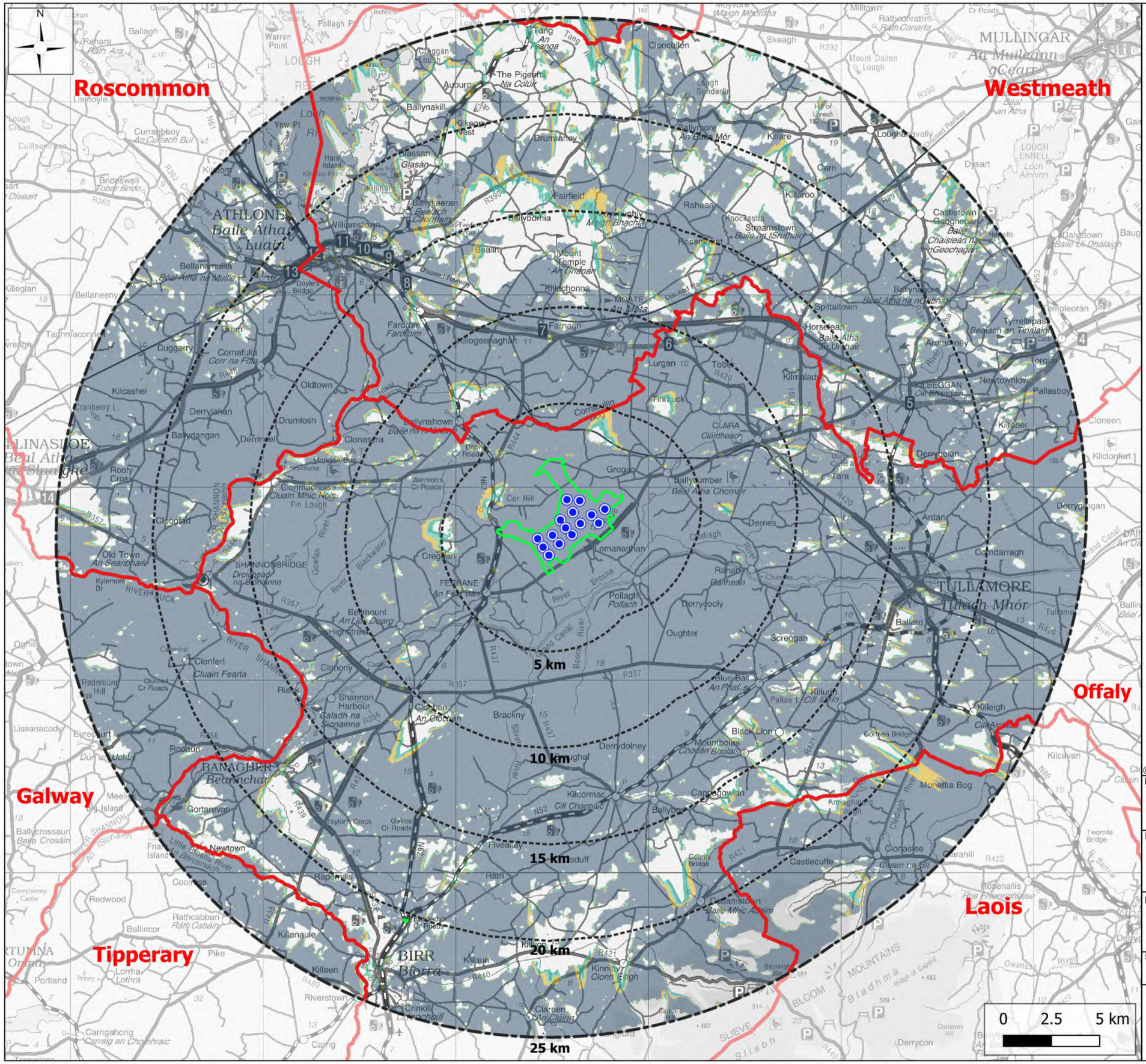
14.3 Visibility of the Proposed Project

14.3.1 ZTV Mapping: Theoretical Visibility of the Proposed Turbines

ZTV mapping is an important step in the LVIA process, in that it clearly shows which areas of the LVIA Study Area will have theoretical visibility of the proposed turbines and which areas will have no theoretical visibility.

The ZTV mapping methodology outlined in Section 1.5 of Appendix 14-1 was used to examine the theoretical visibility of the 15 no. proposed turbines from all landscape and visual receptors within the LVIA Study Area, using the half-blade height of wind turbines as points of reference. As noted in Appendix 14-1, the actual visibility on the ground is significantly less than that predicted by ZTV mapping due to intervening factors such as on-site visual screening from natural and man-made features, atmospheric weather, and/or localised topography.

Generation of the ZTV utilises large scale topographical data (interpolation across 10m OSi contour data) and does not account for topographical variation of smaller scale (e.g. <10m). Therefore, in reality, the small, localised undulating topographical features of the landscape are likely to inhibit further visibility of the proposed turbines that may not be represented in the ZTV maps. 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 full visibility. In this regard, the ZTV is a useful tool to confirm areas where there is no visibility of the proposed turbines; thus, receptors located in those areas can be scoped out from further assessment.



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbines

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible

Drawing No.

Figure 14-1

Drawing Title

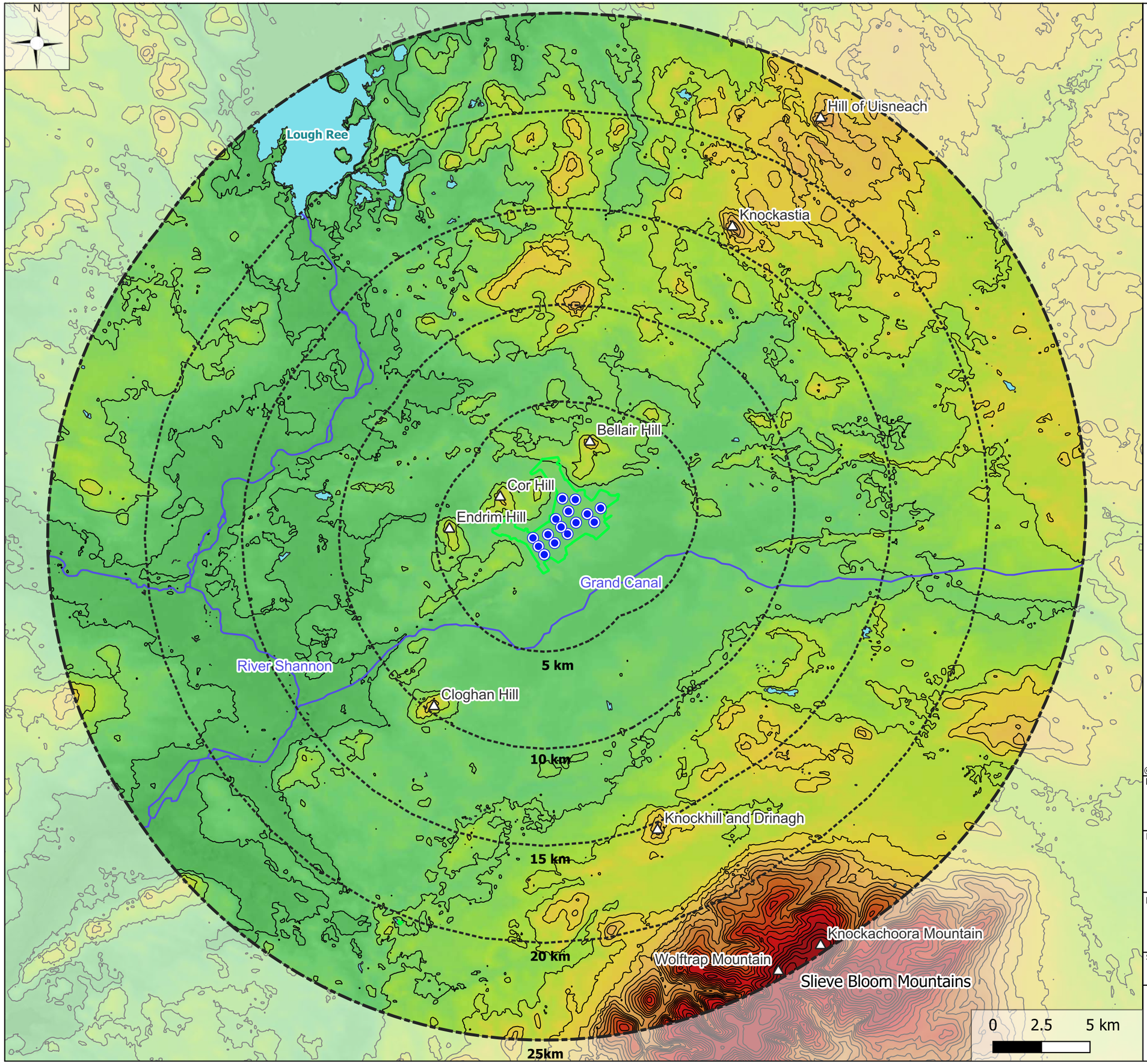
Half-Blade ZTV

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	19/03/2026	GL	DM

MKO



Map Legend

- LVIA Study Area
- EIAR Site Boundary
- Proposed Turbines
- Topographical Features
- 20m contours
- Major Rivers within LVIA Study Area
- Lough Ree

Elevation Above Ordnance Datum (AOD)

- 10m
- 25m
- 50m
- 75m
- 100m
- 150m
- 200m
- 250m
- 300m
- 350m
- 400m

Drawing No.

Figure 14-2

Drawing Title

Physical Landscape Features

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	04/03/2026	JC	DM

MKO

14.3.2 Half-Blade ZTV of the Proposed Turbines

A half-blade ZTV map is shown in Figure 14-1 above. The ZTV is used within several mapping figures included in this chapter (see Figure 14-6, Figure 14-7, Figure 14-10, Figure 14-14, Figure 14-16) to enable assessment of theoretical visibility of the proposed turbines from landscape and visual receptors Separate colour bands are used on each ZTV map to indicate the number of turbines of which the half-blade will potentially be visible. The legend on each map shows the number of theoretically visible turbines for each corresponding colour, as follows:

- Yellow: 1-5 turbines theoretically visible
- Teal: 6-10 turbines theoretically visible
- Grey: 11-15 turbines theoretically visible

Figure 14-2 above shows the topographical features and elevation gradients existent within the receiving landscape of the LVIA Study Area; the geography of these topographical landforms defines the distribution of theoretical visibility illustrated in Figure 14-1.

The topographical characteristics of the LVIA Study Area are generally typical of the Irish midlands, characterised by a relatively low-lying, flat landscape, particularly to the west and south-west. In reality, the visibility of the proposed turbines within this extremely flat landscape will be far less than is indicated by the ZTV. Some notable topographical features exist within the wider LVIA Study Area, such as the South Central Hills of Westmeath including the hill of Knockastia (approximately 16 km northeast of the nearest proposed turbine (T11), the Hill of Uisneach (approximately 23 km northeast of the nearest proposed turbine (T11)), as well as the Slieve Bloom Mountains, with the summit located approx. 25 km southeast of the nearest proposed turbine (T03).

A small section of County Longford is located to the north of the LVIA Study Area and has very limited theoretical visibility. Given the distance from the Proposed Project and limited theoretical visibility within the small portion of this area that falls inside the LVIA Study Area, it is unlikely that the proposed turbines will be visible from this area. As such, County Longford has been scoped out from further assessment and is not considered further in this chapter. The other counties within the LVIA Study Area, including Counties Laois, Galway and Roscommon are addressed later within this LVIA Chapter.

The following discussion considers various topographical characteristics of the LVIA Study Area as they relate to the theoretical visibility as shown by the ZTV map above.

Description of Theoretical Visibility within 10km of the Proposed Project site

As shown in the physical landscape features map in Figure 14-2 above, the proposed turbines are situated in a predominantly flat lowland landscape allowing for stretches of full theoretical visibility within 10km of the proposed turbines, excepting small pockets of partial theoretical visibility from slight topographical undulations. The terrain is flattest to the south of the proposed turbines, with contours showing less than 20m of change in elevation.

Endrim, Cor and Bellair Hills are the only notable topographical features within 10km of the proposed turbines. These landforms cause pockets of no theoretical visibility and as such, limit visibility of the proposed turbines from receptors in these directions. To the south-west and north-east, further landforms and other minor topographical elevations create pockets of limited or no theoretical visibility.

Description of Theoretical Visibility within the Wider Study Area

As shown in Figure 14-1 and Figure 14-2 above, beyond 10km, the nature of the landscape is primarily flat with rises in elevation to the north-east and south-east in the wider landscape.

To the west, the flat topography ranges from 25m AOD at its lowest point in the valleys along the River Shannon to 75m AOD. The primarily flat terrain allows for a vast spread of theoretical visibility with small pockets of no theoretical visibility due to localised topographical undulations. A large patch of no theoretical visibility occurs along the River Shannon, directly west of the proposed turbines at the border of counties Offaly and Roscommon, due to the topographical screening occurring from the irregular, undulating terrain.

To the north, in County Westmeath, several small hills and undulations create areas of no theoretical visibility within 10km. Beyond 20km, theoretical visibility becomes increasingly sparse due to the undulating landscape. To the north-east, the topography rises towards Knockastia and the Hill of Uisneach, where the ZTV map indicates that there are extensive areas of intermittent theoretical visibility beyond 10km from the proposed turbines in this direction. At the Hill of Uisneach, visibility is largely confined to its highest point, with minimal to no theoretical visibility across the surrounding landscape due to intervening topographical features.

To the south-east, the landform rises sharply to form the northern extent of the Slieve Bloom Mountain range, comprising the Wolftrap and Knocachoora Peaks. This region is characterised by undulating hills, resulting in extensive areas of no theoretical visibility beyond.

In general, the ZTV indicates that the geographical distribution of theoretical visibility becomes limited beyond 10km of the proposed turbines and is very sparse beyond 15km of the proposed turbines, particularly to the north, north-east and south-east. The gentle peaks and undulations throughout the predominantly flat landscape of the LVIA Study Area further restrict theoretical visibility of the proposed turbines from many locations within the LVIA Study Area.

14.3.2.2 On-Site Appraisal of Actual Visibility During Field Surveys

As mentioned previously, the ZTV map is a useful tool to indicate areas where there will be no visibility of the proposed turbines. In practice, vast areas of the LVIA Study Area which have an indication of full theoretical visibility by the ZTV map (Figure 14-1) are likely to have no actual visibility of the proposed turbines due to other visual screening factors existent within the landscape.

Multiple field surveys were conducted during 2021, 2022, 2023, 2024, and 2025 to determine the actual visibility from locations where the ZTV has indicated full theoretical visibility. These surveys determined that visual screening from localised undulations in topography, vegetation and man-made elements substantially reduce the likelihood of viewing turbines in vast areas of the LVIA Study Area.

In most instances, visual screening existent in the gently undulating and highly vegetated landscape beyond 5km from the proposed turbines did not permit open views in the direction of the proposed turbines. Visibility is only likely to occur in isolated, elevated vantage points where open, long-ranging landscape views in the direction of the proposed turbines were found. Representative photomontages were captured from elevated locations where open views towards the proposed turbines were found. Visual effects arising from such locations are assessed in Section 14.7 – *Likely Significant Landscape and Visual Effects*.

As demonstrated and discussed throughout this LVIA, the flat terrain is a positive attribute of the receiving landscape that greatly restricts actual visibility of the proposed turbines in areas beyond 5km from the Proposed Wind Farm. Contrary to the ZTV, visibility appraisals and photomontage visualisations determined that long-range visibility is very limited in these flat areas of the landscape due to visual screening from above-ground elements such as vegetation and the built environment. Ultimately, very limited/no visibility of the proposed turbines occurs beyond 5km, excepting for occasional circumstances where a localised rise in elevation creates elevated vantage points permitting open views across the landscape. The term ‘visual screening’ (discussed below) is used throughout this LVIA and is an important concept to understand with respect to the exceptionally flat landscape of the LVIA Study Area and how this relates to the reality of visibility on the ground in such a flat landscape.

Various wind farms have been consented and constructed within landscape types such as this throughout Ireland (e.g., Ballivor Wind Farm, Cloncreen Wind Farm, Derrinlough Wind Farm, Mountlucas Wind Farm). A common feature of this landscape type is that smaller screening vegetation in the intervening landscape can have a disproportionate screening effect on turbine visibility. This means that distance becomes an important factor influencing actual visibility on the ground. As the proposed turbines are not located at high elevations relative to the surrounding landscape, they appear smaller in scale quickly as distance increases, as seen in such a planar view. The topography of the site and wider landscape setting therefore reduces the potential for overbearing or domineering effects provided sufficient setback from receptors is achieved – as it is designed into this project. The low-lying elevation and flat topography of the Proposed Project site contributes to the landscape's capacity to accommodate a wind farm, as is evident by the photomontage visualisations which inform the impact assessments reported later in this Chapter (See EIAR Volume 2: *Photomontage Booklet* and Appendix 14-3). Many of the photomontages illustrate that even at close distances from the site, the flat topography and the screening landcover thereon serve to reduce the visibility of the proposed turbines.

Disproportionate Visual Screening Effect

Any landscape feature that blocks a view and prevents a clear onward view has a 'visual screening effect,' whether it is a 1-metre-tall wall, a 2-metre-high roadside hedgerow, a 5-metre-high building, or a 15-metre tree. As a full visual screen, such features only allow a person to see over them, thereby pushing the person's line of sight higher into the sky rather than along the level of the ground.

The impact of visual screening elements such as vegetation (forestry, road-side hedgerows, and trees) and buildings (particularly within cities, towns, and villages) on long range visibility are accentuated in flat lowland landscapes, this is called a disproportionate visual screening effect. The graphic in Figure 14-3 below best explains this 'disproportionate screening effect'. A ZTV may indicate full theoretical visibility of the proposed turbines from an open field or roadway. However, when a receptor is located at the same base elevation as a turbine, a feature such as a distant treeline has the capacity to greatly restrict or completely obscure visibility of the proposed turbine. Distance becomes a substantial factor determining visibility of proposed turbines as it is difficult to see beyond a few kilometres above visual screening within a flat landscape.

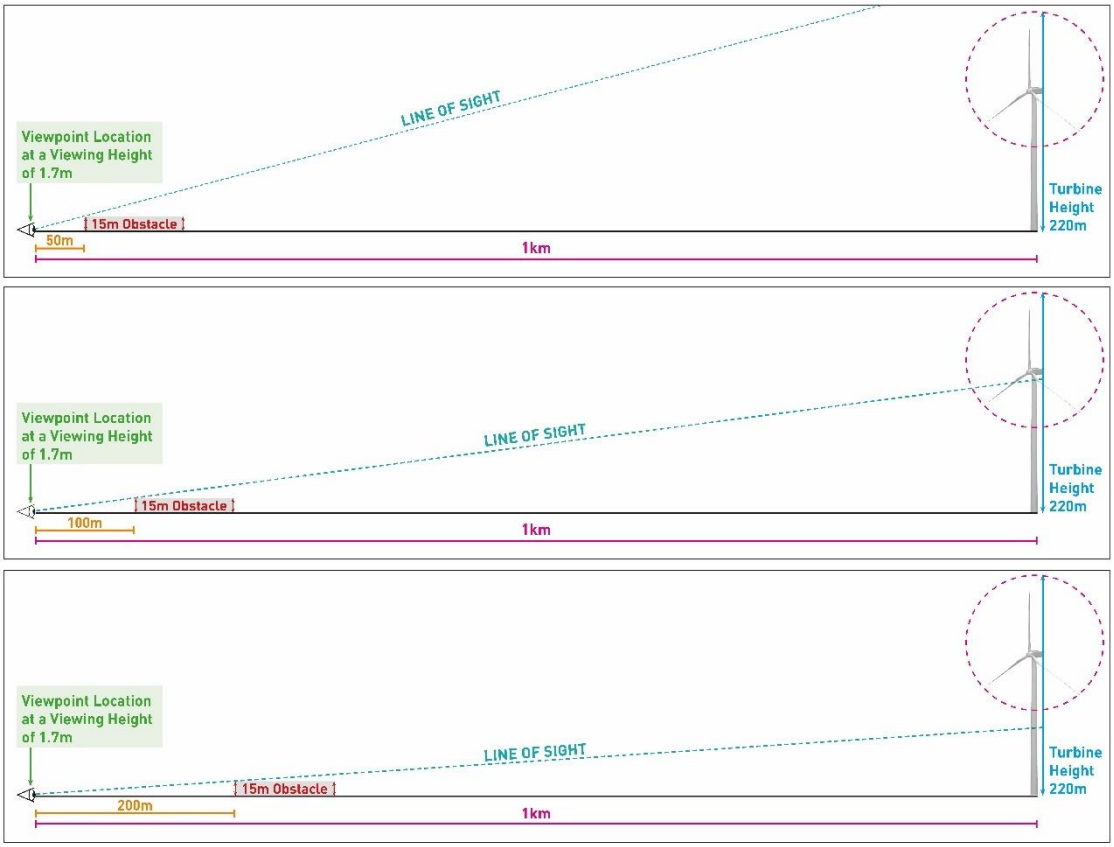


Figure 14-3 Disproportionate Visual Screening Effect

Figure 14-3 above illustrates the disproportionate screening effect that small features in the landscape can have on screening a proposed wind turbine from view. The figure shows a 220-metre-tall wind turbine located one kilometre from a viewing location. The illustration in Figure 14-3 is modelled proportionally to ensure measurement accuracy and scaled to fit this report. A 15-metre-tall obstacle, such as a treeline is used as the landscape feature giving rise to the visual screening effect. In the three examples shown, the 15-metre obstacle is shown at 50 metres, 100 metres and 200 metres from the viewing location, and the resultant line of sight is shown as a blue line running from the viewing location upwards over the top of the obstacle.

14.3.3 Visibility in Close Proximity to the Site: Route Screening Analysis

Route Screening Analysis (RSA) was conducted in the years 2022 and 2024 to comprehensively demonstrate the varying characteristics of the degree of visual screening existent along the local road network and to record the actual visibility of the proposed turbines in comparison to the theoretical visibility indicated by ZTV mapping. The full methodology is outlined in *Appendix 14-1: LVIA Methodology* (Section 1.5.3: On-Site Visibility Appraisal: RSA).

The RSA visual screening categories are:

- **'Little/No'** visual screening: areas of the road that are mainly open with open views in the direction of the proposed turbines (see example below in Plate 14-3)
- **'Intermittent/Partial'** visual screening: areas of the road where there are intermittent or partial views in the direction of the proposed turbines (see Plate 14-4)
- **'Dense/Full'** visual screening: areas of the road with dense visual screening, sufficient to block views in the direction of the proposed turbines (see Plate 14-5)

The results of the RSA are mapped in Figure 14-4 below, showing the extent at which each visual screening classification is present on all public roads within 3km of the proposed turbines. Where roads continued beyond 3km from the proposed turbines, the RSA survey continued to record screening until reaching an appropriate termination point or junction.

RSA was conducted along the N62 National Road, R444 Regional Road and R436 Regional Road to a distance of 5km as these are considered relatively prominent and well-trafficked transport routes in close proximity to the site. RSA was also conducted along all prominent local roads to the north, south-west and south-east connecting the settlements of Ferbane town, Pollagh village and Ballycumber village, as these are the largest settlement clusters in close proximity to the Proposed Wind Farm.

Map Legend

- RSA Extent
- Proposed Turbines

Route Screening Analysis

- Class 1 - No / Very Little Visual Screening
- Class 2 - Partial / Intermittent Visual Screening
- Class 3 - Dense / Full Visual Screening

Drawing No.

Figure 14-4

Drawing Title

Route Screening Analysis

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:47,000	200804	22/01/2026	JC	DM

Plate 14-3 Example of 'Little/No' Visual Screening towards the Proposed Wind Farm (L7001 local road)

Plate 14-4 Example of 'Intermittent/Partial' Visual Screening of views towards the Proposed Wind Farm (L3004 local road)

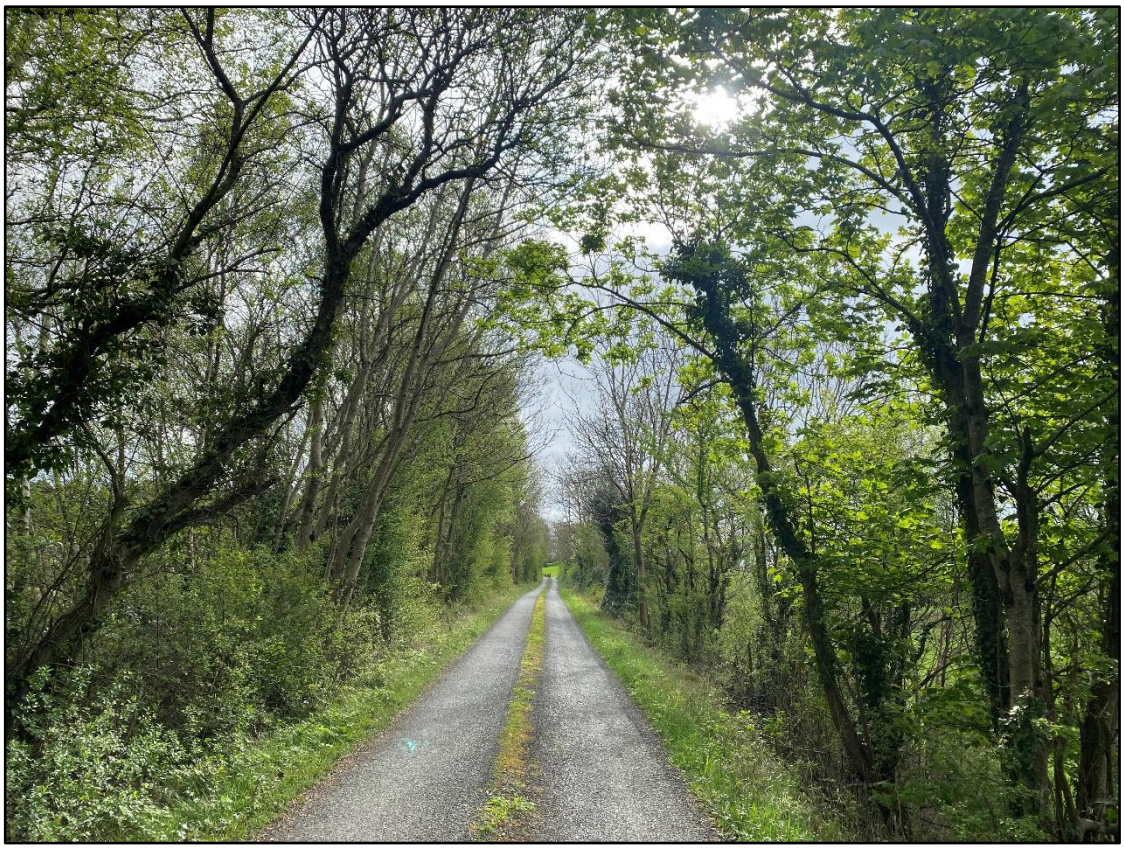


Plate 14-5 Example of 'Dense/Full' Visual Screening of views towards the Proposed Wind Farm (L70015 local road)

N62 National Road

The N62 National Road runs in a south-north orientation, covering a length of approximately 9.5km within a 5km radius of the nearest proposed turbine (T01). The road is classified with primarily large stretches of 'Intermittent/Partial' Visual Screening along the majority of its route, interspersed with instances of 'Dense/Full' Visual Screening in certain areas.

R444 Regional Road

A very small stretch of the R444 Regional Road is located within the 5km radius of the nearest proposed turbine (T10), covering a length of approximately 3.4km. The road exhibits a varied screening profile, primarily comprised of 'Intermittent/Partial' and 'Little/No' Visual Screening with instances of 'Dense/Full' Visual Screening.

R436 Regional Road

The R436 Regional Road runs in a south-west to north-east orientation, covering a length of approximately 14.7km within 5km of the proposed turbines. The road exhibits a varied screening profile, featuring predominantly 'Little/No' Visual Screening within 1km of proposed turbines, as it runs parallel to the Proposed Wind Farm. Longer, prolonged stretches have primarily 'Intermittent/Partial' Visual Screening or 'Dense/Full' Visual Screening within 1-3km of the proposed turbines.

At its closest point, an existing internal road branches from the R436 leading to turbines T14 and T13 and is primarily characterised by 'Little/No' Visual Screening. Throughout the town of Ferbane and village of Ballycumber, as well as along the 3-5km stretch of the road that runs parallel to the proposed turbines, visual screening remains consistently either 'Intermittent/Partial' or 'Dense/Full' Visual Screening.

Local Roads

Local Roads to the North

The L7001 Local Road, located to the east of the R444 stretches for approximately 9km along the northern edge of the 5km buffer as seen in Figure 14-4 above from the nearest proposed turbine (T10). The road exhibits a mix of roadside vegetation with large stretches of primarily 'Little/No' Visual Screening and instances of 'Intermittent/Partial' Visual Screening or 'Dense/Full' Visual Screening. One local road (L-7002) branching northeast from the N62 National Road is characterised by 'Dense/Full' Visual Screening with patches of 'Intermittent/Partial' Visual Screening and small stretches of 'Little/No' Visual Screening.

North of Ballycumber, local roads, primarily the L2018, are primarily classified as 'Dense/Full' Visual Screening. Within the townland of Tinamuck South, visibility is mainly 'Dense/Full' Visual Screening with patches of 'Intermittent/Partial Visual Screening and one small stretch of 'Little/No' Visual Screening. The L-70211 local road, branching off from the R436, traveling in a north-west direction towards the proposed turbines, is primarily classed as 'Dense/Full' Visual Screening with patches of 'Intermittent/Partial' Visual Screening. To the south of Ballycumber, the L2016 road is primarily classed as 'Partial/Intermittent' Visual Screening with small instances of both 'Dense/Full' Visual Screening and 'Little/No' Visual Screening.

Local Roads to the South-West

Within 3km, the L70075 local road is mainly composed of 'Dense/Full' Visual Screening and 'Intermittent/Partial' Visual Screening and one small stretch of 'Little/No' Visual Screening. The L7007 local road, which branches off to the west of the N62 National Road, is classified with patches of 'Dense/Full' Visual Screening and 'Intermittent/Partial' Visual Screening within 3km of the nearest proposed turbine (T01). Beyond 3km, there are prolonged stretches of both 'Dense/Full' Visual Screening and 'Intermittent/Partial' Visual Screening with long stretches of 'Little/No' Visual Screening. Local roads near Ferbane have either 'Intermittent/Partial' Visual Screening or 'Dense/Full' Visual Screening.

Local roads to the South-East

Local roads to the south and south-east, comprises part of the 'Offaly Way' along the L-30044 Local Road, which exhibits primarily stretches of 'Little/No' Visual Screening as well as instances of 'Dense/Full' Visual Screening and 'Intermittent/Partial Visual Screening. This road leads to Lea Beg road to where Turraun Nature Park is located, where the vegetative nature provides high levels of visual screening. Roads in the periphery of Pollagh are primarily classed as 'Dense/Full' Visual Screening and 'Intermittent/Partial' Visual Screening.

Table 14-3 Distribution of Screening Recorded during Route Screening Analysis

Screening Class	Length of Road Mapped in Figure 14-4	Percentage Distribution of Screening on the Surveyed Roads
Little/No Visual Screening	44.7km	23.9%
Partial/Intermittent Visual Screening	85.3km	45.6%
Dense/Full Visual Screening	57.0km	30.5%

In summary, 'Partial/Intermittent' Visual Screening was recorded on most of surveyed roads. The mosaic pattern of the screening evident along the majority of roads as seen in Figure 14-4 above

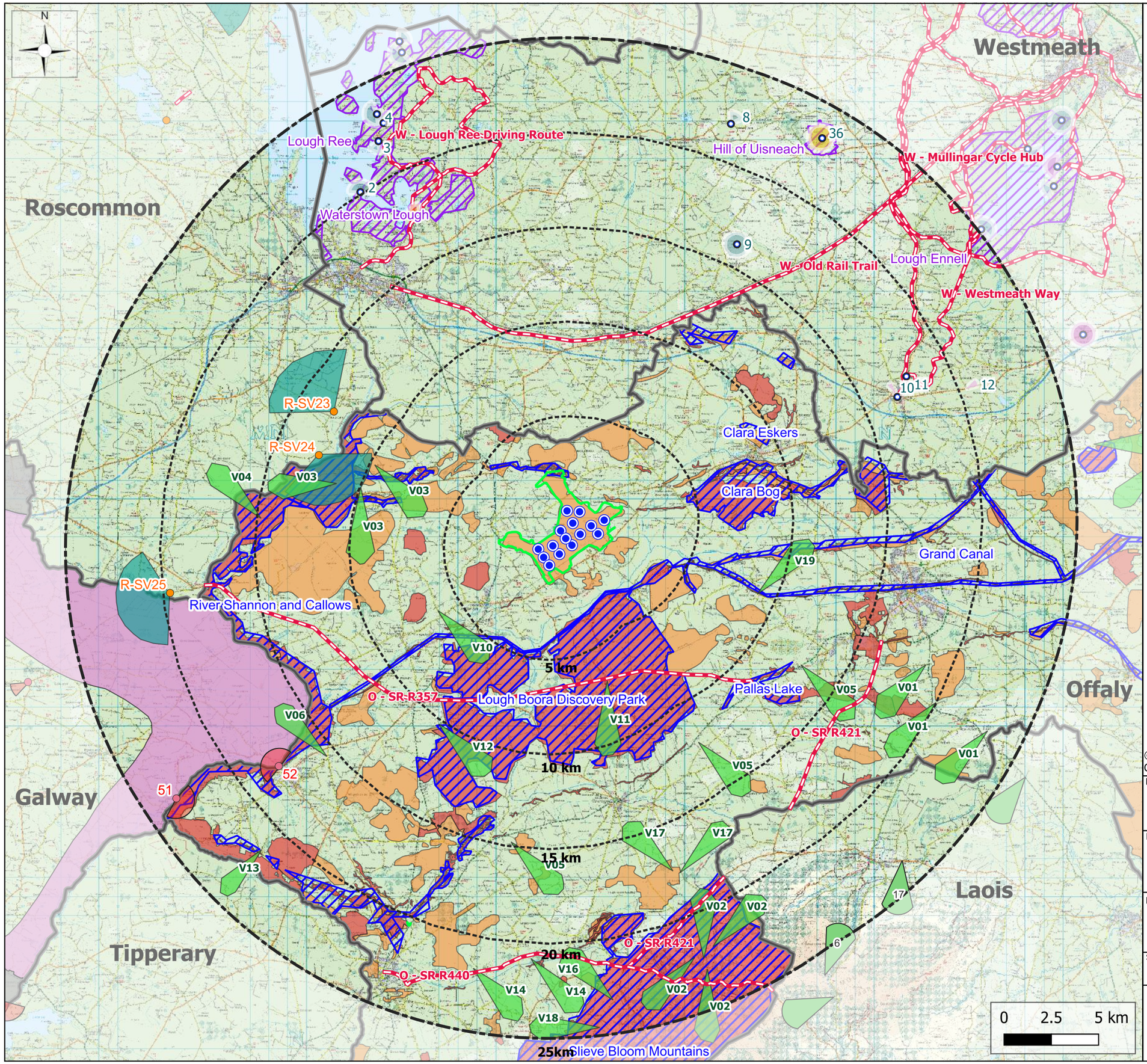
suggests that there is intermittent visibility along most of the roads beyond 1km, with visibility varying along all routes, offering glimpses of areas with open visibility that quickly transition into 'Partial/Intermittent' Visual Screening or 'Dense/Full Visual Screening. Within a 1km radius, open roads adjacent to the proposed turbines exhibit minimal screening due to their immediate proximity. The natural bogland landscape immediately surrounding the site to the south allows for unhindered views of the proposed turbines within this 1km range. Given that there is at least some level of screening (either 'Partial/Intermittent' Visual Screening or 'Dense/Full Screening' Visual Screening) present on the majority of roads visually screened, this suggests that the widespread full theoretical visibility indicated on the ZTV is not fully representative of the actual on ground visibility of the proposed turbines, given the predominantly flat nature of the LVIA Study Area.

The RSA results and on-site visibility appraisals provide a strong illustration of locations where visibility of the proposed turbines will occur as well as locations where potential effects on receptors will arise or not arise in close proximity to the site. These methods (along with ZTV mapping) are therefore useful tools for ensuring a focussed approach in the selection of photomontage viewpoints and assessment of effects on receptors surrounding the site such as local residential visual amenity. The RSA is therefore also considered and discussed in Section 14.7.3.2.4 – Residential Receptors.

14.4 Landscape Baseline

The Landscape Baseline reports relevant policy pertinent to the LVIA, as well as a description of the receiving landscape of the Proposed Project site and its wider setting within the LVIA Study Area. This is broken down into the following sections:

- **Landscape Designations and Policy Context –** Policy setting pertaining to the location and nature of the site from a landscape perspective based on:
  - Offaly County Development Plan 2021–2027
  - Westmeath County Development Plan 2021–2027
  - Roscommon County Development Plan 2022–2028
  - Galway County Development Plan 2022–2028
  - Laois County Development Plan 2021–2027
  - Tipperary County Development Plan 2022 – 2028
- **Landscape Character of the site** – A description of the physical landscape and characteristics of the site and its immediate setting, this includes the following considerations:
  - Landscape characteristics based upon findings from site visits conducted in the years 2021, 2022, 2023, 2024, and 2025
  - An appraisal of landscape value and the susceptibility of the landscape to change, and a determination of landscape sensitivity.
- **Landscape Characterisation in the DoEHLG 2006 Guidelines for Planning Authorities** – A review of the guidance for the siting and design of wind farms in specific landscape types (DoEHLG 2006 Guidelines' and Draft DoHPLG 2019 Guidelines and how this relates to the landscape characteristics of the site.
- **Landscape Character of the Wider Landscape Setting** - A description of the wider landscape setting, including the identification of designated LCAs located within the 15km LCA Study Area and a preliminary analysis of these LCAs using ZTV mapping.



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbines

Galway

- Co. Galway Protected Views
- Co. Galway Protected Views Direction

Co. Galway Landscape Sensitvity

- 3 - Special

Westmeath

- Co. Westmeath Scenic Routes
- Co. Westmeath Areas of High Amenity

Co. Westmeath Protected Views

- National
- Local
- Co. Westmeath Protected Views origin

Offaly

- Co. Offaly Key Amenity Routes
- Co. Offaly Areas of High Amenity
- Co. Offaly Scenic Views

Co. Offaly Landscape Sensitivity

- High
- Moderate

Roscommon

- Co. Roscommon Scenic Views
- Co. Roscommon Scenic View Extents

Laois

- Co. Laois Views and Prospects

Drawing No.

Figure 14-5

Drawing Title

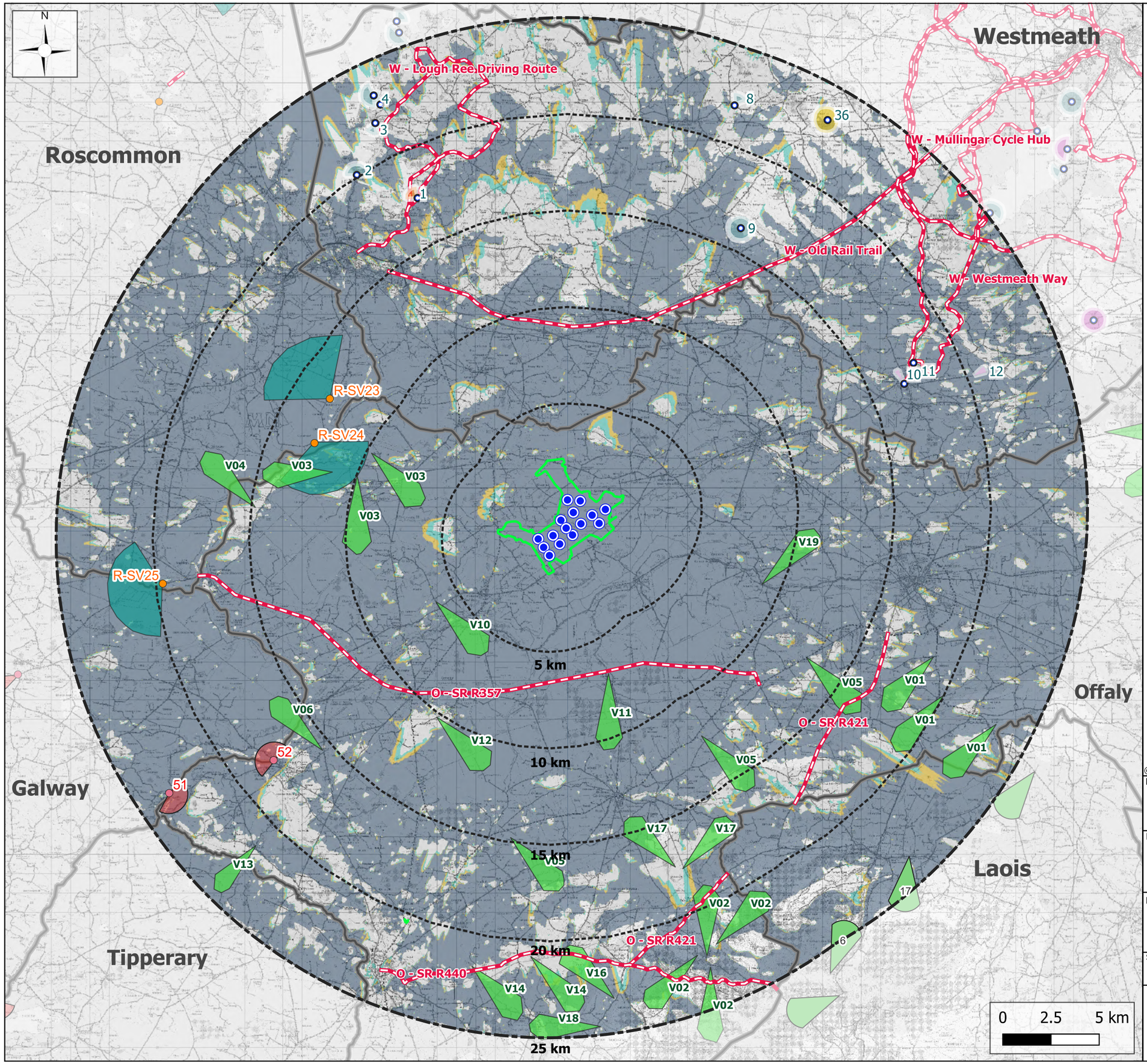
Landscape Policy Context

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:200,000	200804	19/03/2026	GL	DM

MKO



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbines

Galway
- Co. Galway Protected Views
- Co. Galway Protected Views Extents

Westmeath
- Co. Westmeath Scenic Routes
- Co. Westmeath Protected Views Origin

Co. Westmeath Protected Views
- National
- Local

Offaly
- Co. Offaly Key Amenity Routes
- Co. Offaly Scenic Views

Roscommon
- Co. Roscommon Scenic Views
- Co. Roscommon Scenic View Extents

Laois
- Co. Laois Views and Prospects

Zone of Theoretical Visibility
- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible

Drawing No.

Figure 14-6

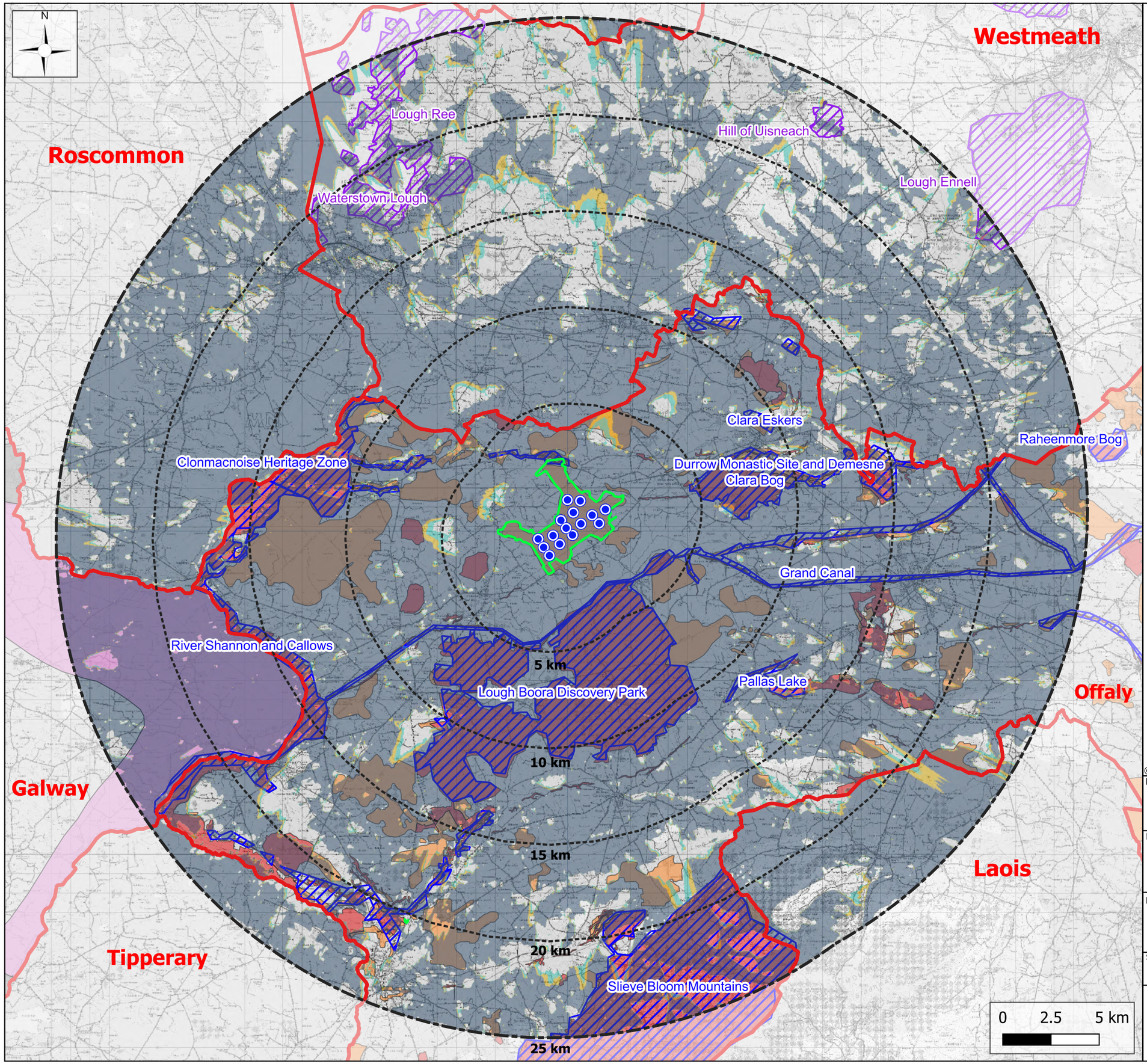
Drawing Title

Landscape Policy Context & ZTV Part 1

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	04/03/2026	JC	DM



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbine Layout

Galway

Co. Galway Landscape Sensitivity

- 3 - Special

Westmeath

- Co. Westmeath Areas of High Amenity

Offaly

- Co. Offaly Areas of High Amenity

Co. Offaly Landscape Sensitivity

- High
- Moderate

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible

Drawing No.

Figure 14-7

Drawing Title

Landscape Policy Context & ZTV Part 2

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	19/03/2026	GL	DM

14.4.1 Landscape Designations and Policy Context

This sub-section reviews the specific 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 Project.

The Proposed Project is located in County Offaly, therefore, the Offaly County Development Plan 2021–2027 (hereafter, OCDP) was consulted to identify landscape designations existent in the LVIA Study Area. Additionally, general landscape policy and landscape policy pertaining to wind energy development are also described in this section of the LVIA, providing context for the selection of the site as a landscape suitable for wind energy development.

The OCDP is used as the principal policy document consulted for landscape policy. However, as demonstrated by ZTV mapping (Figure 14-1) five additional counties are located in the LVIA Study Area and comprise areas with theoretical visibility of the proposed turbines. Consequently, the county development plans for Counties Westmeath, Roscommon, Galway, Laois, and Tipperary were also consulted to identify relevant landscape designations existent within the LVIA Study Area.

All landscape policy designations within the LVIA Study Area are mapped above in Figure 14-5, Figure 14-6, and Figure 14-7.

14.4.1.1 County Offaly

Adopted into effect on the 22nd of October 2021, the OCDP sets out policies on landscape in *Chapter 4: Biodiversity and Landscape. Section 4.16* and *Section 4.17* contain the following general landscape policies and objectives:

> *"**BLP-38** It is Council policy to protect and enhance the county's landscape, by ensuring that development retains, protects and where necessary, enhances the appearance and character of the county's existing landscape.*
>
> ***BLP-39** It is Council policy to seek to ensure that local landscape features, including historic features and buildings, hedgerow, shelter belts and stone walls, are retained, protected, and enhanced where appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.*
>
> ***BLP-40** It is Council policy to ensure that consideration of landscape sensitivity is an important factor in determining development uses.*
>
> ***BLP-41** It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscapes. This assessment will provide details of proposed mitigation measures to address likely negative impacts."*
>
> *"**BLO-24** It is an objective of the Council to have regard to the Landscape Sensitivity Areas in Tables 4.18, 4.19 and 4.20 in the consideration of planning applications.*
>
> ***BLO-25** It is an objective of the Council to protect skylines and ridgelines from development where such developments will create significant visual intrusion."*

It should be emphasised that this LVIA takes consideration of potential impacts based on the designation of both landscape and visual sensitivity and discusses mitigation measures to mitigate any potential for significant landscape and visual effects, cognisant of the policies and objectives set out above.

The following subsections address the specific elements covered by this planning policy including the designations of the landscape character assessment, Key Scenic Views and Prospects, Amenity Routes as well as Areas of High Amenity.

14.4.1.1.1 Designated Landscape Character Areas

General Policy on Landscape Character Assessment

Landscape character refers to the distinct and recognisable pattern of elements that occur consistently in a particular type of landscape, and how people perceive this. It reflects the combination of geology, landforms, soils, vegetation, land use and human settlement of a particular area, thereby creating the unique sense of place found in different areas.

LCA, as carried out by the local authorities in all counties in Ireland to meet the objectives of the National Landscape Strategy Framework 2015–2025 (Department of Arts, Heritage and the Gaeltacht [DoAHG], 2015), forms an important basis of this LVIA.

The LCA is intended to analyse the character, value and sensitivity of landscapes identified within a particular area (i.e. counties) as part of efforts by the DoAHG to achieve national-level consistency in terms of landscape decision-making and uphold compliance of European Landscape Convention best practices. This approach aligns with the best practice guidance GLVIA3, which state that:

> *"Landscape Character Assessment is the key tool for understanding the landscape and should be used for baseline studies".*

Differences in Local Planning Policy

A designated LCA is typically a geographic area defined by its distinct and recognisable combination of natural, cultural, and visual elements that give it a unique identity and character. A designated Landscape Character Type (LCT) is typically a category of landscape classification or archetype which represents a distinct subset of landscape characteristics and could be represented by multiple LCAs – e.g. 'Uplands' is a common LCT. Each county in Ireland usually defines LCAs within the local planning policy. However, there is large variance in the naming conventions used for designated LCAs and LCT within different county development plans. In some instances, county development plans use the term LCT or LCU (for Landscape Character Unit) as the label for landscape areas which would typically be recognised as an LCA. This is important to recognise for the LVIA in this Chapter, as there is the following variance across the naming conventions used by the different counties within the LCA Study Area:

- Co. Offaly: no landscape character assessment conducted
- Co. Westmeath LCA: typical/standard definition of an LCA
- Co. Galway LCU: typical/standard definition of an LCA
- Co. Roscommon LCA: typical/standard definition of an LCA

The landscape character assessment for County Offaly is discussed in the subsection below, while Counties Westmeath, Galway and Roscommon are discussed in Section 14.4.1.2.1. Counties Laois and Tipperary are not located within the 15km LCA Study Area, therefore, the LCAs of these counties are scoped out of this LVIA as there is no potential for any significant landscape effects to occur.

County Offaly LCAs

A landscape character assessment has not yet been conducted or published for County Offaly. Consequently, County Offaly does not have designated LCAs. Therefore, MKO has prepared Interim (undesignated) LCAs for the area of County Offaly within the LCA Study Area (15km from the proposed turbines for assessment of landscape character). The Interim LCAs, hereafter referred to as

'ILCAs', identified within the LCA Study Areas are listed below and are comprehensively described and assessed in *Appendix 14-2 – LCA Assessment Tables*. The description and sensitivity of these Interim LCAs were determined from site visits, desk studies and assessments conducted by MKO. The Offaly ILCAs are listed here and mapped below in Figure 14-13.

- Offaly ILCA 1 – Birr Plains
- Offaly ILCA 3 – Grand Canal Corridor
- Offaly ILCA 4 – North-Western Lowland Farmland and Marginal Peatland
- Offaly ILCA 5 – River Shannon and Callows
- Offaly ILCA 6 – Slieve Bloom Upland

The Proposed Project itself is located within ILCA 4 – North-Western Lowland Farmland and Marginal Peatland. A full description of the key characteristics of LCAs scoped in for further assessment below in Section 14.7 Likely Significant Landscape and Visual Effects are included in the LCA impact assessment tables comprising Appendix 14-2.

14.4.1.1.2 Landscape Sensitivity

Section 4.14.1 of the OCDP describes landscape sensitivity as *"the measure of its ability to accommodate change or intervention without suffering unacceptable effects to its character and values."* The sensitivity of the landscapes of County Offaly varies and is thereby classified within the following sensitivity classes: Low, Moderate and High Sensitivity and are shown in Figure 4.22 of the OCDP - *Landscape Classification Areas in County Offaly.*

The entire Proposed Wind Farm is located within an area designated with Moderate Sensitivity, as shown in Figure 14-5. Table 4-19 of the OCDP describes moderately sensitive areas as *"areas can accommodate development pressure but with limitations in the scale and magnitude. In this category of sensitivity, elements of the landscape can accept some changes while others are more vulnerable to change."*

The OCDP continues to note the following sensitivities in relation to Moderate Sensitive Areas:

> *"The development of Lough Boora (albeit designated as high sensitivity) acts as a prototype in the creation of parkland character.*
>
> *However, some of these cutaway bogs may be appropriate for other sensitively designed and located developments including renewable energy (**wind farms**, biomass crops) and/or industrial use."*

Areas of High Amenity

The OCDP defines 'Areas of High Amenity' (AHAs) as *"areas worthy of special protection / enhancement due to their uniqueness and scenic / amenity value."* Table 4.17 in Section 4.13 in the OCDP designates 13 no. AHAs within the County; these are listed below. The OCDP states that *"it is a priority of the Council to protect and preserve the AHAs in Table 4.17".*

- Waterways and Wetlands:
  - River Shannon and Callows
  - Grand Canal
  - Lough Boora Discovery Park
  - Pallas Lake
- Upland Areas:
  - Slieve Bloom Mountains
  - Croghan Hill
- Peatlands:
  - Clara Bog

- Raheenmore Bog
- Eskers:
  - Eiscir Riada
  - Clara Eskers
  - Other Eskers
- Archaeological and Historical:
  - Clonmacnoise Heritage Zone
  - Durrow Monastic Site and Demesne

Section 4.16 and Section 4.17 of the OCDP sets out the county's policy objectives for preservation and enhancement for AHAs:

> ***"BLP-35*** *- It is Council policy to protect and preserve the county's Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Discovery Park, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sráids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning).*
>
> ***BLP-36*** *- It is Council policy, to ensure that issues of scale, siting, design, and overall compatibility (including particular regard to environmental sensitivities) with a site's location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis.*
>
> *"**BLO-22** It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity, and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it:*
>
> - *Causes unacceptable visual harm;*
> - *Introduces incongruous landscape elements; and*
> - *Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness; (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns; (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements."*

Regarding the aforementioned policies, it is important to highlight that this LVIA thoroughly considers the sensitivity of the High Amenity Areas. It is emphasised throughout this LVIA that the Proposed Wind Farm does not significantly alter the character of these High Amenity Areas, as discussed and assessed in Section 14.7.3.1. Furthermore, as discussed further in Section 14.4.3.1 below, the Proposed Project aligns with the guidelines set out in the DoEHLG 2006 Guidelines' and the Draft DoHPLG 2019 Guidelines in relation to siting and design, ensuring compatibility within the landscape.

Table 14-4 AHA within the LVIA Study Area

AHA Name	Distance and Direction from the Nearest Proposed Turbine
Within 5km	
AHA 2 – Grand Canal	3 km south from the nearest proposed turbine (T03)
AHA 3 – Lough Boora Discovery Park	3 km to south-east to the nearest proposed turbine (T05)
AHA 7 – Clara Bog	4.5km west from the nearest proposed turbine (T15)
Within 10km	
AHA 12 – Clonmacnoise Heritage Zone	7.6km north-west from the nearest proposed turbine (T01)
Within 15km	
AHA 4 – Pallas Lake	10.7km south-east from the nearest proposed turbine (T14)
AHA 1 – River Shannon and Callows	13.5km south-west from the nearest proposed turbine (T01)
AHA 13 – Durrow Monastic Site and Demesne	13.3km east from the nearest proposed turbine (T15)
Within 20km	
AHA 5 – Slieve Bloom Mountains	18.7km south-east from the nearest proposed turbine (T03)

Esker Systems (AHA) – "Other Eskers" and the "Esker Riada"

In the OCDP, "*esker systems*" are identified as Areas of High Amenity and are protected landscape receptors due to their high geological value and sensitivity. Eskers are glacial landforms that also hold historic value as elevated pathways across the flat, boggy midland landscape. Thus, whilst esker systems are considered as high amenity areas in the OCDP, their key sensitivities are not derived from their visual appearance; moreover, they are not generally considered landscape features of high tourism or recreational value. Esker systems provide elevated vantage points permitting open views across the flat landscape. Therefore, they were used for viewpoint selection in this LVIA and are considered in this LVIA.

The Esker Riada is a collection of different eskers extending east to west across the Irish midlands. At its closest point, it is located approx. 1.7km to the north of Lemanaghan Bog. As outlined in Chapter 13: Cultural Heritage, and Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context, the Esker Riada holds archaeological value due to its strong cultural and historical associations with the Slí Mhór—one of the 5 Ancient Roads of Ireland. Owing to this historical and archaeological connectivity, the Esker Riada is discussed in Section 14.4.2.2 of this Chapter – 'Historic Landscape Character of the Surrounding Area', in regard to its cultural context.

The designated AHAs are mapped in Figure 4.18 of the OCDP and shown in Figure 14-5 previously. The AHAs that were identified in the LVIA Study Area (excluding esker systems) are listed in *Table 14-4* above. The Proposed Wind Farm itself does not fall within any AHA designated in the OCDP.

14.4.1.1.3 Green Infrastructure

Section 4.10 of the OCDP defines green infrastructure as:

> *"...integrated and interconnected networks of green space and water capable of delivering ecosystem services and quality of life benefits to people. [Green infrastructure] includes features such as parks, gardens, green roofs, green walls, rivers, lakes, canals, peatland, wetland landscapes, uplands, greenways, blueways, woodlands and farmlands in our countryside and settlements."*

The OCDP further notes that green infrastructure provides a wide variety of functions, including improving attractiveness of place and local amenity provision. Green infrastructure in County Offaly includes:

> *"Areas of High Amenity in the county, woodlands and boglands connected by walking routes, eskers, riparian ways, Bord na Móna rail links and the Grand Canal."*

County Offaly's strategic level green infrastructure is shown on Figure 4.13 of the OCDP, this map is reproduced below in Plate 14-6.

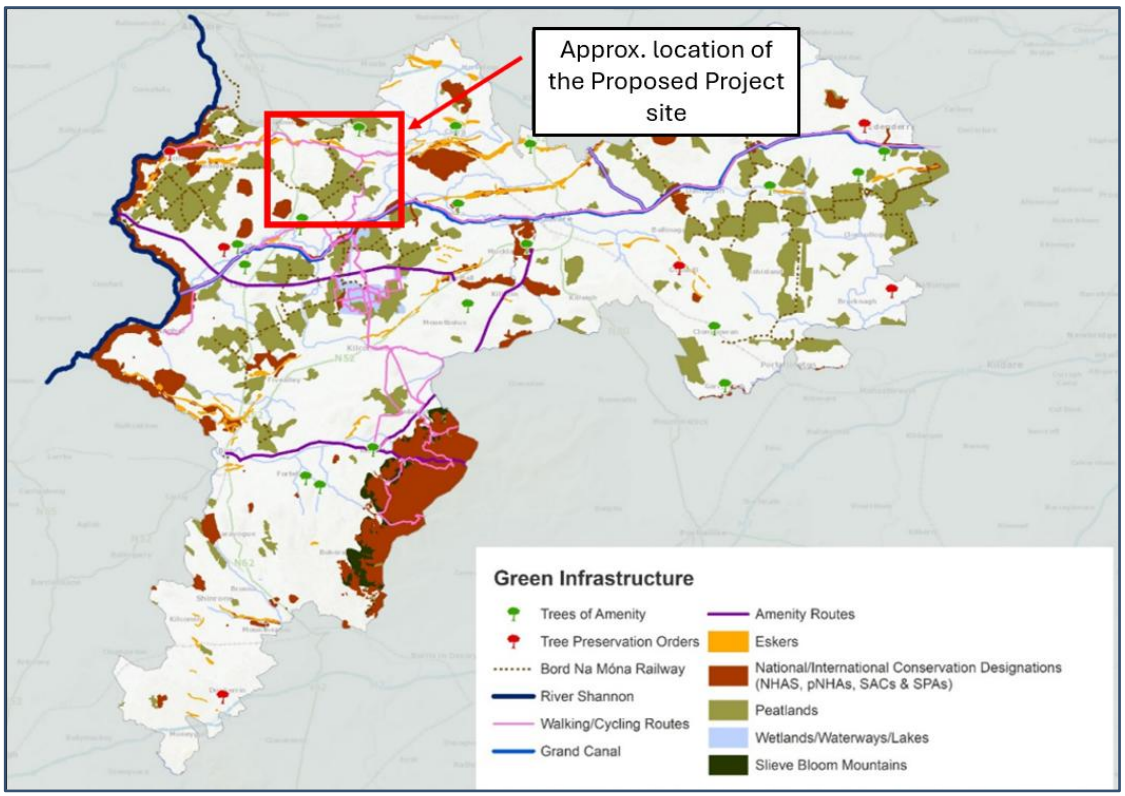


Plate 14-6 Offaly CDP Figure 4.13 County Offaly's Strategic Green Infrastructure

A number of constituent elements of green infrastructure are located within, and adjacent to, the Proposed Project site. The site itself consists predominantly of peatlands. There is also a local walking trail (the Banagher Line) and a Bord na Móna (BnM) railway, as well as the recently approved Offaly West Midlands Trail, all of which are elements of green infrastructure.

The OCDP contains the following relevant policy related to green infrastructure:

> ***"BLP-27** It is Council policy to recognise the economic, social, environmental, and physical value of green infrastructure.*

BLP-28 *It is Council policy to protect existing green infrastructure within the county, to provide additional green infrastructure where possible and to encourage green infrastructure to be spatially connected to facilitate the extension or establishment of ecological corridors.*

BLP-30 *It is Council policy to integrate the provision of green infrastructure with infrastructure provision and replacement, including walking and cycling routes, as appropriate, while protecting natural heritage."*

The OCDP contains the following polices in relation to peatlands:

"BLP-14 *- It is Council policy to protect the county's designated peatland areas and landscapes, including any historical walkways through bogs and to conserve their ecological, archaeological, and cultural heritage and to develop educational heritage.*

BLP-15 *- It is Council policy to work with adjacent local authorities and relevant stakeholders in promoting a National Park designation for the peatlands in the midlands and a 'Regional Peatway' connecting natural and cultural attractions.*

BLP-16 *It is Council policy to support the provision of outdoor pursuits, walking and cycling routes through the county's peatlands and network of industrial railways linking the River Shannon Blueway, Royal Canal, Grand Canal, and Barrow Blueway across the midlands as outlined in the 'Major Cycling Destination in the Midlands of Ireland –Feasibility Study 2016', which is a priority of the 'Outdoor Recreation Plan State Lands and Waters' (2017)".*

As discussed in Section 4.4.1.9 'Amenity Pathways and Carparks' of Chapter 4, if planning permission is granted for the Proposed Wind Farm, the associated amenity pathways will connect into the proposed Offaly West portion of the Midlands Trail Network (MTN). The MTN is a long-term plan to create a network of walking and cycling trails that connects rural areas to open spaces. The MTN will consist of a serviced network of inclusive off-road trails that enables local people and visitors to explore the Midlands region by bike, e-bike and on foot. Please see Section 4.4.1.9 of Chapter 4 and Section 5.3.8.3 of Chapter 5 of this EIAR for further detail.

14.4.1.1.4 Landscape Policy Pertaining to Wind Energy Development

County Offaly's policy on wind energy can be found in the Wind Energy Strategy (WES) of the OCDP, as well as Chapter 3 – Climate Action and Energy of the OCDP. It is an objective of County Offaly's WES (p.2) to:

"Identify key areas within the county that are 'Open for Consideration for Wind Energy Developments' or 'Unsuitable for Wind Energy Developments' based on wind speed, access to the electricity grid and substations, and avoidance of adverse impacts on the landscape and designated sites."

The WES for the OCDP was updated and amended in August 2021 as per the 'OCC's Chief Executive's Report on the Material Alteration Consultation Stage of the OCDP' in order to exclude an area surrounding the Lemanaghan Monastic Site and provide adequate set-back distance from recorded monuments. This is discussed in further detail in Section 2.6.4.1 of Chapter 2, with details on the evolution of the Proposed Wind Farm layout provided in Section 3.2.5.2.2 of Chapter 3 of this EIAR. Please see further information on the Lemanaghan Monastic Complex and associated visual and cultural heritage impacts in Chapter 13 and Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context.

The designations of County Offaly's WES was arrived at through 'sieve mapping' analysis of the key environmental, landscape, technical and economic criteria, designating two types of areas within the county, as discussed within the WES (seen below in Figure 14-8):

- *Areas Open for Consideration for Wind Energy Development*
- *Areas Deemed Not Suitable for Wind Energy Development*

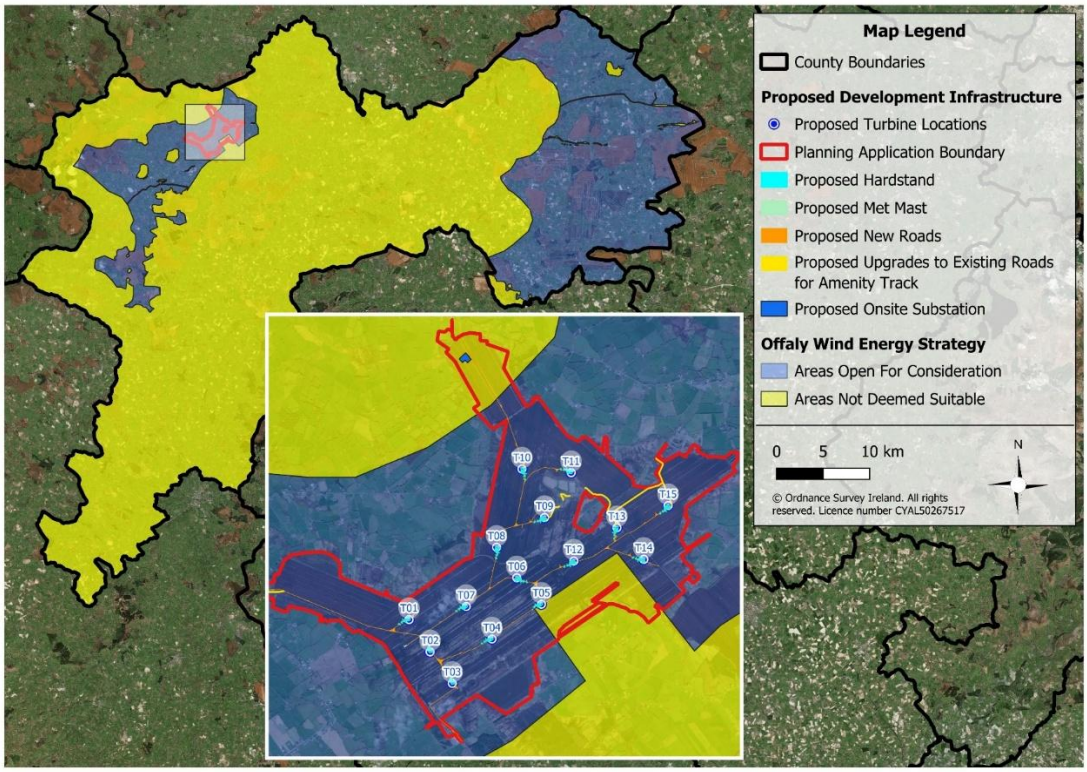


Figure 14-8 County Offaly Wind Energy Strategy

The proposed turbines of the Proposed Wind Farm are located within an area designated as 'Areas Deemed Open for Consideration' for Wind Energy Developments, with the exception of T05 which is located on the boundary of an area designated 'not Deemed Suitable for Wind Energy Developments'. A detailed review of this zoning designation and landscape character either side of the line is discussed in Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context.

The 2021 Wind Energy Strategy area designated as 'Not Open to Consideration' was created to provide an appropriate set-back distance from the Lemanaghan Monastic Site, with the intention of protecting the setting and character of the Monastic Complex. This is described further in Appendix 13-5 – Lemanaghan Monastic Complex, with reference to the Wind Energy Strategy (WES), supported by GIS mapping and drone imagery to illustrate the landscape context and the relationship between the zoning boundary and the archaeological complex.

Furthermore, a detailed site-specific constraints assessment has been undertaken as part of the design process (see Chapter 3, Section 3.2.5.2.1) which demonstrates that this area of the Proposed Project site is a suitable location for a wind energy development.

The OCDP defines an 'Area Open for Consideration for Wind Energy Development' as follows:

> ***"Areas Open for Consideration for Wind Energy Developments*** *- These areas are open for consideration for wind energy development as these areas are characterised by low housing densities, do not conflict with European or National designated sites, and have the ability by virtue of their landscape characteristics to absorb wind farm developments".*

The 'Areas Open for Consideration' are further subdivided into 12 potential wind energy areas identified in Map No. 7 of the WES are assessed in detail in Table 3 of the WES; the WES map is reproduced below in Figure 14-9.

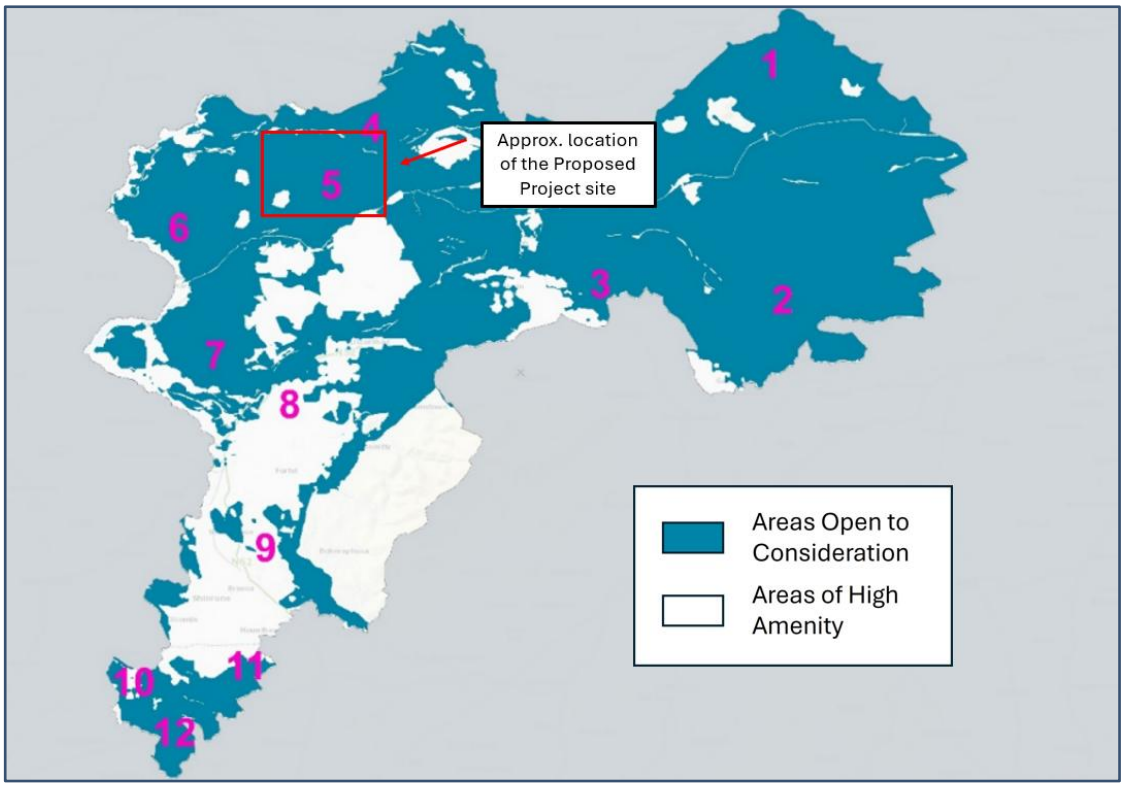


Figure 14-9 Extract of Map 7 'Potential Wind Energy Areas (12)' from Co. Offaly's WES 2021-2027

As can be seen in Figure 14-9 above, which contains a reproduced image of the 12 Potential Wind Energy Areas in County Offaly, the Proposed Project is primarily located within Potential Wind Energy *Area 5 – "Area generally west of Doon and northeast of Ferbane"*. This area has the following description in Table 3 of the WES:

> *"This area with the exception of Endrim Hill and Cor Hill is relatively flat and slightly undulating. There exists a number of significant tracts of peatlands, transitional woodlands, and coniferous forestry at Clongawny, Clonlyon and Castletown, which having regard to the low density of housing in their vicinity and extensive tracts of flat peatlands in this area offer potential to accommodate wind farm developments."*

Chapter 3 of the OCDP contains the following policy relating to landscape and wind energy developments:

> *"**CAEP-38** It is Council policy that in assessing planning applications for wind farms, the Council shall:*
>
> *(a) have regard to the provisions of the Wind Energy Development Guidelines 2006, the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future;*
>
> *(b) have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy Designations Map from the County Wind Energy Strategy".*

The Proposed Project is located on a cutaway peatland area in County Offaly. Chapter 3 of the WES further outlines the county's policy relating to peatlands and wind energy developments, stating that:

> *"**CAEP-16** It is Council policy to support the preparation of a comprehensive after use framework plan for the industrial peatlands and associated workshops, office buildings and industrial sites in the midlands and adjacent parts of the north-west and southern regions,*

which meets the environmental, economic, and social needs of communities in these areas, and also demonstrating leadership in climate change mitigation and land stewardship. The Council recognises that the industrial peatlands in the midlands are a significant resource will transition to after uses ranging from amenity, tourism, biodiversity services, 'wild areas', flood management, climate mitigation, energy development, industry, education, conservation and many more."

14.4.1.1.5 Key Scenic Views, Prospects and Key Amenity Routes

Section 4.14.2 of the OCDP notes that there a *"number of valuable views and prospects which offer a very attractive cross-sectional view and overall impression of differing landscapes",* to which the Council recognises the need to *"protect the character of the county by protecting Key Scenic Views, Prospects and Key Amenity Routes within the county".* These Key Scenic Views, Prospects and Key Amenity Routes are listed in Table 4.21 and Table 4.22 of the OCDP and can be seen on Figure 14-15 below. Policies and objectives related to the scenic views and key amenity routes in the OCDP are as follows:

*"**BLP-43** It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to significantly affect Key Scenic Views and Prospects as listed in Table 4.21 and Key Amenity Routes as listed in Table 4.22.*

***BLO-26** It is an objective of the Council to protect Key Scenic Views and Key Prospects contained in Table 4.21, and Key Amenity Routes as listed in Table 4.22 from inappropriate development.*

***BLO-27** It is an objective of the Council to ensure that Proposed Projects take into consideration their effects on views from Key Scenic Views and Prospects and Key Amenity Routes and are designed and located to minimise their impact on this views and prospects."*

All designated Key Scenic Views and Prospects and Key Amenity Routes identified in the LVIA Study Area are listed below in Table 14-5.[2] The locations of these designations are mapped in Figure 14-15 below. As these scenic amenity designations are of a visual nature, they are comprehensively scoped in Section 14.5: Visual Baseline.

Table 14-5 Designated Offaly Key Scenic Views and Prospects

View No.	View Description (*Table 4.21*, OCDP 2021-2027)	Figure 14-15 Map Ref.
V1	View from N80 in the townland of Ballynasragh, Pigeonhouse, Killeigh, Derryclure, Derrybeg and Cloncon. View to South-West Slieve Bloom Mountains and Killeigh Village.	O-V1
V2	View from Road No. L-08003 in the Slieve Bloom Mountains, townlands of Clough, Ballykelly, Coolcreen, Glenletter, Glenregan, Castletown, Forelacka and Glinsk. View towards Slieve Bloom Mountains, River Shannon northwards over lowlands.	O-V2

2 For purposes of clarity, continuity, and reference to mapping figures in this chapter; designated scenic views are labelled 'V' and key amenity routes 'SR', each is prefixed by the first letter of the county in which it is located e.g. 'W' for Westmeath and 'O' for Offaly. The last number in each label corresponds to the label or number assigned to each designation in the respective county development plans (e.g. W-SV9 = Westmeath - Designated Scenic View No. 9).

View No.	View Description (*Table 4.21*, OCDP 2021-2027)	Figure 14-15 Map Ref.
V3	Views from Pilgrims Road (Road No. L-07013) in the townlands of Clonmacnoise, Clonascra, Ballyduff and Bloomhill. View to Clonmacnoise and River Shannon, Eskers, Mongan Bog and Finlough.	O-V3
V4	View from road No. R444 in the townlands of Clonmacnoise, Creevagh. View to River Shannon and bog lands.	O-V4
V5	View from N52 in the townlands of Heath, Bunaterin, Derrydolney, Ballywilliam, Curraghmore, Ballynacard, Bally na Curra. View to Slieve Bloom Mountains.	O-V5
V6	View from R356 and Road No. L-07014 in the townlands of Cushcallow, Park, Mullaghakeeraun and Curralahan. View to River Shannon and bog lands.	O-V6
V10	View from road No. L-03004 in the townlands of Skehannagh, Killagally Glebe, Ballyclare. View to southwards towards Slieve Bloom Mountains.	O-V10
V11	View from Regional Road R357 in the townlands of Lumcloon, Bun, Rin, Leabeg and Leamore. View to southwards towards Slieve Bloom Mountains.	O-V11
V12	View from road No. L-07009 in the townland of Stonestown. View over bog lands and Slieve Bloom Mountains.	O-V12
V13	View from Road No. L-03012 in the townlands of Glaster, Ballynasrah, Newtown, Kilmochonna. View over Little Brosna and Callows	O-V13
V14	View from R440 in the townlands of Kyle, Cloghanmore, Streamstown, Ballinree, Killaun. View towards Slieve Bloom Mountains	O-V14
V16	View from Road No. L-04025 in the townlands of Clonee, Cumber Lower. View westward over farmland	O-V16
V17	View from road No. L-06034 in the townlands of Knockhill and Drinagh. View towards Northeast and Northwest over lowlands	O-V17
V18	View from Road No. L-08008 in the townlands of Grange, Belhill, Longford Big and Church Land. Views towards Seir Keiran Monastic Site	O-V18
V19	View from road No. L-02011 in the townlands of Rahan Demesne, Newtown. View to Churches and Earthworks	O-V19

Table 14-6 Designated Offaly Amenity Routes

Amenity Route	Route Description (*Table 4.22*, OCDP 2021-2027)	Map Ref.
Northern Scenic Amenity Route (R357 Blueball to Shannonbridge)	This route links the N52 at Blueball to Shannonbridge. It passes through esker landscape, peatlands, undulating agricultural lands, Lough Boora Parklands, and the callows area of the River Shannon in particular.	O-SR R357
Southern Scenic Amenity Route (R440 and R421 Birr to Kinitty and Ballard to Kinitty)	This route provides an attractive drive within the open countryside to the attractions of the Slieve Bloom Mountains and around the foothills of the mountains themselves.	O-SR R421

14.4.1.1.6 Archaeological and Historical Landscapes

Archaeological and historical landscapes in County Offaly are designated under AHAs in the OCDP. Table 4.20 of the OCDP states that *"County Offaly is rich in landscapes of archaeological and historic interests ranging from large ecclesiastical sites such as Clonmacnoise and Durrow Abbey to archaeological features such as Durrow High Cross".*

These landscapes, which "*primarily include Clonmacnoise, Durrow, Killeigh, Leamonaghan and Rahan",* are designated as *"highly sensitive to new developments, which could potentially damage the historical character and the cultural and social importance of the area".*

Section 10.11 of Chapter 10 - Built Heritage of the OCDP provides policies concerning the county's archaeological and historic landscapes as follows:

> **"BHP-37** *It is Council policy that any development that may, due to its size, location, or nature, have implications for archaeological heritage (including both sites and areas of archaeological potential / significance) shall be subject to an archaeological assessment. When dealing with proposals for Offaly development that would impact upon archaeological sites and/or features, there will be presumption in favour of the 'preservation in situ' of archaeological remains and settings, in accordance with Government policy. Where permission for such proposals is granted, the Planning Authority will require the developer to have the site works supervised by a licensed archaeologist".*

Furthermore, at the time of issue, Objective BHO-06 in Chapter 10 of the OCDP acknowledges the nomination by the Government of Ireland, of two Monastic Sites, Clonmacnoise and Durrow Abbey, on the tentative list for the inclusion to the UNESCO World Heritage sites list and notes that it is an objective of the Council to explore the potential of further designating the Monastic Sites at Clonmacnoise and Durrow as prospective UNESCO World Heritage Sites. However, it is noted that both Clonmacnoise and Durrow Abbey are no longer included on the current Tentative List for consideration as UNESCO World Heritage Sites.

It is further emphasised that both Clonmacnoise and Durrow Abbey are located approximately 13.8km and 14km from the nearest proposed turbines (T01 and T15), respectively, and either have no or partial theoretical visibility. Due to limited visibility, and distance from the proposed turbines, significant landscape and visual effects are not likely to occur. However, for the avoidance of doubt, and given the very high sensitivity and cultural significance of these sites, they have been scoped in for further assessment and discussion in Section 14.5.1.5 and are discussed in detail in relation to potential visual effects in Section 14.7.3.2.3.

14.4.1.2 Landscape Policy in the Surrounding Counties

While the Proposed Project site is located within Co. Offaly, Counties Westmeath, Roscommon, Galway, Laois, and Tipperary are also located within the LVIA Study Area. As indicated by ZTV mapping (see Figure 14-1 above), there is theoretical visibility of the proposed turbines in each of these counties. Therefore, relevant designations pertinent to the landscape and visual impact assessment conducted in this Chapter are identified and listed below from the following county development plans:

- Westmeath County Development Plan 2021–2027 (hereafter referred to as the WCDP)
- Galway County Development Plan 2022–2028 (hereafter referred to as the GCDP)
- Laois County Development Plan 2021–2027 (hereafter referred to as the LCDP)
- Roscommon County Development Plan 2022–2028 (hereafter referred to as the RCDP)
- Tipperary County Development Plan 2022–2028 (hereafter referred to as the TCDP)

14.4.1.2.1 *Landscape Character Areas – Other Counties in the LCA Study Area*

County Westmeath

The LCA of County Westmeath was undertaken for the 2008–2014 WCDP and the resultant LCA designations are adopted in the current WCDP. Section 13.6 of the WCDP identifies and maps 11 no. LCAs, 4 no. of which occur within the LCA Study Area. These LCAs are listed below and are mapped in Figure 14-13 above.

- W – LCA - 6 – Lough Ree / Shannon Corridor
- W – LCA - 7 – Western Lowlands
- W – LCA - 8 – South Central Hills
- W - LCA - 11 – South Westmeath Eskers

The WCDP contains the following objectives related to the LCAs:

> *"It is a policy objective of Westmeath County Council to:*
>
> ***CPO 13.8*** *Protect the landscapes and natural environments of the County by ensuring that any new developments do not detrimentally impact on the character, integrity, distinctiveness, or scenic value of their area. Any development which could unduly impact upon such landscapes will not be permitted;*
>
> ***CPO 13.9*** *Ensure the preservation of the uniqueness of a landscape character type by having regard to the character, value, and sensitivity of a landscape in new development proposals;*
>
> ***CPO 13.10*** *Ensure development reflects and, where possible, reinforces the distinctiveness and sense of place of the landscape character types, including the retention of important features or characteristics, taking into account the various elements which contribute to their distinctiveness;*
>
> ***CPO 13.12*** *Require a Landscape and Visual Impact Assessment for Proposed Projects with the potential to impact on significant landscape features within the county;*
>
> ***CPO 13.16*** *Landscape Character Area 6: Explore the feasibility of promoting Lough Ree and its islands as a model for a living Biodiversity Reserve;*

CPO 13.17 *Minimise impact on the ecological, archaeological, biodiversity and visual amenity surrounding quarry sites and quarrying of sensitive sites within the Landscape Character Areas including the lake valley landscape, eskers, and canal corridor;*

CPO 13.18 *Protect and enhance the setting of the Hill of Uisneach and support increased public access to the site. Only sensitive development that does not undermine the archaeological and cultural significance of the site will be permitted;*

CPO 13.19: *(a) Protect and sustain the established appearance and character of views associated with the High Amenity Area around the Hill of Uisneach. (b) Require any development proposals within the High Amenity Area around the Hill of Uisneach to demonstrate that no adverse effects will occur on the established appearance or character of this feature as viewed from either the Protected Panoramic Views or from surrounding public roads."*

Regarding the above policy, it should be emphasised that this LVIA considers the potential landscape and visual impacts on the designated LCAs. The assessment of effects on the LCAs scoped in for further assessment are included in Appendix 14-2.

Policies relating to the Hill of Uisneach are further addressed in Section 14.4.1.2.2 – Landscape Sensitivity Designations Other Counties.

County Galway

The LCA of County Galway divides the county into 9 no. Landscape Character Types (LCTs) (excluding Urban Environs), further sub-divided into 29 LCUs defined in the GCDP as *"the smallest area that can be practically identified to assist in policy formulation".*

One LCU in County Galway was identified within the LCA Study Area for effects on landscape character, as shown on Figure 14-13:

- Galway LCU 14 – Shannon Environs Landscape.

This LCU is characterised in the GCDP as being an area in which *"Natural, seasonal processes dominate the landscape. Contains large areas of bog, wetlands, and callows. Also supports large parklands and regular field"* and has a landscape sensitivity designation of *"3 – Special".*

County Roscommon

The LCA of County Roscommon divides the county into 7 no. Landscape Character Types (LCTs), which are further sub-divided into 36 geographically specific LCAs. The RCDP defines the LCAs as *"unique, geographically specific areas of a particular landscape type. Each has its own individual character and identity, even though it shares the same generic characteristics with other areas of the same type".*

One LCA in County Roscommon was identified within the LCA Study Area for effects on landscape character, as shown on Figure 14-13:

- Roscommon LCA 9 – Cloonown and Shannon Callows.

This LCA is characterised in the RCDP as being *"located on the southern tip of County Roscommon and it's the flattest character area in the country"* and has a landscape sensitivity designation of *"Very High".*

County Laois

County Laois is located beyond the 15km LCA Study Area. Therefore, as discussed in Section 14.3.1, due to the determination that no significant effects on landscape character are likely to arise beyond distances of 15km from the proposed turbines, LCAs located in County Laois are not included in this assessment.

County Tipperary

Similarly, County Tipperary is located beyond the 15km LCA Study Area. Therefore, as discussed in Section 14.3.1, due to the determination that no significant effects on landscape character are likely to arise beyond distances of 15km from the proposed turbines, LCAs located in County Tipperary are not included in this assessment.

14.4.1.2.2 *Landscape Sensitivity Designations - Other Counties in the LVIA Study Area*

The WCDP, GCDP, LCDP, and TCDP designate sensitive landscape receptors within their individual county of high amenity value worthy of special protection.

Each county has differing naming conventions and sensitivity classifications as well as different policy objectives pertaining to their respective landscape designations. In a general sense, it is a policy objective for each county to take additional care in the protection of the unique, valuable, and sensitive landscapes which fall within the following designations, as described for each county below.

County Westmeath

The WCDP associates 'Areas of High Amenity' (AHA) with the county's *"major lakes and the river Shannon and are designated due to their amenity value and recreational potential".* Seven AHAs are listed and shown on Map 64 of the WCDP Volume 2 Book of Maps. Of these, 4 no. AHAs are located within the LVIA Study Area; these are mapped on Figure 14-5 previously and listed below:

- Waterstown Lough
- Lough Ree
- Lough Ennell
- Hill of Uisneach

The WCDP contains the following policy in relation to AHAs:

> ***"CPO 9.24 –*** *Restrict development not related to farming practices and tourism in all High Amenity Areas, with the exception of housing for the immediate family (son/daughter) of established residents living on landholdings, who demonstrate a housing need and have long-term intrinsic links with the area. The entire landholding will be demonstrated to have been in the resident's ownership 5 years prior to the date of application."*

The WCDP recognises the Hill of Uisneach as *"a nationally significant archaeological landscape"* and notes that *"the site and its immediate context is very sensitive to adverse visual impacts"*. Furthermore, the Westmeath County Council recognises the significance and sensitivity of the Hill of Uisneach and given that the site is listed on the tentative list for UNESCO World Heritage status since 2010, further protection has been afforded to the site by designating the area as a AHA with views from the perimeter skyline ridge identified as a Protected Panoramic Views, as well as a 360 degree panorama (Protected View 36 in the WCDP) from one location at the monument of St Patricks Bed. The Hill of Uisneach is located approx. 23km to the north-east of the nearest proposed turbine (T15). The protected views and landscape buffers, defined as 'Amenity Areas', at the Hill of Uisneach are

reproduced below in Figure 14-10 with a zone of theoretical visibility indicating full theoretical visibility located on the peak of the hill.

As stated in the WCDP:

> *"from a landscape perspective, core and buffer areas are identified as locations where any development is likely to significantly alter the appearance and context of monuments and areas where developments should be carefully scrutinised to anticipate and avoid significant changes to landscape context of the monuments or to the inter-relationship between the core area and relevant monuments in the surrounding landscape.*
>
> - ***An Inner Core High Amenity Area** [yellow shaded area] that comprises the interior of the hilltop plateau that is visually isolated from the surrounding countryside.*
> - ***An Outer Core High Amenity Area** [olive shaded area] that contains the majority of monuments can be readily identified by observing the field boundaries that enclose areas above the 160m contour.*
> - ***A High Amenity Buffer Area** [turquoise shaded area] can be identified within the adjoining townland boundaries as follows: - Ushnagh Hill - Mweelra - Rathnew - Kellybrook".*

As seen in Figure 14-10 below, the majority of the 'High Amenity Buffer Area' has primarily no theoretical visibility, with theoretical visibility' primarily confined with the 'Inner Core High Amenity Area' and the 'Outer Core High Amenity Area'.

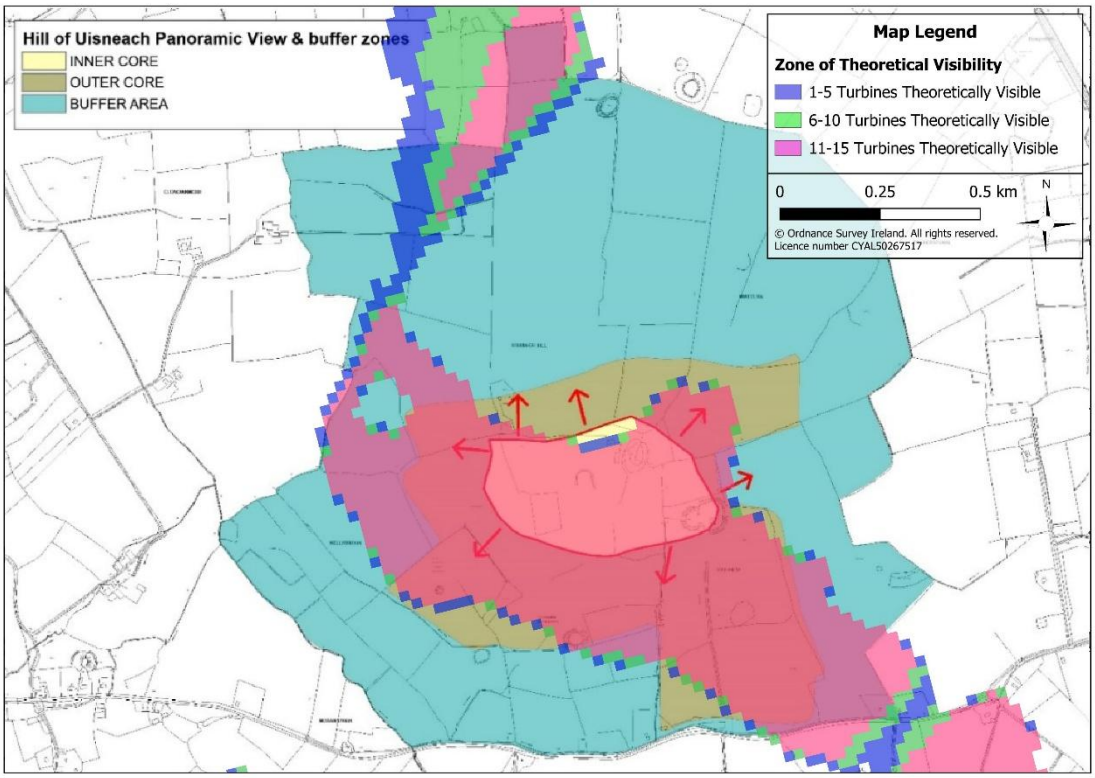


Figure 14-10 WCDP Figure 13.2 'Hill of Uisneach Panoramic View and Buffer Zone' overlain with a ZTV

In terms of landscape and visual effects, the WCDP contains the following policy in relation the Hill of Uisneach:

> *"**CPO 6.35** - Continue to promote the Hill of Uisneach as a sustainable visitor offering and enhanced access to the site, including the creation of walking and cycling connections with the Old Rail Trail (Galway to Dublin) Greenway.*

> ***CPO 13.7*** *- Ensure that any significant, industrial and or infrastructural developments (excluding residential; agricultural buildings; tourism; greenway; cultural; educational or community buildings), which would impact upon Uisneach and or its protected views will not be permitted due to the sensitivity of the site.*
>
> ***CPO 13.18*** *- Protect and enhance the setting of the Hill of Uisneach and support increased public access to the site. Only sensitive development that does not undermine the archaeological and cultural significance of the site will be permitted.*
>
> ***CPO 13.19*** *– (a) Protect and sustain the established appearance and character of views associated with the High Amenity Area around the Hill of Uisneach. (b) Require any development proposals within the High Amenity Area around the Hill of Uisneach to demonstrate that no adverse effects will occur on the established appearance or character of this feature as viewed from either the Protected Panoramic Views or from surrounding public roads."*

Regarding the above-mentioned terminology shown in bold, it should be emphasised that this LVIA takes consideration of all potential landscape and visual impacts the Proposed Project may have on the Hill of Uisneach. However, whilst cognisant of the specific Development Management Requirements set out above, the LVIA in this chapter emphasises, that, given the distance (<23km) from the proposed turbines, the Proposed Wind Farm will not result in any significant visual effects on the protected views to or from the Hill of Uisneach, nor will the Proposed Wind Farm alter the physical fabric of the landscape of the Hill of Uisneach. Nevertheless, given the recognition of its cultural significance and the landscape sensitivity of the Hill of Uisneach, it is scoped in for further assessment as a separate receptor to other Westmeath AHAs and is assessed in full in Section 14.7 of this chapter.

County Galway

As stated previously, the GCDP divides the county into 4 'Landscape Character Types', to which it assigns a sensitivity classification describing the *"landscape's capacity to absorb new development, without exhibiting a significant alteration of character or change of appearance".* These are shown on Map 06 of the GCDP Appendix 4 Landscape Character Assessment.

One Landscape Character Unit (LCU) with the sensitivity classification of 'Special' was identified within the LVIA Study Area approx. 14km west from the nearest proposed turbine; this area is mapped on the Landscape Policy Context Map (Figure 14-5). The following definition is given to this sensitivity classification in Appendix 4 Landscape Character Assessment of the GCDP:

> *"Special: High Sensitivity to Change."*

County Laois

Section 11.10 of the LCDP notes that 'Sensitive Areas' include *"upland areas, visually open and expansive areas, and areas in the vicinity of natural heritage or built heritage assets or scenic views".*

These Sensitive Areas are described in full under 'Landscape Character Area and Special Features' in Table 11.6 of the LCDP, and are assigned a sensitivity of 'Low', 'Medium', or 'High'.

The areas with a High sensitivity designation located within the LVIA Study Area (noted below) and are mapped on the Landscape Policy Context Map (Figure 14-5).

- Peatlands
- Mountain Areas

It is important to note that the LCDP has identified multiple peatlands under the same naming convention. For the purpose of this LVIA chapter, these peatlands were further categorised after the townlands they are located in for a more comprehensive analysis of landscape and visual impacts. The peatlands with the townland names are shown in Figure 14-5.

- Clonlyon peatland
- Catlecuffe peatland
- Derry peatland

These peatlands are located approximately 20km from the nearest proposed turbine (T14). At this distance, where visibility occurs, the proposed turbines appear as small-scale elements in the distant background and would not give rise to any Significant landscape or visual effects. As such, impact to these peatlands as a result of the Proposed Project have been scoped out of further detailed assessment.

In terms of landscape and visual effects, the WCDP contains the following policy objectives in relation the Hills and Upland Areas and Mountain Areas:

> *"**LCA 5** – Ensure that development will not have a disproportionate visual impact (due to excessive bulk, scale, or inappropriate siting) and will not significantly interfere with or detract from scenic upland vistas, when viewed from areas nearby, scenic routes, viewpoints and settlements.*
>
> ***LCA 6** – Ensure that developments on steep slopes (i.e. >10%) will not be conspicuous or have a disproportionate visual impact on the surrounding environment as seem from relevant scenic routes, viewpoints and settlements.*
>
> ***LCA 7** – Facilitate, where appropriate, developments that have a functional and locational requirements to be situated on steep or elevated sites (e.g. reservoirs, telecommunication masts or wind energy structures) where residual adverse visual impacts and minimised or mitigated.*
>
> ***LCA 8** – Maintain the visual integrity of areas which have retained a largely undisturbed upland character and Respect the remote character and existing low-density development in these areas.*
>
> ***LCA 9** – Have regard to the potential for screening vegetation when evaluating proposals for development within the uplands.*
>
> ***LCA 10** – Actively propose the designation of the Slieve Blooms as a Special Amenity Area and seek an Order to that effect.*
>
> ***LCA 11** – Protect the positive contribution that views across adjacent lowland areas and landmarks within the landscape make to the overall landscape character."*

County Roscommon

County Roscommon does not have explicit designations for high amenity areas or designations for sensitive landscape receptors. The RCDP attributes value classifications to their designated LCAs *(Exceptional Value, Very High Value, High Value and Moderate Value).* Special care is given to prevent inappropriate development in the highly sensitive LCAs designated as having 'Exceptional' value. It is noteworthy that the entire section of the county within the LVIA Study Area, is designated with a 'Moderate' value (the lowest sensitivity designation in the RCDP), with no areas designated with 'Exceptional', 'Very High', or 'High' value within the LVIA Study Area and therefore are not assessed in this LVIA.

As discussed in Section 14.4.1.2.1; LCA sensitivity ratings are incorporated into the assessment of effects on LCAs included in Appendix 14-2.

County Tipperary

County Tipperary designates 'Primary and Secondary Amenity Areas' within the county. These areas *"are particularly notable by virtue of their scenic and visual quality and offer significant opportunities for tourism development and rural recreational activities"* and can be seen in Figure 11.1 of the TCDP. No designated Primary of Secondary Amenity Areas are located within the entirety of the LVIA Study Area, and therefore, have not been included for assessment.

Landscape Sensitivity Designation Summary

The following table lists the high landscape sensitivity designations listed in the previous sub-sections. A preliminary assessment was conducted using ZTV mapping to determine likely visibility from these sensitive landscape receptors as well as the landscape designations identified in County Offaly in Section 14.4.1.1. Sensitive landscape receptors scoped in for further assessment are discussed in full in Section 14.4.4.1.

Table 14-7 Landscape Sensitivity Designations within other counties of the LVIA Study Area

Name	Distance and Direction from the Nearest Proposed Turbine
Westmeath	
Waterstown Lough	16.8km north-west from the nearest proposed turbine (T10)
Lough Ree	16.6km north-west from the nearest proposed turbine (T10)
Lough Ennell	24km north-east from the nearest proposed turbine (T15)
Hill of Uisneach	22.3km north-east from the nearest proposed turbine (T15)
Galway	
Special Sensitivity Area	14.3km south-west from the nearest proposed turbine (T02)
Laois	
Clonlyon Peatland	17.1km south-east from the nearest proposed turbine (T04)
Castlecuffe Peatland	18.3km south-east from the nearest proposed turbine (T05)
Derry Peatland	18.9km south-east from the nearest proposed turbine (T14)
Mountain Areas	18.9km south-east from the nearest proposed turbine (T03)

14.4.1.2.3 *Designated Scenic Amenity – Other Counties within the LVIA Study Area*

Counties Westmeath, Galway, Roscommon, Laois and Tipperary protect scenic amenity within their respective counties through designations of scenic views, prospects and scenic routes. Each county has differing naming conventions and policy objectives pertaining to their respective designations. In a general sense, it is a policy objective for each county to take additional care in the protection of the unique and valuable scenic views which fall within the following designations:

- County Westmeath – Scenic Routes and Protected Views
- County Galway – Scenic Routes and Viewpoints

- County Laois – Scenic Views and Prospects
- County Roscommon - Scenic Routes and Scenic Views
- County Tipperary – Scenic Routes and Views

Designated scenic amenity and views from these counties that are located within the LVIA Study Area are mapped in the Landscape Policy Context map (Figure 14-5) and listed in Table 14-8 below.[3]

No Tipperary Scenic Routes and Views are located within the 25km LVIA Study boundary. Therefore, the Scenic Routes and Views from the TCDP are not included in this assessment.

Table 14-8 Scenic views, Protected Views, Scenic Routes, and Key Amenity Routes within the LVIA Study Area

Development Plan Reference No.	Description	Direction of View	Significance (if applicable)	Map Reference
County Westmeath *(italic content taken from WCDP 2021-2027)*				
PV 1	*View over Lough Ree from parking/picnic area on the N 55 Road between Ballykeeran and Glasson.*	*This is a panoramic view of Lough Ree and the surrounding landscape from the car parking areas on the N55 Road between Ballykeeran and Glasson. (WCDP, 2021 – 2027)*	*Regional*	W – V1
PV 2	*Views of Lough Ree from Coosan waterfront from pier, slipway and forest walk trail.*	*The focus of this view is Lough Ree to the north. Hare Island is an important feature of this view. (WCDP, 2021 – 2027)*	*Local*	W – V2
PV 3	*Views of Lough Ree from Carnakill pier and Portlick Forest Walk from pier and forest walking trail.*	*The focus of this view is Lough Ree to the southwest. The lough's islands and wooded shores form the background and are an important feature of the view. (WCDP, 2021 – 2027)*	*Local*	W – V3

3 For purposes of clarity, continuity, and reference to mapping figures in this chapter; designated scenic views are labelled 'V' and scenic routes 'SR', each is prefixed by the first letter of the county in which it is located e.g., 'W' for Westmeath and 'M' for Meath. The last number in each label corresponds to the label or number assigned to each designation in the respective county development plans (e.g., M -V54 = Meath – Designated Scenic View No. 54).

PV 4	*View of Lough Ree from Portlick Scout Campsite from short stretch of road along lake shore.*	*The focus of this view is Lough Ree to the west. The lough's islands and wooded shores form the background and are an important feature of the view. (WCDP, 2021 – 2027)*	*Local*	W – V4
PV 5	*View of Lough Ree from small pier at lake shore.*	*The focus of this view is Lough Ree to the west. The south end of Inchmore and the north spit of Whinning are important features of the view. (WCDP, 2021 – 2027)*	*Local*	W – V5
PV 8	*Panoramic views over countryside to the north off Ballymore-Mullingar Road from Local road L5342.*	*This is a panoramic view of the landscape around Ballymore to the West and North and captures small glimpses of Lough Sewdy. From the local road L-5342. This view should be considered to begin from the point where the road begins to descend. (WCDP, 2021 – 2027)*	*Local*	W – V8
PV 9	*Panoramic views from Knockastia Hill, Coolatoor from the local road that rings the Knockastia Hill.*	*This is a series of views from the roads which circle Knockastia Hill. There are many points where there are low hedges that provide panoramic views of the surrounding landscape from the road. (WCDP, 2021 – 2027)*	*Local*	W – V9
PV 10	*View of the south-east face of Kilbeggan Distillery from*	*The focus of this view is the east face of Kilbeggan*	*County*	W – V10

	bridge over the River Brosna on Regional road R446.	*Distillery and the river below it. (WCDP, 2021 – 2027)*		
PV 11	*View of Old Mill outside Kilbeggan from the intersection of the Local road L-524 with the Regional road R-389.*	*The focus of this view is the north face of the Old Mill beside the river. (WCDP, 2021 – 2027)*	*Local*	W – V11
PV 12	*View of Long Hill Esker from south of the R-446 Regional Road.*	*The focus of this view is the wooded hill of Long Hill Esker to the NE. This view should be considered to being at junction of local road and R446 at Derrylusk and end at the base of Long Hill Esker. (WCDP, 2021 – 2027)*	*County*	W – V12
PV 36	*Panoramic view of surrounding countryside from atop the Hill of Uisneach. View from point on site trail, by St Patrick's Bed.*	*A panoramic view from the top of the Hill of Uisneach. The hill's rugged terrain makes up much of the view foreground. Beyond, the view is the surrounding working landscapes. Views facing North provide the greatest extent of visible landscape. (WCDP, 2021 – 2027)*	*National*	W – V36
Old Rail Trail	*The Old Rail Trail extends from Mullingar to Athlone for a distance of 42km and forms part of the Dublin to Galway National Cycle Network and the Royal Canal Greenway, which extends across the County form the backbone of the greenway network in Westmeath.*	N/A	N/A	W – Old Rail Trail
Lough Ree Driving Route	A looped driving route to the east of Lough Ree following the lake shore.	N/A	N/A	W – Lough Ree Driving Route

Tain Trail	Route north of Kilbeggan town along the R389 Regional Road	N/A	N/A	W – Tain Trail
Westmeath Way	*One long-distance National Waymarked Way exists from Mullingar to Kilbeggan*	N/A	N/A	W – Westmeath Way
Mullingar Cycle Hub	A looped cycle hub around multiple loughs	N/A	N/A	W – Mullingar Cycle Hub
County Galway *(italic content taken from GCDP, Appendix 4 - Landscape Character Assessment)*				
PV 52	*This view is from the middle of the Banagher bridge.*	*The focus of this view is the Shannon River, Banager Park and the Castle ruins.*	*County*	G – V 52
PV 51	*This view is from Meelick Quay picnic and parking area.*	*The focus of this view is the River Shannon and the Incherky in the background. The old battery (covered in trees) is an important feature of this view.*	*County*	G – V 51
County Roscommon				
SV 23	View from third class road across the Shannon callows.	South-East	N/A	R – V 23
SV 24	View from third class road across the Shannon callows and esker ridge in County Offaly.	South-East	N/A	R - V 24
SV 25	Elevated view from third class road overlooking the Shannon callows to the south/southwest, with undulating farmland and mature trees. View to north/northwest overlooking flat raised cutover bog.	West	N/A	R – V25
County Laois				
17	Views over farmland and Slieve Bloom Mountains	South-West	N/A	R – V 23

As the scenic amenity designations listed in Table 14-8 are of a visual nature, they are comprehensively addressed in Section 14.5 of this Chapter – *Visual Baseline*, where ZTV mapping and on-site appraisals determine the likely visibility of the proposed turbines within these scenic views or from scenic routes.

14.4.2 Landscape Character of the Proposed Project 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. The identification of landscape character as outlined in the Landscape and Landscape Assessment Guidelines (DoEHLG, 2000) comprises the identification of primarily physical units (areas defined by landform and landcover) and, where appropriate, of visual units.

The Proposed Project site was visited multiple times during the years 2021, 2022, 2023,2024 and 2025 where an assessment of topography, drainage, landcover and land use was conducted. Information gathered during these visits has informed the following descriptions of the Proposed Project site.

This section includes aerial images captured by a drone which are useful tools to illustrate the character, scale, context, and constituent parts of the landscape of the site. However, it is important to highlight that these aerial images do not represent the views of visual receptors that would be experienced at ground level.

Please note that the aerial imagery was captured on a frosty day, hence some glare is visible on the surfaces. Coincidentally, the glare from the frost in the aerial imagery is a useful visual aid to clearly identify land cover which is bare cutover peatland.

Proposed Project Site and Overview

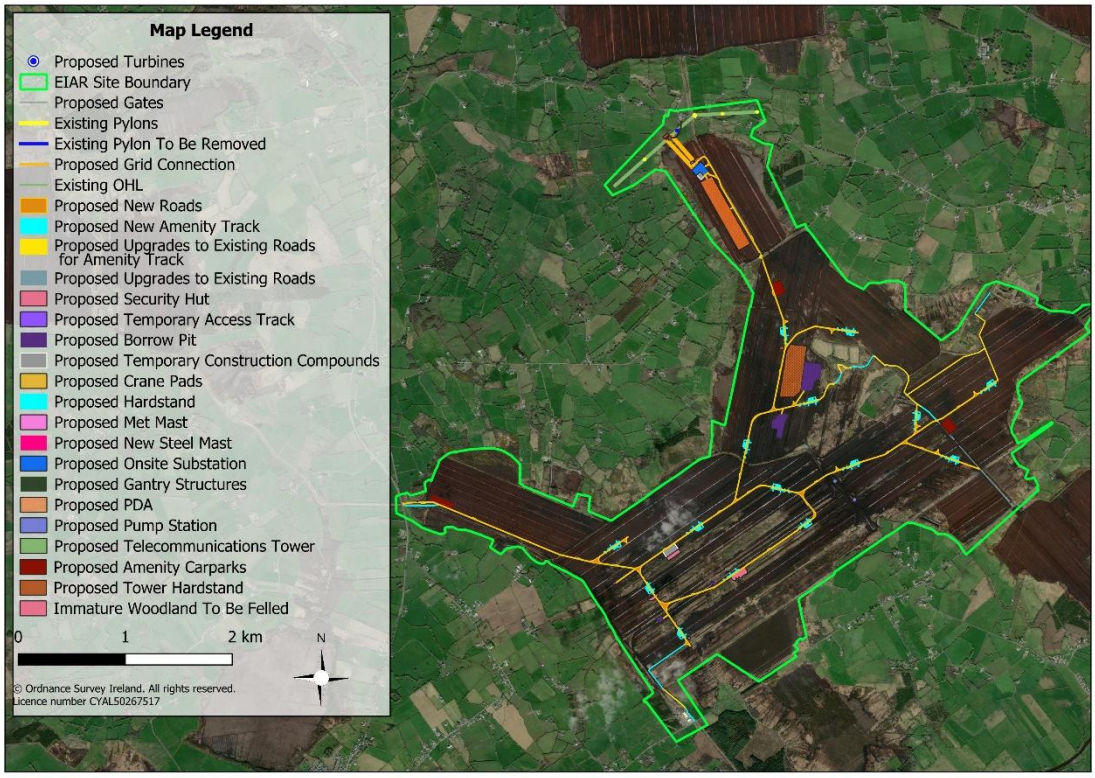


Figure 14-11 Aerial View of the Proposed Project site

The Proposed Project site comprises of a large expanse of open peatlands located within the flat midland landscape of County Offaly. The peatlands were originally raised bogs which are typically found in these lowland landscapes of the Irish midlands. The character of these peatlands forming the Proposed Project site is now strongly influenced by the industrial peat extraction practices historically conducted at the site. The bog within which the Proposed Project is located is Lemanaghan Bog. Due to historical peat extraction and ancillary activities which took place on Lemanaghan Bog, the Proposed Project site has been degraded and now resembles a cutover peatland landscape.

Plate 14-7 Drone Image for Landscape Context: Views east towards the Proposed Wind Farm demonstrating the very flat nature of the site and surrounding landscape

The Proposed Wind Farm is located approximately 3km northeast of Ferbane, 1.5km north of Pollagh and 2.5km southwest of the village of Ballycumberin County Offaly. The character of the wider landscape surrounding the site comprises of a rural agricultural landscape, peatlands and dispersed rural settlements, as seen in Plate 14-8 and Plate 14-9 below. As shown in the images above the cutover peatlands are enclosed by pockets of mature vegetation including treelines and hedges. Mature boundary vegetation is also prevalent throughout the surrounding agricultural landscape.

Plate 14-8 Drone Image for Landscape Context: Views north-west towards Lemanaghan Bog

Plate 14-9 Drone Image for Landscape Context: Views south overlooking the Proposed Wind Farm, approx. 1km north from proposed turbine T10

Topography and Landform

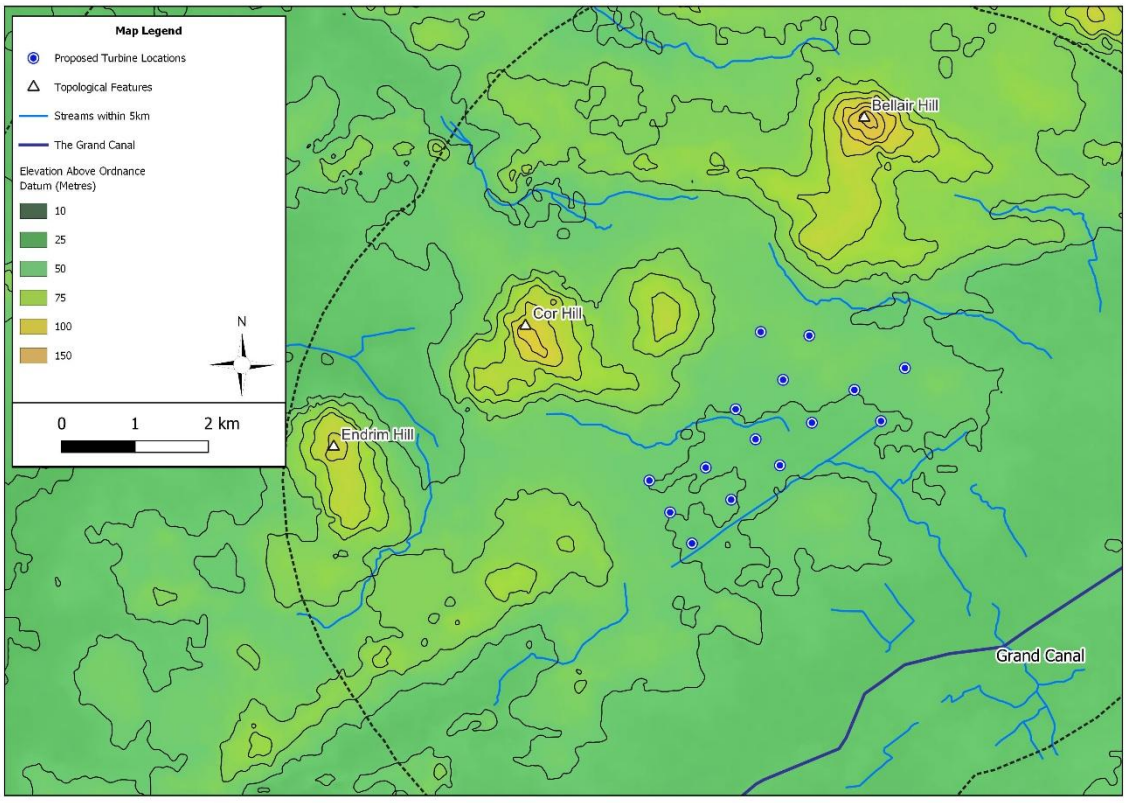


Plate 14-10 Topography of the site

The topography of the site is flat and low-lying with little variation in topography levels as shown above. Much of the site ranges from approximately 40m – 60m AOD. The flat terrain of the site is enclosed by the topographical features of Endrim Hill, Cor Hill and Bellair Hill located to the west and north of the site, screening any long-range views in these directions from within the site.

Due to historic peat extraction and ancillary activities, the topography and landform have been substantially altered and modified. As stated previously, the landform is very flat (see Plate 14-11 below) within most areas of the site and is often at a lower elevation than the surrounding landscape beyond the site boundary due to the quantity of material that was removed during the many years of operational peat harvesting. Modified landforms exist throughout the site; including a large network of drainage ditches, which were cut into the bog to facilitate peat extraction and ancillary activities.

Plate 14-11 View overlooking the flat landscape of the Proposed Wind Farm, approximately 200m north of proposed turbine T02

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.

The landcover within the Proposed Project site comprises a mix of bare cutaway peat, re-vegetated peat, degraded bog, and scrub vegetation. Industrial features that facilitated historic peat extraction activities are still evident throughout the Proposed Project site. Industrial elements such as railways infrastructure contribute to the industrialised landcover and character of the landscape.

All peat extraction operations on site ceased in 2020, and some areas of the Proposed Project site had been out of production for many years prior to this. The images below show a variety of vegetation establishment that have occurred due to peat extractions being ceased. A variety of ground cover types other than bare cutaway peat (scrub, re-vegetated peat, or degraded bog) commonly occur along corridors where infrastructure such as drains and access roads exist, as well as along extraction plot boundaries where the peat banks form elevated berms.

Plate 14-12 A railway tract traversing a drained area of cutover bog at the Proposed Wind Farm

As shown in the images below, large areas of shrub and tree colonisation are prevalent throughout the Proposed Project site where peat extraction and ancillary activities ceased earlier than other areas of the site.

Plate 14-13 Views east from proposed turbine T09 towards the dense vegetation within the Proposed Wind Farm

Plate 14-14 Views of vegetation colonisation within the Proposed Wind Farm

Land Use

Peat extraction activities at the Proposed Wind Farm ceased in the year 2020. Current existing land use of the Proposed Project site includes recreational use, with a local walkway, 'Banagher Line', on the Rossfaraghan local road located on the southern section of the Proposed Project site, running parallel to the proposed turbines (see Plate 14-15 below). The walkway branches off to allow partial access to the peatlands site (see Plate 14-16 below).

Plate 14-15 Local Walkway located on the southern section of the Proposed Wind Farm, running parallel to the proposed turbines

Plate 14-16 Views north-west towards the bog from the walkway, 'Banagher Line' located south of the Proposed Wind Farm, within the site

Evidence of toghers (ancient wooden trackways) have been identified within the Proposed Project site. These features historically served as important routes across peatland areas. Such features are a common characteristic of peatland landscapes in Ireland and are considered of archaeological and cultural heritage value. These are further discussed with the aid of maps and drone imagery in Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context. Section 13.3.3.3 of Chapter 13: Cultural Heritage assesses the impact of the Proposed Project on toghers within the Proposed Project site, which are predominantly not visibly discernible. Toghers within the Proposed Project site are largely not currently visible and are not currently used as recreational routes through the site, which comprises private land.

Views within the Proposed Project site

In general, views within the site primarily comprise a highly modified and degraded bog landscape. The terrain is defined by cutover surfaces, drainage channels, irregular peat ridges, and shrub vegetation, resulting in a fragmented, degraded landscape. Shrub, rough grassland and tree vegetation is prevalent across the site, contributing to a generally unmanaged landscape character.

Plate 14-17 Views within the site of a degraded bog landscape

Long-ranging views are very limited in these flat, lowland landscapes, such as that in which the Proposed Project is located. As detailed previously in Section 14.3.2.2, above-ground features such as vegetation or localised topography undulations often cause a disproportionate screening effect in very flat landscapes, limiting long-range views. However, as shown below in Plate 14-18, occasional unrestricted long-ranging views are available throughout the Proposed Project site due to the absence of above-ground elements on the open expanses of bare cutover peat.

Plate 14-18 Views west from proposed turbine T08

The Proposed Project site and its surrounds are located within a rural landscape setting, characterised by agricultural fields and a network of local roads, with residential developments situated along these local roads. Notably, the L7001 local road to the north of the bog is located on slightly elevated terrain. As such, there are open views of the residential receptors from within the site.

Plate 14-19 Views north from within the site towards the residential receptors along the L7001 local road

14.4.2.2 Historic Landscape Character of the Surrounding Area

Section 10.1 of the OCDP states that *"Offaly's historic environment, comprising its built form, landscape, heritage and archaeology, provides a depth of character that benefits the county's economy, culture and quality of life of our citizens".*

The Proposed Wind Farm has a strong cultural association with the local communities who have a historic and generational connection to peat extraction on the site and local area.

Lemanaghan Monastic Site

Lemanaghan Monastic Site, which is part of the Lemanaghan Monastic Complex (comprising the Monastic Site and the Lemanaghan Hermitage) is located approximately 1.2km south-east from the nearest proposed turbine (T05). The monastic site is a heritage feature of high archaeological significance, which contributes value to the historic landscape character of the area surrounding the Proposed Wind Farm.

The landscape and geographic context of the Lemanaghan Monastic Complex, as well as other heritage features relative to the Proposed Wind Farm are shown in Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context

The effects of the Proposed Wind Farm on Cultural Heritage Monuments and the cultural connection to monuments such as the monastic site are comprehensively addressed in Chapter 13: Cultural Heritage. However, given its close proximity to the proposed turbines, the impact on landscape setting is addressed and reported in Section 14.7 of this Chapter.

Slí Mhór and the Esker Riada

There is a broader cultural and historic relationship between the peatland landscape of County Offaly and the network of monastic and early medieval sites that form part of the county's historic landscape character.

Slí Mhór, often referred to as the *"Great Way,"* is one of the Five Ancient Roads of Ireland. These ancient routeways originated from the Hill of Tara, connecting key royal and ceremonial sites across the island and served as vital transport corridors for trade, travel, and religious figures (Please see Chapter 13: Cultural Heritage and Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context for further information). As such, while the Slí Mhór contributes to the value of the wider historic landscape, the route itself is not a waymarked walking trail. It does however overlap with the Pilgrims Road to Clonmacnoise which is comprehensively assessed in Section 14.5.2 of this Chapter.

Grand Canal

The Grand Canal is located 3.3 km to the south of the nearest proposed turbine (T05) and extends across the length of County Offaly east-west. It is a historic transport and trade route which contributes character to the wider historic landscape setting of the area.

14.4.2.3 Landscape Character of the Proposed Grid Connection

As outlined in Chapter 4, the Proposed Grid Connection will facilitate the connection of the Proposed Wind Farm to the national grid via a connection from the proposed onsite 220kV substation to the Shannonbridge-Maynooth 220kV OHL utilising 0.8km of OHL. A drone image showing the northern extent of the site, including the approximate location of the substation and associated infrastructure—such as the proposed new steel mast locations—is shown in Figure 14-12 and Plate 14-20 below.

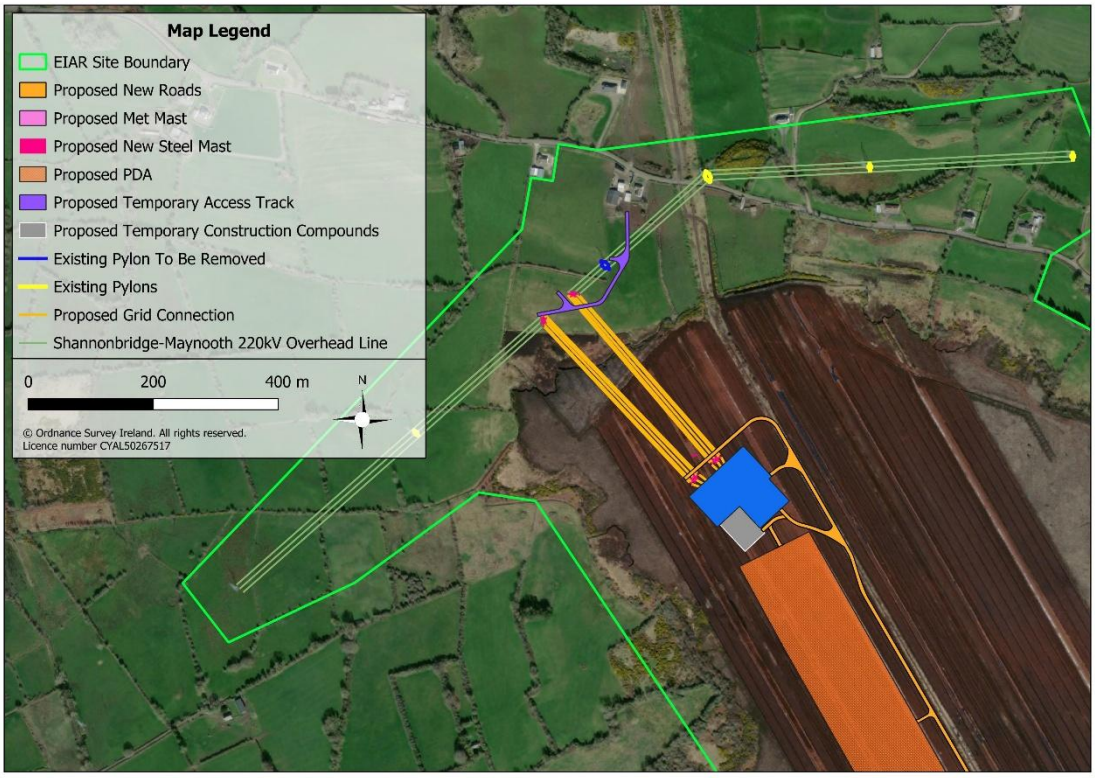


Figure 14-12 Proposed Grid Connection

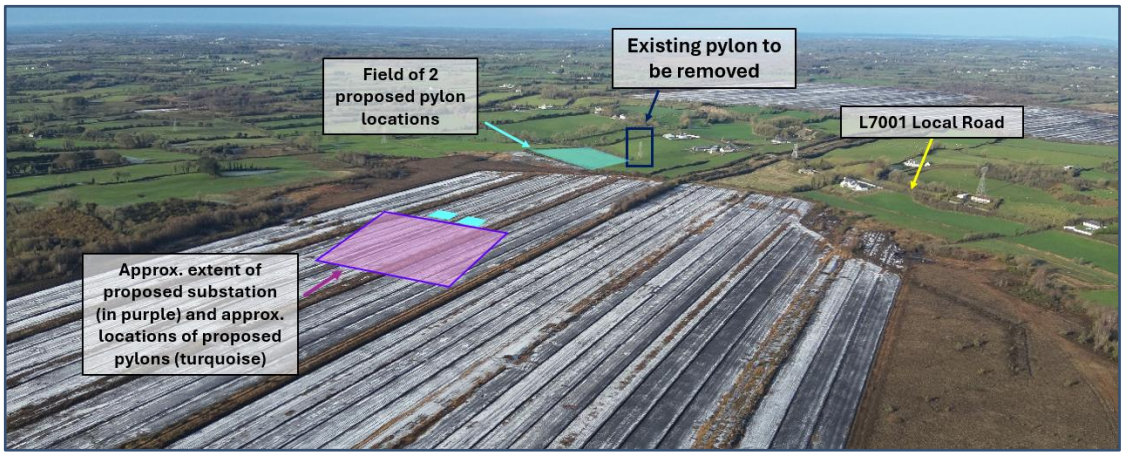


Plate 14-20 Drone Image for Landscape Context: Views north, overlooking the northern extent of the Proposed Project site inclusive of Proposed Grid Connection infrastructure

Landscape Character and Setting of the Proposed 220kV GIS Substation.

The proposed onsite 220kV substation is located in the northern section of the site, in the townland of Cooldorragh, within proximity to the existing Shannonbridge-Maynooth 220kV OHL located approximately 0.4km north of the proposed onsite 220kV substation at its closest point.

The proposed onsite 220kV GIS substation is located on a flat area of land approximately 1.6km north of proposed turbine T10. The landcover of the proposed onsite 220kV substation location is composed of flat cutover peatlands with tracts of vegetation enclosing the bog, providing vegetative screening from within the site. Further vegetation of shrub and trees along with some residential dwellings are seen in the distant background on a slight incline of elevation. A landscape plan including berms and planting measures are proposed along the eastern and northern boundary of the proposed onsite 220kV substation as a measure to visually soften and partially screen the proposed substation infrastructure

from view and mitigate landscape and visual impacts (See Appendix 14-6). Landscape and visual effects arising as a result of this element of the Proposed Project are discussed in full in Section 14.7 below.

Landscape Character and Setting of the Overhead Line and End Masts

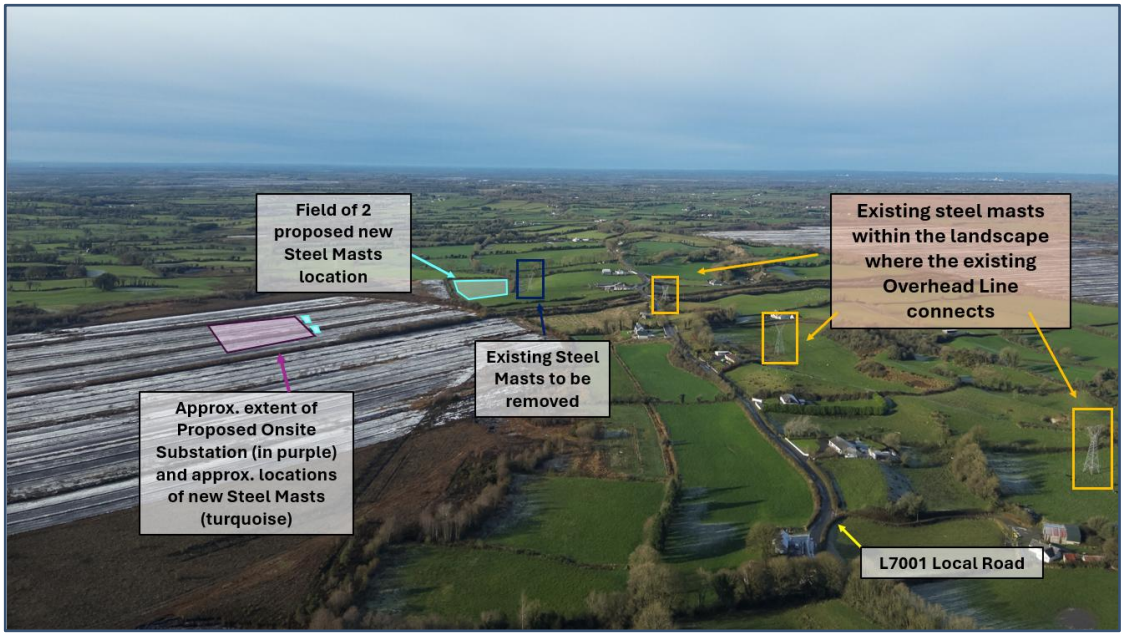


Plate 14-21 Drone Image for Landscape Context: Views westward, overlooking the proposed onsite 220kV substation within the site to the south of the L7001 Local road, and existing pylons to the north of the L7001

The Proposed Grid Connection will consist of approximately 0.8km of overhead line (0.4km of double looped OHL), 4 no. new steel masts, and the removal of 1 no. existing steel mast. Of the 4 no. proposed new steel masts, 2 no. new steel masts will be constructed at the proposed onsite 220kV substation and 2 no. new steel masts will be constructed under the existing Shannonbridge-Maynooth 220kV OHL, as seen in Plate 14-21 above.

Plate 14-22 View of existing pylon within the agricultural field in the northern extent of the site

The steel masts will be largely similar to the existing mast seen in Plate 14-22 above. A dedicated photomontage has been prepared including the substation and steel masts, which is included in the Volume 2 Photomontage Booklet, and is discussed in detail in the Photomontage Assessment Tables in Appendix 14-3 and as well below, in Section 14.7.

14.4.3 Sensitivity of the Site: Landscape Value & Susceptibility to Change

Landscape 'Value' was assessed in order to determine the landscape 'Sensitivity' of the Proposed Project site as well as the wider landscape setting and establish the capacity of the immediate landscape in which the Proposed Project will be built, as is prescribed by best practice guidance (GLVIA3, p.80):

> *'...as part of the baseline description the value of the potentially affected landscape should be established'.*

Comprehension of the Landscape Value and Landscape 'Susceptibility to Change' (to a wind farm development) enables determination of the sensitivity of the landscape at a micro-level (meaning, the landscape of the Proposed Project site) and its capacity to absorb the infrastructure of a wind farm development.

Table 14-9 below considers the collective appraisal of seven indicators of landscape Value in the GLVIA3 (listed below). Landscape Value and Susceptibility to Change are then combined to assign an overall Sensitivity rating of the site.

The determination of landscape Value takes into consideration the scenic amenity designations and landscape sensitivity and value designations found in the local landscape policy, as well as other indications of landscape value attached to undesignated landscapes, including:

- Landscape designations (LCA setting, Scenic Routes and Views, amenity areas, etc.)
- Quality/condition of landscape elements
- Scenic/aesthetic qualities
- Rarity/conversation status
- Wildness/naturalness
- Recreational value
- Cultural meaning/associations

The ratings of Value and Susceptibility range from High, Medium, or Low, while the overall Sensitivity is assigned as **Very High**, **High**, **Medium** or **Low**, following criteria outlined in the full detailed methodology, presented in Appendix 14-1: LVIA Methodology (Section 1.7: Assessing Landscape Effects).

Table 14-9 Indicators of Landscape Value and Sensitivity

Indicator	Description
Landscape Designations	The Proposed Project is located within ILCA 4 of County Offaly – North-Western Lowland Farmland and Marginal Peatland. The Proposed Project site is not located in a protected landscape within any local landscape policy and no sensitive landscape designations (areas of high amenity) fall within the site itself. The site is located within an area designated with Medium or 'Moderate' landscape sensitivity of the OCDP. Cutaway bogs, which comprise the majority of this landscape type and where the turbines are located are noted in the OCDP as appropriate for *"sensitively designed and located developments including renewable energy (**wind farms**)."* No designated scenic views or routes are located within the site itself, although there are designated protected views located within the wider LVIA

	Study Area. The closest scenic view is located 6.3km southwest from the nearest proposed turbine (T03).
Landscape Elements Quality / Condition	This refers to the physical state of the landscape and the condition of individual elements. The site is a heavily modified landscape substantially degraded by historic peat extraction activities and artificial drainage.
Scenic / Aesthetic Qualities	There is limited scenic or aesthetic quality pertaining to this landscape as the area predominantly comprises of bare cutover peat. The site has an industrial character, and features such as the railways throughout the site are distinctive and hold some local aesthetic value and interest.
Rarity or Conservation Interests	The vast majority of the site comprises of cutover or open cutaway peat. Pockets of bog woodland and other boundary vegetation around the site are valuable biodiversity corridors. A comprehensive description and assessment of the biodiversity within the Proposed Project site is contained in Chapter 6:Biodiversity.
Wildness / Naturalness	Although the site comprises of expansive and unpopulated lands, it is a highly managed and modified rural landscape. The anthropological influence of historic peat harvesting on this site itself, and the influence of agriculture and roads in the wider landscape setting detracts from most senses of naturalness or wildness.
Recreational Value	There is little to no recreational value to the site itself. It is an industrialised, degraded cutover peat site. A short walkway (Banagher Line) is existent within the south of the site; however, views mainly consist of a heavily modified, degraded landscape.
Cultural Meaning / Associations	There are some valuable cultural associations with the site, including for the surrounding local communities who have historically worked on the land of the bog, or used it as a source of fuel in the past. There is evidence of historic togher roads traversing the peatlands within the site which may have accessed historic monuments and other locations of the surrounding cultural landscape such as the Lemanaghan Monastic Site. Please refer to Chapter 13: Cultural Heritage for further information.

In consideration of the factors detailed in the table above, and the designations outlined in the OCDP, the landscape value of the Proposed Project site is deemed to be **'Low/Medium'**. There is value to the historic and cultural landscape of the site and setting, however it is a highly modified and degraded landscape from historic peat harvesting. The susceptibility of the landscape of the site to the proposed change of wind energy development is '**Low'** considering local planning policy indicating the suitability of degraded cutover peatlands for wind energy development in County Offaly and the general suitability of cutover peatlands (See pg. 107 of DoEHLG 2006 Guidelines) as large uninhabited areas surrounded mature boundary vegetation capable of accommodating wind energy developments. Overall, the sensitivity of this landscape to a wind farm development is deemed to be '**Low**'.

14.4.3.1 Landscape Characterisation in the DoEHLG 2006 Guidelines (and with reference to the Draft DoHPLG 2019 Guidelines)

This section considers the DoEHLG 2006 Guidelines and is cognisant of the Draft DoHPLG 2019 Guidelines. These documents 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, noting that it represents the 'best fit' solutions to likely situations. The guidance defines six general landscape

character types: 'Mountain Moorland', 'Hilly and Flat Farmland', 'Flat Peatland', Transitional Marginal Land', 'Urban/industrial' and 'Coastal'. 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. In consideration of landscape in the relevant county development plans and site visits conducted by the MKO Landscape and Visual team, the physical characteristics of the site are best described by the 'Flat Peatland' landscape character type. Therefore, the best practice siting and design strategies prescribed for Flat Peatland (DoEHLG 2006 Guidelines) were implemented for the site.

14.4.3.1.1 *Flat Peatland*

The key characteristics of the Flat Peatland Landscape type as stated in the DoEHLG 2006 Guidelines are:

- *"Landscapes of this type comprise a vast planar extent of peatland and have significant potential for future wind energy development;*
- *In their relatively undisturbed and naturalistic state the wet bogs comprise a landcover mostly of heather, wild grasses, and bog cotton, as well as patches of coniferous plantation;*
- *Some of these bogs have been harvested for peat and may comprise long parallel ridges of stacked milled peat and deep drains;*
- *Evidence of human habitation is sparse;*
- *Roads tend to run in straight lines over considerable distances, followed by electricity and/or telephone lines; and*
- *This landscape type is horizontal, open, extensive, and also characterised by a sense of remoteness."*

The siting and design guidance given for Flat Peatland Landscape in the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines is set out below:

Location

> *"Wind energy developments can be placed almost anywhere in these landscapes from an aesthetic point of view. They are probably best located away from roadsides allowing a reasonable sense of separation. However, the possibility of driving through a wind energy development closely straddling a road could prove an exciting experience."*

In terms of **location**, the 15 no. turbines of the Proposed Wind Farm are aligned to form one coherent, aesthetic cluster of turbines. One rationale for the recommendation (cited above) is to site the proposed turbines away from roadsides to allow a reasonable sense of separation. The R436 Regional Road travels from a south-west to a north-east direction, parallel to the site and is located 0.7km south from the nearest proposed turbine at its closest point (T14).

In terms of location, siting the turbines on a flat plain of low-lying land within a relatively flat landscape will result in the visibility of proposed turbines being rapidly reduced with increased distance from the site. As shown in the photomontages (EIAR Volume 2: Photomontage Booklet) and described throughout the photomontage assessment tables (see Appendix 14-3), the proposed turbines are viewed as a coherent development within the landscape. Also, as described below, an optimum aesthetic effect is achieved through adherence to other recommendations in the guidelines listed below (Spatial Extent, Spacing and Layout).

Spatial Extent

> *"The vast scale of this landscape type allows for a correspondingly large spatial extent for wind energy developments."*

In terms of **spatial extent**, the expansive landscape of the site allows the landscape to accommodate the single cluster of the 15 no. proposed turbines within the landscape.

Spacing

> *"Regular spacing is generally preferred, especially in areas of mechanically harvested peat ridge."*

In terms of **spacing**, the proposed turbines are strategically sited to ensure regular and consistent spacing across the Proposed Wind Farm. This has resulted in a coherent arrangement of turbines, contiguous and connected to each other visually when viewed within the landscape. The turbines are evenly spaced to provide a sense of order to the layout from various orientations in the immediate surroundings. Overall, given the flat topography of the site, the strategic siting of the turbines reduces their visual prominence and visual effects from the wider LVIA Study Area.

Layout

> *"In open expanses, a wind energy development layout with depth, preferably comprising a grid, is more appropriate than a simple linear layout. However, where a wind energy development is located close to feature such as a river, road, or escarpment, a linear or staggered linear layout would also be appropriate."*

In terms of **layout**, the proposed turbines are strategically aligned in a grid layout within the large, expansive flat peatland landscape, thereby meeting the above standards of the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines. Additionally, it is important to note that the closest residential receptor is located 896m from the nearest turbine, exceeding the minimum 500m set back distance from residential receptors in the current DoEHLG 2006 Guidelines and also the recommended 4 times tip height set back distance to third party properties, explicitly set out for residential visual amenity, prescribed by the Draft DoHPLG 2019 Guidelines.

Height

> *"Aesthetically, tall turbines would be most appropriate. In any case, in terms of viability they are likely to be necessary given the relatively low wind speeds available. An even profile would be preferred."*

In terms of **height**, the proposed turbines are tall vertical features within the landscape, thereby, complying with the recommendations for height stated in the above guidance. The cluster of turbines as a whole retains a very even profile on account of the very flat landscape, improving visual coherence of the wind farm in line with the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines.

Cumulative Effect

> *"The openness of vista across these landscapes will result in a clear visibility of other wind energy developments in the area. Given that the wind energy developments are likely to be extensive and high, it is important that they are not perceived to crowd and dominate the flat landscape. More than one wind energy development might be acceptable in the distant background provided it was only faintly visible under normal atmospheric conditions."*

In terms of **cumulative effect**, this LVIA assesses cumulative effects with other existing, permitted and proposed wind farms later in Section 14.7.3.1.6 and Section 14.7.3.2.6.

14.4.4 Landscape Character of the Wider Landscape Setting

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

The landscape surrounding the Proposed Project site is a rural agricultural landscape. It is a working, settled landscape with small settlement clusters and residential receptors arranged along local road networks. As shown in the image below agricultural fields are defined by field boundaries comprised of hedgerows and treelines, which restrict long-range visibility within a flat landscape, which is typical of the wider landscape setting surrounding the site to the east, south and west.

Plate 14-23 Drone Image for Landscape Context taken from within the Proposed Wind Farm overlooking the wider rural agricultural landscape

After agricultural land, raised bogs constitute a large portion of the landcover in the LVIA Study Area. Notably, Clara Bog, a nature reserve, is located approximately 5km east from the nearest proposed turbine T15, while the bogs to the south (approx. 3km from the nearest proposed turbine (T14), form part of the Lough Boora Discovery Park. Derrynagun Bog is located approximately 800m south-east from the nearest proposed turbine, T14. Additional bogs can be seen in the wider landscape to the west and north of the Proposed Project site.

Plate 14-24 Views towards the Proposed Wind Farm from Clara Bog

Due to historical forestry activities on and adjacent to the peatlands in the LVIA Study Area, large tracts of commercial forestry as well as pockets of broadleaf woodland are also prominent throughout the landscape, forming a notable element of its character, as seen in Plate 14-25 below.

Plate 14-25 Drone Image for Landscape Context: Views east of the Proposed Wind Farm of a large pocket of woodland

Ferbane and Ballycumber are the closest settlements to the Proposed Wind Farm. These are connected to other settlements within the LVIA Study Area, such as Tullamore and Kilcormac, by major roads like the R436 Regional Road and the N62 National Road. The network of roads extending from these settlements forms linear patterns of residential development along these routes, with individual residential houses scattered throughout the landscape. Approx. 8.3km north of the proposed turbines lies the M6 motorway, which is one of the main transport routes in the LVIA Study Area.

Plate 14-26 Drone Image for Landscape Context: Views east towards the Proposed Project site

Overall, the wider landscape is typical of the characteristics of an Irish midland landscape. The landscape is generally flat with occasional eskers and localised undulations within the landscape. More elevated terrain is found to the south-east of the LVIA Study Area, towards the Slieve Bloom Mountains, and to the north-east, in the direction of Knockastia and the Hill of Uisneach. The LVIA Study Area also holds notable historical sites. Clonmacnoise, an early Christian monastic site, is located approximately 14 km west from the nearest proposed turbine (T01) in the LVIA Study Area. Other local heritage sites, such as Durow Abbey, and St. Manchan's Well, are also present within the local landscape setting, contributing to the character of the landscape. The impact assessments detailed later in this chapter (Section 14.7) provide a comprehensive evaluation of the likely significant landscape and visual effects from key landscape and visual receptors within the wider LVIA Study Area, where theoretical visibility is present.

14.4.4.1 Landscape Receptor Preliminary Analysis

Having identified and located the LCAs, and the prominent and sensitive landscape receptors existent within the LVIA Study Area, a preliminary analysis was conducted using ZTV mapping to scope out landscape receptors that will not be impacted by the Proposed Project and identify receptors requiring further assessment. As reported previously, high-sensitivity landscape receptors and landscape designations are assessed within the 25km LVIA Study Area, whereas LCAs within are assessed within the 15km LCA Study Area.

14.4.4.1.1 *Preliminary Analysis – Landscape Character Areas*

A map showing all LCAs within 15km of the proposed turbines and the distribution of theoretical visibility of the proposed turbines occurring in each LCA is shown in Figure 14-5 below.

Each LCA is listed below in Table 14-10, as well as a description of theoretical visibility within each LCA, as indicated by the ZTV in Figure 14-6 and Figure 14-7 below. Several LCAs identified in the LCA Study Area (15km for landscape character) have very small areas of theoretical visibility indicated by the ZTV map. The potential visibility of the proposed turbines was appraised during site surveys from all LCAs with very limited or partial theoretical visibility. The ZTV and on-site visibility appraisals determines which LCAs are scoped in for full assessment later in this chapter (see also Appendix 14-2); the results are noted in Table 14-10 below.

Table 14-10 LCAs within 15km of the proposed turbines[4]

Map Ref	LCA	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
Up to 5 km				
O – ILCA 4	North-Western Lowland Farmland and Marginal Peatland	Predominantly full TV within 5km of the proposed turbines with some patches of limited to no theoretical visibility due to rise in elevation from Cor and Bellair Hills. Patches of no TV increases beyond 5km to the west towards Endrim Hill and to the east, where localised undulations prevent visibility.	Visibility will occur; however, there will be limited visibility beyond the 5km of the proposed turbines as a result of screening from vegetation in the flat landscape.	Yes
O – ILCA 6	Grand Canal Corridor	Full theoretical visibility along the stretch of this LCA within 5km of the proposed turbines. Primarily full theoretical visibility beyond 5km with small patches of no TV approx. 8km south-west from the nearest proposed turbine (T03).	On-site appraisal determined that partial visibility will occur from elevated locations along this LCA such as bridges (see VP 03). However, visibility will be restricted by natural vegetation along the canal.	Yes
O – ILCA 3	Central Wetlands	Large patches of full theoretical visibility within 10km of the proposed turbines. TV decreases beyond 10km, primarily south-west from Cloghan Hill.	The area is relatively flat to the north-east and visual screening will occur as a result of surrounding vegetation within the area. Elevated landscapes such as Cloghan Hill may have visibility, where the turbines will be viewed as small background features.	Yes

[4] *For purposes of clarity, continuity, and reference to mapping figures in this chapter; Landscape Character Areas are labelled 'LCA', and each is prefixed by the first letter of the county in which it is located e.g., 'W' for Westmeath and 'O' for Offaly. The last number in each label corresponds to the label or number assigned to each LCA in the respective county development plans.*

Map Ref	LCA	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
W - LCA7	Western Lowlands	Large patches of full TV occur within 10km of the proposed turbines, with pockets of no TV from localised undulations.	Locations in the undulating hills in the area may have visibility of the proposed turbines.	Yes
5 to 10 km				
O – ILCA 1	Birr Plains	Primarily full TV within 10km of the proposed turbines. Beyond 10km, large patches of no TV are prominent due to the undulating topography.	There may be visibility from elevated locations.	Yes
O – ILCA 5	River Shannon and Callows	Primarily partial or full TV, with a small number of areas of no TV.	These areas are relatively flat. Visual screening will occur as result of the surrounding vegetation within the area.	Yes. This ILCA has been scoped in as a precautionary measure on account of Clonmacnoise, a cultural heritage receptor of high sensitivity, located within this ILCA.
W – LCA 6	Lough Ree / Shannon Corridor	There is full TV in the portion of this LCA located within the LCA Study Area.	Given the distance (approx. 9km) from the proposed turbines, there is likely to be no or very limited background views of the proposed turbines from the small part of this LCA located within the LCA Study Area.	No, given the distance from the nearest proposed turbine (approximately 9.8km) as well as the low-lying flat terrain of this LCA, there will be no significant effects on the landscape character of this LCA arising as a result of the

Map Ref	LCA	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
				Proposed Project.
10 to 15 km				
R – LCA 9	Cloonown and Shannon Callows	There is full TV in the portion of this LCA located within the LCA Study Area.	Given the distance (approx. 10km) from the proposed turbines, there are likely to be no or very limited background views of the proposed turbines from the small part of this LCA located within the LCA Study.	No, given the distance from the nearest proposed turbine and the low-lying flat terrain of this LCA there will be no Significant effects on the landscape character of this LCA arising as a result of the Proposed Project.
W – LCA 8	South Central Hills	There is full TV in the small portion of this LCA located within the LCA Study Area.	Given the distance (approx. 14.5km) from the proposed turbines, there are likely to be no or very limited background views of the proposed turbines from the small part of this LCA located within the LCA Study Area.	No, given the small section of the LCA within the LCA Study Area, given the distance and low-lying landscape, significant effects are not likely to occur on the landscape character of this LCA arising as a result of the Proposed Project.
W – LCA 11	South Westmeath Eskers	There is primarily partial or full TV of the proposed turbines within this small portion of the LCA within the LCA Study Area, with a number of large areas of no TV.	Given the distance (approx. 12.5km) from the proposed turbines, there are likely to be no or very limited background views of the proposed turbines from the small part of this LCA located within the LCA Study Area.	No, given the distance from the nearest proposed turbine and the very small section of this LCA located within 15km of the proposed

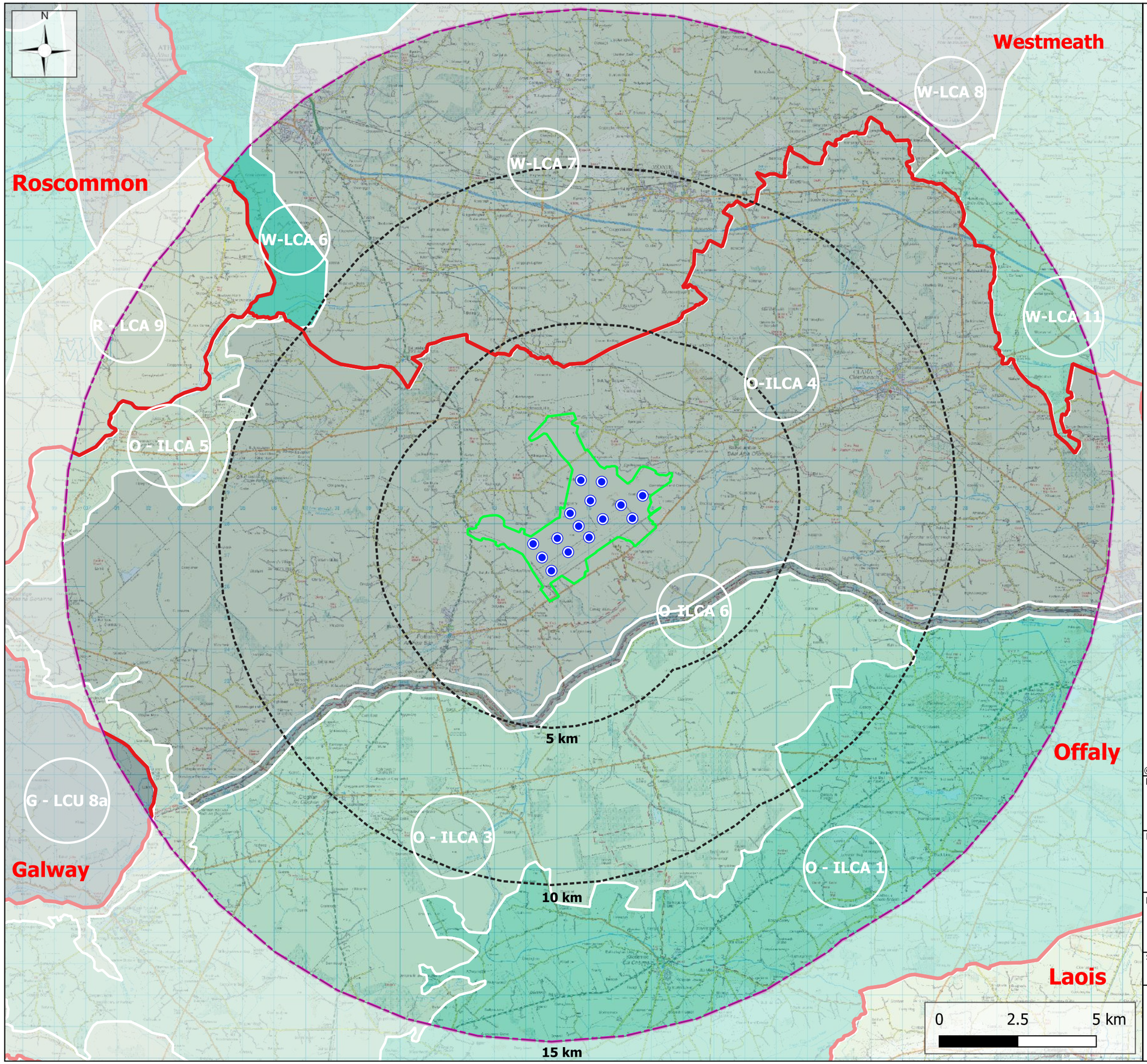
Map Ref	LCA	Theoretical Visibility (TV) as indicated by ZTV	Actual Visibility	Scoped in for Assessment
				turbines, there will be no significant effects on the landscape character of this LCA arising as a result of the Proposed Project.
G – LCU 8a	Shannon Environs Landscape	Primarily full TV in the very small portion of this LCA located within the LCA Study Area.	Given the distance (approx. 14.6km) from the proposed turbines, there are likely to be no or very limited background views of the proposed turbines from the small part of this LCA located within the LCA Study Area.	No, given the distance from the nearest proposed turbine and the very small section of this LCA located within 15km of the proposed turbines, there will be no significant effects on the landscape character of this LCA arising as a result of the Proposed Project.

Following the pre-assessment exercise, the LCAs shown in Table 14-11 below have been scoped in for assessment. As some of the proposed turbines are likely to be visible from some areas within these LCAs, potential landscape effects may arise as a result of the Proposed Project.

Table 14-11 LCAs Scoped In for further assessment

Map Ref.	LCA
O – ILCA 4	North-Western Lowland Farmland and Marginal Peatland
O – ILCA 6	Grand Canal Corridor
O – ILCA 3	Central Wetlands
W – LCA 7	Western Lowlands
O – ILCA 1	Birr Plains
O – ILCA 5	River Shannon and Callows

A detailed description of the 6 no. LCAs scoped in for assessment and the likely effects on landscape character as a result of the Proposed Project are presented in the Landscape Character Assessment Tables that form Appendix 14-2. A summary of landscape effects on these LCAs is reported in Section 14.7.3 of this chapter - Operational Phase.



Map Legend

- LCA Study Area (15km for Assessment of LCAs)
- County Borders
- EIAR Site Boundary
- Proposed Turbines

Provisional Offaly LCAs

- ILCA 1 - Birr Plains
- ILCA 3 - Central Wetlands
- ILCA 4 - North-Western Lowland Farmland and Marginal Peatland
- ILCA 5 - River Shannon and Callows
- ILCA 6 - Grand Canal Corridor

Westmeath LCAs

- LCA 6 - Lough Ree/Shannon Corridor
- LCA 7 - Western Lowlands
- LCA 8 - South Central Hills

Galway LCUs

- LCU 8a - Shannon Environs Landscape

Roscommon LCAs

- LCA 9 - Cloonown and Shannon Callows

Drawing No.

Figure 14-13

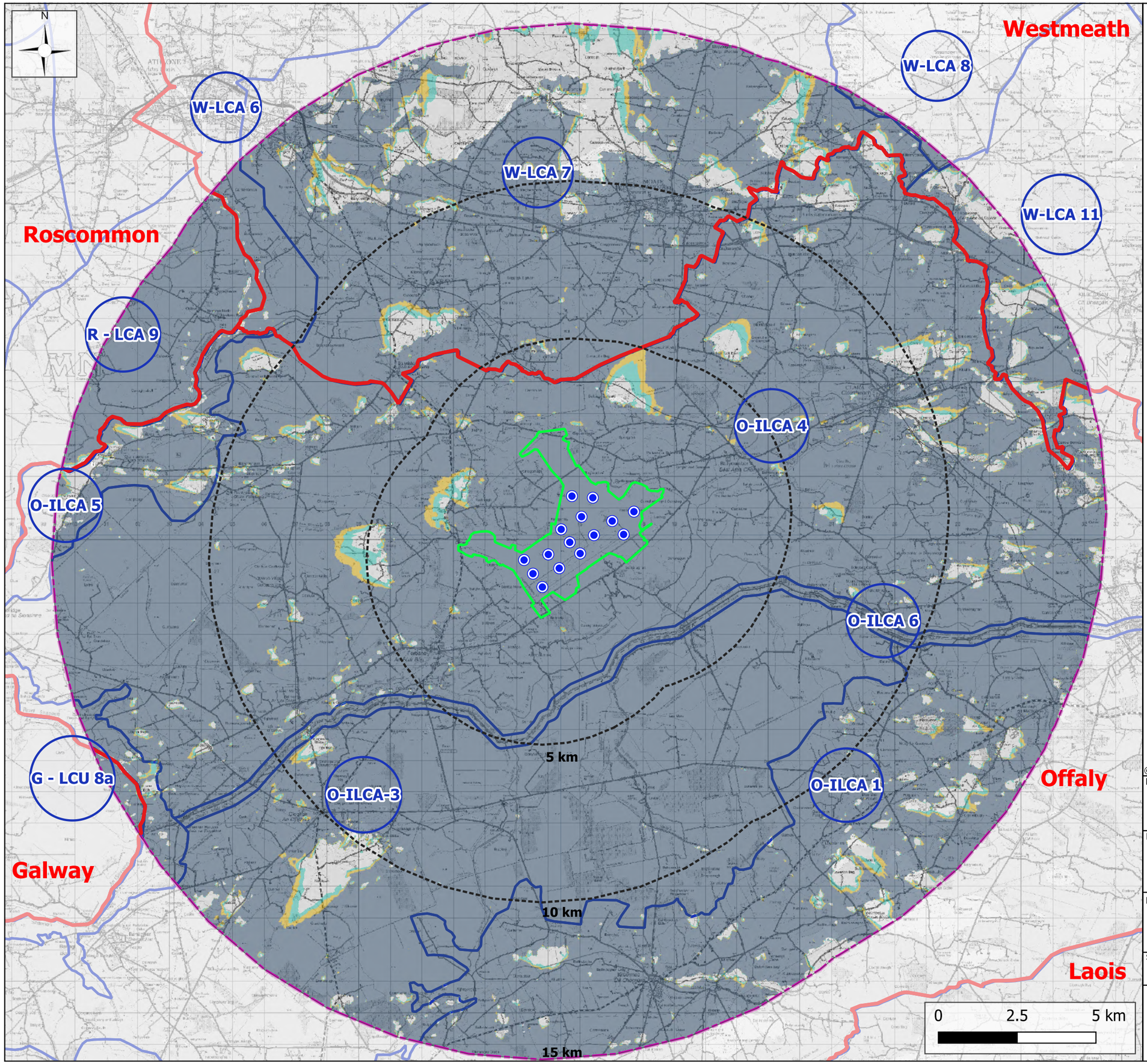
Drawing Title

Landscape Character Areas

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:120,000	200804	16/02/2026	GL	DM



Map Legend

- LCA Study Area (15km for Assessment of LCAs)
- County Borders
- EIAR Site Boundary
- Proposed Turbines
- **Landscape Character Areas**

Co. Offaly Provisional LCAs
ILCA 1 - Birr Plains
ILCA 3 - Central Wetlands
ILCA 4 - North-Western Lowland Farmland and Marginal Peatland
ILCA 5 - River Shannon and Callows
ILCA 6 - Grand Canal Corridor

Co. Westmeath LCAs
LCA 6 - Lough Ree/Shannon Corridor
LCA 7 - Western Lowlands
LCA 8 - South Central Hills

Co. Galway LCUs
LCU 8a - Shannon Envrions Landscape

Co. Roscommon LCAs
LCA 9 - Cloonown and Shannon Callows

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible

Drawing No.

Figure 14-14

Drawing Title

Landscape Character Areas & ZTV

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:120,000	200804	19/03/2026	GL	DM

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14.4.4.1.2 Preliminary Analysis – Other Landscape Receptors

Apart from the LCAs identified above, a number of additional landscape receptors have been identified in the preceding sections. These are mapped in Figure 14-5 above and listed in Table 14-12 below, along with a description of theoretical visibility from each receptor, as indicated by the ZTV in Figure 14-6 and Figure 14-7. The potential visibility of the proposed turbines was appraised during site surveys (conducted in the years 2021, 2022, 2023,2024 and 2025) from all receptors with very limited or partial theoretical visibility. The ZTV and on-site visibility appraisals determine which landscape receptors are scoped in for full assessment later in this chapter; the results are noted in Table 14-13.

Table 14-12 Landscape Receptors within 25km of the Proposed Project site

Name	Theoretical Visibility (TV) as indicated by the ZTV	Actual Visibility	Scoped in for Assessment
Offaly AHA 2 – Grand Canal	Primarily full TV of this AHA within the LVIA Study Area with small patches of no TV.	Visibility will be restricted by natural vegetation along the canal. However, some visibility will occur from elevated vantage points.	Yes
Offaly AHA 3 – Lough Boora Discovery Park (Includes Lough Boora Discovery Park and Turraun Nature Park)	Primarily full TV of this LCA with small patches of no TV.	Visibility will occur; however, views will be screened by natural vegetation.	Yes
Offaly AHA 7 – Clara Bog	Primarily full or partial TV with small sections of no TV.	Visibility will occur; however, views will be limited by bordering field vegetation.	Yes
Offaly AHA 4 – Pallas Lake	The northern section of this AHA has primarily full TV. The southern section has no TV.	Where visibility does occur, views will be restricted by dense bordering vegetation.	No
Offaly AHA 12 – Clonmacnoise Heritage Zone	There are patches of full TV and no TV of this AHA within the LVIA Study Area.	Visibility is likely to occur from elevated vantage points, where the proposed turbines may be visible as small elements in the background of the view. However, visibility is likely to be heavily restricted by vegetation and infrastructure.	Yes

Offaly AHA 1 – River Shannon and Callows	Large patches of no TV to the northern extent of this AHA with increased theoretical visibility to the south.	Visibility is likely to occur; however, turbines will be viewed as small elements in the background of the view, partially screened by intervening vegetation.	Yes
Offaly AHA 5 – Slieve Bloom Mountains (Overlap with County Laois too)	The small section of this AHA within the LVIA Study Area has large sections of full TV.	Visibility is likely to occur from the elevated locations along this AHA; however, given the distance from the proposed turbines, they will be viewed as small features in the background of the view.	Yes
Offaly AHA 13 – Durrow Monastic Site and Demesne	Large patches of full and partial TV.	Visibility will be highly restricted by natural vegetation.	Given its high sensitivity in the OCDP, as a precautionary measure, it has been scoped in for assessment
Westmeath AHA - Waterstown Lough	Large sections of full TV with large patches of no TV to the eastern extent of the AHA.	At this distance (20-25km from the proposed turbines), visibility will be primarily confined to elevated vantage points within the AHA. Visibility will be further confined by vegetative screening enclosing the lough. No significant effects on the overall character of the landscape are likely to occur.	No
Westmeath AHA - Lough Ree	Primarily no theoretical visibility along the banks of Lough Ree.	At this distance (20-25km from the proposed turbines), visibility of the turbines will be primarily confined to elevated vantage points within the AHA. In a general	No

		sense, the AHA is primarily at low elevation and scenic amenity is primarily directed west, north and south, away from the proposed turbines. No Significant effects on the overall character of the landscape are likely to occur.	
Westmeath AHA – Hill of Uisneach	Patches of full TV at the summit of the hill.	Visibility and visual effects will be limited given the distance; however, given its designation as a National Heritage Site, it is scoped in for assessment.	Yes

As discussed in detail in Section 14.4.1.1.1, County Offaly's *AHA 11 – Other Eskers* was scoped out from further assessment in this LVIA as the esker system is not generally considered to be of high sensitivity from an LVIA perspective.

Following the pre-assessment exercise, the landscape receptors listed in Table 14-13 below have been selected for assessment. As some of the proposed turbines are likely to be visible from these receptors, potential landscape effects may arise as a result of the Proposed Wind Farm.

Table 14-13 Landscape Receptors Scoped In for further assessment

County	Landscape Receptor
County Offaly	Offaly AHA 2 – Grand Canal
County Offaly	Offaly AHA 3 – Lough Boora Discovery Park
County Offaly	Offaly AHA 7 – Clara Bog
County Offaly	Offaly AHA 9 – Eiscir Riada
County Offaly	Offaly AHA 12 – Clonmacnoise Heritage Zone
County Offaly	Offaly AHA 1 – River Shannon and Callows
County Offaly ***incl. County Laois*	Offaly AHA 5 – Slieve Bloom Mountains **Upland Areas – High Sensitivity*
County Offaly	AHA 13 – Durrow Monastic Site and Demesne
County Westmeath	Westmeath AHA – Hill of Uisneach

A detailed description of the landscape receptors scoped in for assessment and the likely effects on the landscape as a result of the Proposed Project as reported in Section 14.7.3 – Operational Phase.

14.5 Visual Baseline

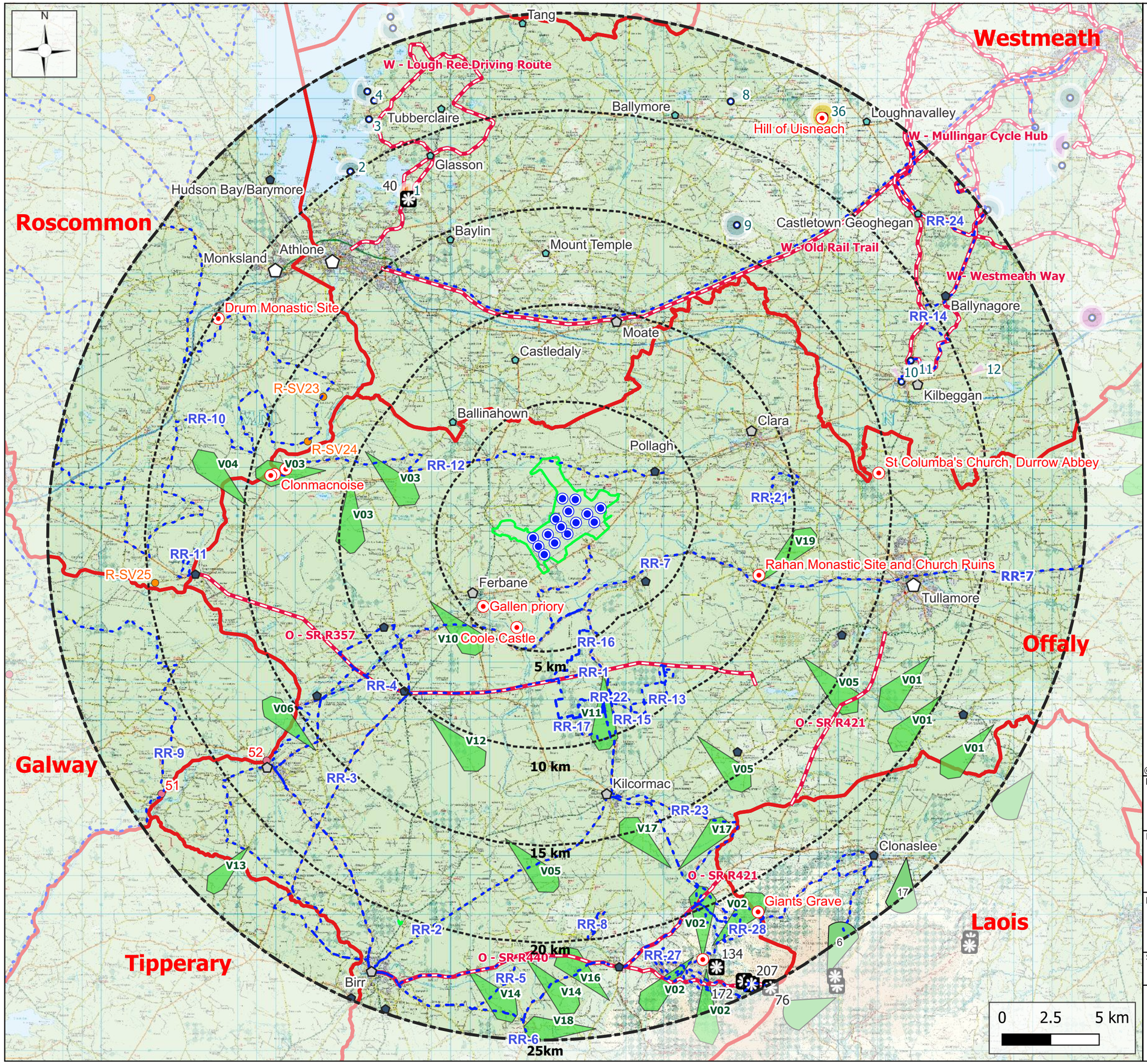
14.5.1 Visual Receptors

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 visual receptors have been identified within the LVIA Study Area and are listed below:

- Designated Scenic Routes and Views
- Settlements
- Recreational Routes (Waymarked Walking Routes; Cycle Routes; Scenic Drives; Tourist Routes)
- Recreational, Cultural Heritage and Tourist Destinations
- Transport Routes

These visual receptors are identified in the Visual Baseline Map (Figure 14-15 below) and are listed in Table 14-12 to Table 14-19 in the following sections along with theoretical visibility at those locations indicated by the ZTV map in Table 14-18 seen below. During site visits conducted during 2021, 2022, 2023, 2024 and 2025, the likely visibility of the proposed turbines was appraised from receptors where the ZTV has indicated theoretical visibility. Visual receptors were scoped out from further assessment when there was either no theoretical visibility of the proposed turbines or where on-site appraisal determined visibility of the proposed turbines to be very unlikely or very limited.

Considering the limited long-range visibility of the proposed turbines beyond 5km in this flat lowland landscape, effects on residential receptors in close proximity to the proposed turbines is also a focus of this LVIA. A selection of photomontages representative of residential visual receptors is discussed in Section 14.7.3.2.4



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbine Locations

Visual Receptors

- OSi Viewing Points
- Recreational, Tourist and Cultural Heritage Destinations
- Waymarked Walking Trails

Settlements within 25km

- County Hub Town
- Town
- Village
- Small Village of Local Importance

Galway

- Co. Galway Protected Views

Westmeath

- Co. Westmeath Scenic Routes
- Co. Westmeath Protected Views Origin

Co. Westmeath Protected Views

- National
- Local

Offaly

- Co Offaly Scenic Views
- Co. Offaly Key Amenity Routes

Roscommon

- Co. Roscommon Scenic Views

Laois

- Co. Laois Views and Prospects

Drawing No.

Figure 14-15

Drawing Title

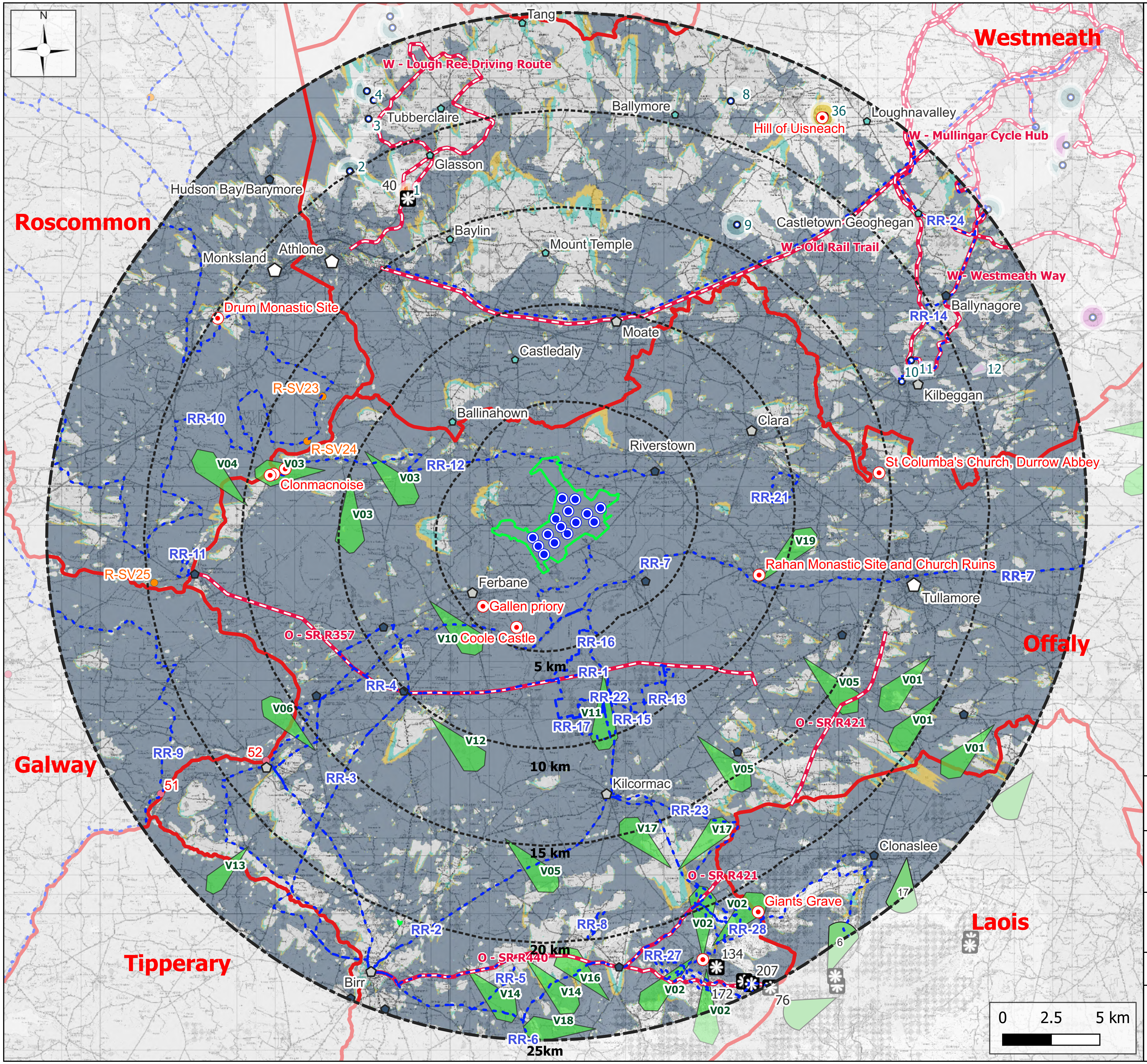
Visual Baseline

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	19/03/2026	GL	DM

MKO



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbine Locations

Visual Receptors

- OSi Viewing Points
- Recreational, Tourist and Cultural Heritage Destinations
- Waymarked Walking Trails

Settlements within 25km

- County Hub Town
- Town
- Village
- Small Village of Local Importance

Galway

- Co. Galway Protected Views

Westmeath

- Co. Westmeath Scenic Routes
- Co. Westmeath Protected Views Origin

Co. Westmeath Protected Views

- National
- Local

Offaly

- Co Offaly Scenic Views
- Co. Offaly Key Amenity Routes

Roscommon

- Co. Roscommon Scenic Views

Laois

- Co. Laois Views and Prospects

Zone of Theoretical Visibility

- 1-5 Turbines Theoretically Visible
- 6-10 Turbines Theoretically Visible
- 11-15 Turbines Theoretically Visible

Drawing No.	Figure 14-16
Drawing Title	Visual Baseline with ZTV
Project Title	Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	19/03/2026	GL	DM

MKO

14.5.1.1 Designated Scenic Amenity Routes and Scenic Views

There are approximately 38 no. designated amenity routes and views identified within the LVIA Study Area and described in Section 14.4.1 – Landscape Designations and Policy Context. These scenic amenity designations are mapped in Figure 14-15 above. Table 14-14 below lists the scenic designations located in the LVIA Study Area as well as any descriptions relating to the direction or object of the view detailed in the relevant county development plan. If detailed in the development plan, the direction of the view is reported in Table 14-14 and whether it is likely that the designated scenic amenity is directed towards the Proposed Project. Table 14-14 also notes the theoretical visibility of the proposed turbines from these designated locations as indicated by the ZTV in Figure 14-16.

Based upon these initial visibility assessments, scenic amenity designations are either scoped in or out for full assessment in this LVIA. No designated scenic routes or views were identified within 5km of the proposed turbines.

Table 14-14 Designated Scenic Amenity - Preliminary Assessment[5]

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
5-10km					
O – V3	*"Views from Pilgrims Road (Road No. L-07013) in the townlands of Clonmacnoise, Clonascra, Ballyduff and Bloomhill. View to Clonmacnoise and River Shannon, Eskers, Mongan Bog and Finlough." (OCDP 2021-2027)*	Southeast, North, West	Yes	Yes	Yes
O – V10	*"View from road No. L-03004 in the townlands of Skehannagh, Killagally Glebe, Ballyclare. View to southwards towards Slieve Bloom Mountains." (OCDP 2021-2027)*	Southwest	No	Yes	Yes, as intermittent visibility of the proposed turbines may occur from this local road through occasional gaps in vegetation
O – V11	*"View from Regional Road R357 in the townlands of Lumcloon, Bun, Rin, Leabeg and*	South	No	Yes	No, as the direction of the view is directed in the opposite

[5] *For purposes of clarity, continuity, and reference to mapping figures in this chapter; designated scenic views are labelled 'V' and key amenity routes 'SR', each is prefixed by the first letter of the county in which it is located e.g. 'W' for Westmeath and 'O' for Offaly. The last number in each label corresponds to the label or number assigned to each designation in the respective county development plans (e.g. W-V9 = Westmeath - Designated Scenic View No. 9).*

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
	Leamore. View to southwards towards Slieve Bloom Mountains." (OCDP 2021-2027)				direction of the proposed turbines and given the nature of dense vegetation within Turraun Nature Park providing high levels of visual screening, it is unlikely that significant effects are not likely to occur.
O – V19	*"View from road No. L-02011 in the townlands of Rahan Demesne, Newtown. View to churches and earthworks." (OCDP 2021-2027)*	Northeast	No	Yes	Yes, given the cultural significance of this site, it has been scoped for assessment
O – SR R357	*"This route links the N52 at Blueball to Shannonbridge. It passes through esker landscape, peatlands, undulating agricultural lands, Lough Boora Parklands, and the callows area of the River Shannon in particular." (OCDP 2021-2027)*	Panoramic	Partially	Primarily full TV along the extent of the route.	Yes
W – Old Rail Trail	*The Old Rail Trail extends from Mullingar to Athlone for a distance of 42km and forms part of the Dublin to Galway National Cycle Network and the Royal Canal Greenway, which extends across the County form the backbone of the greenway network in Westmeath. (WCDP, 2021 – 2027)*	N/A	Partially	Primarily full TV along the route within 10km of proposed turbines, with large patches of no TV along the route beyond 10km	Yes
10-15km					
O – V12	*"View from road No. L-07009 in the townland of*	Southeast	No	No	No

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
	Stonestown. View over bog lands and Slieve Bloom Mountains." (OCDP 2021-2027)				
O – V4	*"View from road No. R444 in the townlands of Clonmacnoise, Creevagh. View to River Shannon and bog lands." (OCDP 2021-2027)*	Northwest	No	No	No
O – V5	*"View from N52 in the townlands of Heath, Bunaterin, Derrydolney, Ballywilliam, Curraghmore, Ballynacard, Bally na Curra. View to Slieve Bloom Mountains." (OCDP 2021-2027)*	Southeast	No	Yes	No, the view is directed away from the proposed turbines. There will be no or very limited actual visibility of the proposed turbines from the small section of the route with TV as a result of roadside visual screening and the distance of the receptor from the proposed turbines.
R – V23	*"View from third-class road across the Shannon callows." (RCDP 2022-2028)*	South-east	Yes	Yes	No, at this distance, where visibility may occur, the proposed turbines will appear as miniature elements in distant background. significant effects are not likely to occur.
R – V24	*"View from third-class road across the Shannon callows and esker ridge in County Offaly." (RCDP 2022-2028)*	South-east	Yes	Partial	No, the viewpoint is located within an area of partial TV, and it overlooks a large section of no TV.

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
					The proposed turbines will be barely discernible from this location; no significant effects are likely to occur.
15-20km					
O – V6	*"View from R356 and Road No. L-07014 in the townlands of Cushcallow, Park, Mullaghakeeraun and Curralahan. View to River Shannon and bog lands." (OCDP 2021-2027)*	Northwest	No	Yes	No, the view is directed away from the proposed turbines. Where the proposed turbines may be visible, visibility will be greatly mitigated by distance.
O – V17	*"View from road No. L-06034 in the townlands of Knockhill and Drinagh. View towards Northeast and Northwest over lowlands." (OCDP 2021-2027)*	Northeast / northwest	Partially	No	No
O – V1	*"View from N80 in the townland of Ballynasragh, Pigeonhouse, Killeigh, Derryclure, Derrybeg and Cloncon. View to South-West Slieve Bloom Mountains and Killeigh Village." (OCDP 2021-2027)*	Southwest	No	Yes	No, the view is directed away from the proposed turbines. Where the proposed turbines will be visible, visibility will be greatly mitigated by distance.
O – SR R440 / O – SR R421	*"This route provides an attractive drive within the open countryside along the Slieve Bloom Mountains and around the foothills of the mountains."(OCDP 2021-2027)*	South-East	No	Large patches of no TV. Where TV does occur, visibility will be greatly reduced by	No

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
				distance and visual screening due to roadside vegetation.	
G – V52	*"This view is from the middle of the Banagher bridge." (GCDP, Appendix 4 – Landscape Character Assessment)*	North-West	No	Partial	This scenic view has been scoped in as there is partial TV from Banagher Bridge, over the river, in the direction of the proposed turbines.
R – V25	*"Elevated view from third class road overlooking the Shannon callows to the south/southeast, with undulating farmland and mature trees. View to north/northeast overlooking flat raised cutover bog." (RCDP 2022-2028)*	South/ southeast/ northeast	Partially	No	No
W – V1	*"View over Lough Ree from parking/picnic area on the N 55 Road between Ballykeeran and Glasson. (WCDP, 2021 – 2027)*	Northwest	No	No	No
W - V9	*Panoramic views from Knockastia Hill, Coolatoor from the local road that rings the Knockastia Hill." (WCDP, 2021 – 2027)*	Panoramic	Yes	Some TV on the southern section of the scenic view.	Yes, visibility may occur from elevated vantage points within this location.
W – V10	*"View of the south-east face of Kilbeggan Distillery from bridge over the River Brosna on Regional road R446." (WCDP, 2021 – 2027)*	Southwest	No	Yes	No, there will be no or very limited actual visibility of the proposed turbines as a result of the distance of the receptor from the proposed turbines and visual screening by

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
					infrastructure surrounding the site.
W – V11	*"View of Old Mill outside Kilbeggan from the intersection of the Local road L-524 with the Regional road R-389. "(WCDP, 2021 – 2027)*	South	No	Partial	No, there will be no or very limited visibility of the proposed turbines as a result of the distance of the receptor from the proposed turbines, and the vegetation surrounding the view.
W-V2	"The focus of this view is Lough Ree to the north. Hare Island is an important feature of this view". *(WCDP, 2021 – 2027)*	North	No	Partial	No, given the distance and the built infrastructure surrounding the proposed turbines, visibility is not likely to occur.
W – Lough Ree Driving Route	A looped driving route to the east of Lough Ree following the lake shore.	N/A	Partial	Small patches of TV along the stretch of the loop	No, there will be no or very limited actual visibility of the proposed turbines from the small section of the route with TV as a result of roadside screening and the distance of the receptor from the proposed turbines.
W - Tain Trail	Route north of Kilbeggan town along the R389 Regional Road	N/A	Partial	Very limited patches of TV on the portion of the scenic route located with the LVIA	No, there will be no or very limited actual visibility of the proposed turbines from the small section of the route with TV as a result of roadside screening and the distance of the

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
				Study Area.	receptor from the proposed turbines.
W - Westmeath Way	*One long-distance National Waymarked Way exists from Mullingar to Kilbeggan (WCDP, 2021 – 2027)*	N/A	Partial	Very limited patches of TV of the scenic route that is located with the LVIA Study Area	No, there will be no or very limited actual visibility of the proposed turbines from the small section of the route with TV as a result of roadside screening and the distance of the receptor from the proposed turbines.
20-25km					
G-V51	*The focus of this view is the River Shannon and the Incherky in the background. The old battery (covered in trees) is an important feature of this view. (GCDP, Appendix 4 – Landscape Character Assessment)*	South-east	No	Yes	No, given the distance to the proposed turbines and visual screening by vegetation within the landscape, visibility of the proposed turbines is not likely to occur.
W-V2	*Views of Lough Ree from Coosan waterfront from pier, slipway and forest walk trail. (WCDP, 2021 – 2027)*	North	No	Partial	No, given the distance and the dense vegetation in the direction of the proposed turbines, visibility is not likely to occur.
W-V3	*Views of Lough Ree from Carnakill pier and Portlick Forest Walk from pier and forest walking trail. (WCDP, 2021 – 2027)*	South-west	No	No	No
W-V4	*View of Lough Ree from Portlick Scout Campsite from short stretch of road along lake shore. (WCDP, 2021 – 2027)*	North-west	No	No	No

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
W-V5	*View of Lough Ree from small pier at lake shore. (WCDP, 2021 – 2027)*	West	No	No	No
W-V8	*Panoramic views over countryside to the north off Ballymore-Mullingar Road from Local road L5342. 2027)*	North	No	No	No
W-V36	*Panoramic view of surrounding countryside from atop the Hill of Uisneach. View from point on site trail, by St Patrick's Bed. (WCDP, 2021 – 2027)*	Panoramic	Yes	Partial	Given that it is on the tentative list as a UNESCO site, as a precaution, it is included for further assessment.
W-V12	*View of Long Hill Esker from south of the R-446 Regional Road. (WCDP, 2021 – 2027)*	East	No	Full	No, given the distance to the proposed turbines and the visual screening by vegetation in the direction of the proposed turbines, visibility is not likely to occur.
L-V17	Views over farmland and Slieve Bloom Mountains.	South	No	Full	No, given the distance to the proposed turbines and the visual screening by vegetation in the direction of the turbines, visibility is not likely to occur.
O-V14	View from R440 in the townlands of Kyle, Cloghanmore, Streamstown, Ballinree, Killaun. View towards Slieve Bloom Mountains	South-east	No	None	No
O-V18	View from Road No. L-08008 in the townlands of Grange, Belhill, Longford Big and Church Land. Views towards Seir Keiran Monastic Site	West	No	Partial	No, at this distance, the proposed turbines, if visible, will appear as

Map Ref.	Scenic Route/View Description	Direction of View	Directed to Turbines?	Theoretical Visibility (TV)	Scoped in for Assessment
					small elements in the distant background. As the protected view is not in the direction of the turbines, no significant effects are likely to occur.
O-V16	View from Road No. L-04025 in the townlands of Clonee, Cumber Lower. View westward over farmland	North-west	No	Partial	No, at this distance, the proposed turbines, if visible, will appear as small elements in the distant background. As the protected view is not in the direction of the turbines, no significant effects are likely to occur.
O-V2	View from Road No. L-08003 in the Slieve Bloom Mountains, townlands of Clough, Ballykelly, Coolcreen, Glenletter, Glenregan, Castletown, Forelacka and Glinsk. View towards Slieve Bloom Mountains, River Shannon northwards over lowlands.	Panoramic	Yes	Yes	Yes, scoped in as a precautionary measure

14.5.1.2 OSi Viewing Areas

Four viewing areas were identified in the LVIA Study Area according to Ordnance Survey of Ireland (OSi) mapping (last accessed on February 4th, 2026). The viewing areas are described below in Table 14-15.

Table 14-15 OSi Viewing Areas within the LVIA Study Area

Map Ref.	Description	Direction and Range of View	Directed to Proposed Turbines?	Theoretical Visibility	Scoped In
15-20km					
#40	Lough Ree Viewpoint	North-west	No	Yes	Given the distance and sensitivity from this Osi viewpoint, it has been scoped out form further assessment.
20-25km					
#134	Slieve Bloom Viewing Area	Panoramic	Partially	Full	Yes
#172	Slieve Bloom Viewing Area	Panoramic	Partially	Full	Yes
#207	Slieve Bloom Viewing Area	Panoramic	Partially	Full	Yes

14.5.1.3 Settlements

In order to identify which settlements within the LVIA Study Area should be considered for assessment and viewpoint selection, the settlement strategies and hierarchy set out in the core strategy of the County Development Plans of Counties Offaly, Westmeath, Galway, Laois, and Roscommon were consulted. The settlement hierarchies of the five counties in the LVIA Study Area use differing classifications and naming conventions. MKO have created a standardised settlement hierarchy to enable cross-comparison of these population centres and clarity within the visual baseline mapping and throughout this assessment. Each settlement is given one of the following classifications in consideration of its size, population density and existing designation in the relevant county development plan.

- County Hub Town
- Town
- Village
- Small Village of Local Importance

Table 14-16 below lists the settlements identified from the respective county development plans within the LVIA Study Area taking into consideration the individual county status within the settlement strategy and whether there is theoretical visibility indicated by the ZTV.

Table 14-16 Settlements within the LVIA Study Area

Settlement	County Settlement Hierarchy	Standardised Settlement Hierarchy	Theoretical Visibility	Scoped In for Further Assessment?
Up to 5km				
Ferbane	Town	Town	Primarily full	Yes
Pollagh	Village	Village	Full	Yes
Ballycumber	Village	Village	Primarily full	Yes
5 – 10km				
Ballinahown	Rural Node	Small Village of Local Importance	Primarily full	Yes
Castledaly	Rural Node	Small Village of Local Importance	Full	Yes
Moate	Self-Sustaining Growth Towns	Town	Primarily full	Yes
Clara	Town	Town	Primarily full	Yes
Belmont	Village	Village	Primarily full	Yes
Cloghan	Village	Village	Primarily full	Yes
10-15km				
Shannon Harbour	Village	Village	Primarily full	No, at this distance, views of the proposed turbines will be substantially visually screened by vegetation and built infrastructure in the flat landscape. Significant visual effects are not likely to occur.

Baylin	Rural Node	Small Village of Local Importance	Partial to none	No
Mount Temple	Rural Node	Small Village of Local Importance	Partial to none	No
Mucklagh	Village	Village	Partial	Yes, some visibility may occur from elevated vantage points where the proposed turbines could appear as small elements in the background of the view.
Mountbolus	Village	Village	Partial to none	No
Kilcormac	Town	Town	Primarily full	Yes
15-20km				
Banagher	Town	Town	Full on the NW section, none on the SE section	No, where visibility may occur, the proposed turbines will be viewed in the distant background. Significant visual effects are not likely to occur.
Shannonbridge	Village	Village	Partial	No, at this distance, views of the proposed turbines will be substantially visually screened by vegetation and built infrastructure in the flat landscape. Significant visual effects are not likely to occur.
Monksland	Regional Growth Centre	County Hub Town	Primarily full with pockets of no theoretical visibility.	No, at this distance, views of the proposed turbines will be substantially visually screened by vegetation and built infrastructure in the flat landscape. Significant visual effects are not likely to occur.
Athlone	Regional Growth Centre	County Hub Town	Primarily full, with pockets of no theoretical visibility.	No, views of the proposed turbines will be substantially visually screened by vegetation and built form within this low-lying settlement. Where visibility does occur, the proposed turbines will be viewed in the distant background.

				Significant visual effects are not likely to occur.
Glasson	Rural (Serviced)	Small Village of Local Importance	None	No
Kilbeggan	Self-Sustaining Growth Towns	Town	Primarily full, with pockets of no theoretical visibility.	No, given the distance from the proposed turbines and visual screening by vegetation existent within the surrounding landscape, views of the proposed turbines from this location will be extremely limited.
Tullamore	Key Town	County Hub Town	Primarily full, with pockets of no theoretical visibility.	Yes, given the significance of Tullamore being a 'key town' in County Offaly, it has been scoped in for further assessment.
20-25km				
Kinnitty	Village	Village	No theoretical visibility.	No
Birr	Self-Sustaining Growth Town	Town	No theoretical visibility.	No
Crinkle	Village	Village	Primarily no theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects
Riverstown	Village	Village	Limited Theoretical Visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects
Hudson Bay/Barymore	Serviced Village	Village	Primarily full theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects

Tubberclaire	Village	Small village of local importance	Primarily full theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects
Ballymore	Rural Serviced Village	Small village of local importance	Primarily full theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects
Loughnavalley	Village	Small village of local importance	No Theoretical visibility	No
Castletown Geoghegan	Rural Serviced Village	Small village of local importance	No Theoretical visibility	No
Ballynagore	Rural Serviced Village	Village	Patches of full theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects
Killeigh	Village	Village	Primarily no theoretical visibility	No
Clonaslee	Village	Village	Primarily full theoretical visibility	No, at a distance beyond 20km, and built form of the settlement, visibility is not likely to occur. Any visibility that may occur will not result in any significant visual effects

14.5.1.4 Recreational Routes

Recreational routes are sensitive receptors as people are likely to be using them in a recreational capacity where there is high value placed on views as well as the scenic amenities of the landscape. The term 'recreational routes' encompasses the following:

- Waymarked walking routes (Source – Sport Ireland Designated Trails)
- Cycle routes (Source – Sport Ireland Designated Cycle Routes)
- Scenic drives and tourist routes (e.g., the Wild Atlantic Way)

31 Recreational Routes were identified and located within the LVIA Study Area by examination of OSi maps and online sources (last accessed 4th February 2026) such as: Sportireland.ie/outdoors/Irelands-trails. Many routes of differing scale and prominence are located within the LVIA Study Area, thus only recreational routes of county or national importance were included in this LVIA. The routes are

shown on Figure 14-15 above and are listed in Table 14-17 below along with theoretical visibility distributed upon each route by ZTV mapping.

Table 14-17 Recreational Routes within the LVIA Study Area[6]

Map Ref.	Route Name	Description	Theoretical Visibility (TV)	Actual Visibility	Scoped In?
5-10km					
RR-23	Offaly Way	"*The Offaly Way is a 29-kilometre linear walking route in the midlands of Ireland that links the Slieve Bloom Way at the old village of Cadamstown with the Grand Canal Way and ends a few kilometres north of the canal at the ancient monastic site of Lemanaghan.*" (Sports Ireland Website)	Primarily full TV within 15km of the nearest proposed turbine. Beyond 15km, TV is limited.	Given its close proximity to the site, visibility will occur; however, it will be substantially less than indicated by the ZTV. The vegetated landscape, especially within the dense forestry in Turraun Nature Park will visually screen the proposed turbines along much of the route.	Yes
RR-12	Pilgrims Road to Clonmacnoise	"*This 24.4km route follows the ancient Pilgrim's Road from Ballycumber to Clonmacnoise monastic site, which runs*	Primarily full TV along the extent of the route with patches of no TV along the western section of the route.	Visibility is likely to occur along the open flat landscapes along this route; however, views will be limited from	Yes

[6] *For purposes of clarity, continuity, and reference to mapping figures in this chapter; recreational routes are labelled 'RR', prefixed with the last number in each label corresponding to the number assigned to each recreational route in the mapping figures in this chapters.*

		along the crest of an esker." (Discover Ireland Website)		roadside vegetation.	
RR-7	Grand Canal Way	*"The Grand Canal Way follows pleasant grassy towpaths, gravel, and sometimes tarmac canal-side roads from Lucan Bridge near Adamstown in County Dublin 124km to Shannon Harbour on Ireland's longest river. Much of the landscape through which the route passes has been untouched by modern agriculture and remains a linear oasis for the flora and fauna that was originally common throughout our countryside."* (Sports Ireland Website)	Primarily full TV along the extent of the trail within the LVIA Study Area.	Actual visibility will be less than indicated by the ZTV. Localised topography and vegetation within the landscape will visually screen the proposed turbines along much of the route.	Yes
R-16	Lough Boora – Turraun Cycle Route	"*This trail on the Pollagh side of the Turraun Wetland is the most diverse trail in the park in terms of habitats and the number of*	Full TV.	Actual visibility will be substantially limited due to the dense forestry and roadside vegetation surrounding	Yes

		species present. Depending on the time of year, you may see the insectivorous round-leaved sundew, yellow spikes of bog asphodel, dragonflies, and damselflies." (Sports Ireland Website)		the majority of the route.	
5-10km					
RR-17	Lough Boora – Mesolithic Route	*"The Lough Boora Mesolithic Loop takes about 2.5 hours to complete. It follows a trail of bog road and sandy track through the leabeg wetlands and passes by an ancient Mesolithic settlement dating back to 6500BC."* (Discover Ireland Website)	Full TV.	Visibility is not likely to occur given the routes location within Lough Boora Discovery Park, surrounded by dense forestry.	No
RR-13	Lough Boora – Finnamore Lakes Route	*"The Finnamore Lakes Route can be accessed on foot only and consists of Finnamores Upper and Lower, where avid anglers*	Full TV.	Actual visibility will be substantially limited due to the dense forestry surrounding Lough Boora. Where	No

		can try their luck at these coarse fisheries." (Lough Boora Discovery Park Website)		visibility does occur, the proposed turbines will be viewed in the distant background. Significant effects are not likely to occur.	
RR-15	Lough Boora – Farmland Route	Short walking route with Lough Boora Discovery Park	Full TV.	Visibility is not likely to occur given the routes location within Lough Boora Discovery Park, surrounded by dense forestry.	No
RR-22	Lough Boora – Sculpture Route	Short walking route with Lough Boora Discovery Park	Full TV.	Visibility is not likely to occur given the routes location within Lough Boora Discovery Park, surrounded by dense forestry.	No
RR-3/ RR-4	Birr Cycle Hub Loop 5/5A	*"This is a figure of eight loop to the north of Birr. Start off along the outside of the castle walls and turn left through the demesne farmland. Continue on through the crossroads to Cloghan for refreshments. You can take the short route*	Primarily full TV with pockets of no visibility within 15km of the proposed turbines and large patches of no TV beyond 15km of the proposed turbines.	Actual visibility will be limited owing to visual screening by roadside vegetation and built infrastructure within the flat landscape. Significant effects are not likely to occur.	No

		across to the Clononey Castle. The return leg of this cycle route will bring you through Shannon Harbour and Banagher Town before a fast downhill road returns you to Birr." (Sports Ireland Website)			
RR-1/ RR-5	Birr Cycle Hub Loop 3/3A	*"Travelling east towards the foothills of the scenic Slieve Bloom Mountains, the full loop is a challenging enough spin, but with 3a and 3b offering a shorter way back there is something here for everyone. Climbing steadily out of the town, the route levels off before the early Christian monastic site of St Kieran. Kinnity and Cadamstown are two interesting and scenic villages ideal for a snack stop"* (Sports Ireland Website)	Primarily full TV within 15km of the proposed turbines, with larger patches of no TV beyond 15km.	On-ground visibility will be limited to the route in closer proximity to the site. Localised topography, vegetated landscape, and distance beyond 15km will limit views towards the proposed turbines.	Yes, as visibility may occur along elevated vantage points.
RR-18	Mullingar-Athlone Old	*"The entire 43km Old Rail*	Mixed TV along the	Actual visibility will	Yes

	Rail Trail Greenway	*Trail Greenway in County Westmeath is an off road and flat pathway which is ideal for a leisurely cycle or stroll with the whole family."* (Discover Ireland Website)	route within the LVIA Study Area with patches of full TV and no TV.	be less than indicated by the ZTV. Localised topography and vegetation within the landscape will visually screen the proposed turbines along much of the route. However, visibility may occur from elevated vantage points such as bridge crossings.	
RR-21	Clara Esker Ballinlough Doorey Loop	*"This trail is mainly on forest gravel track, grassy track, boardwalk and a small section of tarmac road across bog and through beautiful deciduous woodland of native trees in an area of some of the most spectacular eskers in Europe, passing pre-famine ruins and with splendid views from Rabbit Hill of Croghan Hill, Charleville Castle and the Slieve Bloom Mountains."*	Full TV.	At this distance actual visibility will be limited due to the dense forestry and roadside vegetation. The designated views from this route and not directed towards the proposed turbines. Where visibility does occur, the proposed turbines will be viewed as small scale elements in the distant background. Significant effects are	No

		(Sports Ireland Website)		not likely to occur.	
10-15km					
RR-10	Green Heartlands Cycle Route	*"The Green Heartlands offers cyclists the opportunity to discover the beauty of mid and south Roscommon. The 211km circuit includes a dividing Link Road creating an option to explore a shorter loop."* (Visit Roscommon Website)	Primarily full TV with pockets of no TV approximately 18km from the nearest proposed turbine.	Potential long-range views may occur from elevated vantage points	Yes
RR-2	Birr Cycle Hub Loob 3B		Patches of full TV along the extent of the route	Potential long-range views may occur from elevated vantage points	Yes
15-20km					
RR-14	Westmeath Way	*"Stretching some 33 kilometres (21 miles) in length from Kilbeggan to Mullingar, the Westmeath Way provides a wonderful walking experience that includes scenic riverside meadows, rich pastureland, lake views, bog road*	Mixed TV along the route within the LVIA Study Area with patches of full TV and no TV.	Actual visibility will be substantially less than indicated by the ZTV. Localised topography, distance and vegetation within the landscape will visually screen the proposed turbines along much of the route.	No

		sections, serene woodland areas, and quiet canal towpath sections. Truly a rich variety of walking terrain to give a true flavour and experience of the Westmeath Countryside" (Westmeath County Council website)			
RR-8	Kinnity – Knockbarron Loop	*"Knockbarron Woods are located close to the picturesque village of Kinnitty in County Offaly is nestled in the foothills of the Slieve Bloom Mountains. The woods preserve one of the finest and most intact esker systems to be found anywhere in Ireland. Here also is an area of old woodland with much of ecological interest at whatever time of year you visit. This loop is one of five Eco-Walks established by the Slieve*	Mixed TV along the route within the LVIA Study Area with patches of full TV and no TV.	Actual visibility will be very limited due to distance and screening within the dense forest.	No

		Bloom Rural Development Society in collaboration with Coillte and the local communities" (Discover Ireland Website)			
RR-20	Cadamstown – Pauls Lane Loop	*"This varied loop follows minor road, old laneways, and riverside paths. It passes derelict Bordingstown village and young coniferous woodland before reaching the Silver River where there is beautiful river scenery as you walk through woodland alongside the rushing waters."* *(Sports Ireland Website)*	Full TV.	Actual visibility will be substantially less than indicated by the ZTV. Distance and vegetation within the landscape will screen the proposed turbines from view along much of the route.	No
RR-19	Cadamstown Nature Trail Loop	*"The Cadamstown trailhead is the starting point for two beautiful, looped walks which follow the Silver River and then venture into surrounding Slieve Bloom area. The long distance Slieve Bloom Way and also the*	Full TV.	Actual visibility will be substantially less than as indicated by the ZTV. Distance and vegetation within the landscape will screen the proposed turbines from view along much of the route.	No

		Offaly Way can also be accessed from this point. There are a number of very important heritage features in the vicinity including Letter Abbey, Ardara Bridge, and the Giant's Grave." (Slieve Bloom Website)			
RR-9	Hymany Way	*"The Hymany Way traverses the most beautiful and least explored of local areas with its watercourses, including the biodiversity of the Shannon River and the species rich mosaic of habitats along its banks, cutover and drained and raised bog, forest paths and quiet country roads."* (Discover Ireland Website)	Full TV.	Given the distance from the proposed turbines and visual screening by roadside vegetation, visibility of the proposed turbines is not likely to occur.	No
RR-11	Shannonbridge - River Shannon Loop	*"The River Shannon Loop takes the walker north along the banks of the Shannon and back by a quiet bog road*	Mixed TV along the route within the LVIA Study Area with patches of full TV and no TV.	Given the distance from the proposed turbines and visual screening from roadside	No

		and lane passing alongside a section of woodland at the northern end. Features of interest include the imposing Napoleonic Fortifications and the long bridge spanning the Shannon River" (Discover Ireland Website)		vegetation, visibility of the proposed turbines is not likely to occur.	
20-25km					
RR-24	Mullingar Cycle Hub Loop 2	29.8-mile loop trail near Mullingar, County Westmeath *(All Trails Ireland)*	Primarily no TV.	Given the distance from the proposed turbines and visual screening by roadside vegetation, visibility of the proposed turbines is not likely to occur.	No
RR-25	Glenregan Forest – Glenregan Loop	Loop within Slieve Bloom Mountains	Patches of full TV.	Visibility may occur from elevated vantage points along the trail where there is limited vegetative screening.	No, as views from this trail will be screened by the forestry.
RR-28	Slieve Bloom Way	Loop within Slieve Bloom Mountains	Patches of full TV.	Visibility may occur from elevated vantage	Given that this recreational route is located

				points along the trail where there is limited vegetative screening.	within the Slieve Bloom Mountain, it has been scoped in as a precautionary measure
RR-27	Giants Grave	Loop within Slieve Bloom Mountains	Patches of full TV.	Visibility may occur from elevated vantage points along the trail where there is limited vegetative screening.	Given that this recreational route is located within the Slieve Bloom Mountain, it has been scoped in as a precautionary measure
RR-26	Kinnitty Castle Loop		Pockets of full TV.	At this distance, where TV is indicated, visibility will be limited by dense forestry along the walking route	Given that this recreational route is located within the Slieve Bloom Mountain, it has been scoped in as a precautionary measure

14.5.1.5 Recreational, Cultural Heritage and Tourist Destinations

Recreational, cultural heritage, and tourist destinations were identified within the LVIA Study Area throughout a desktop exploration of tourism plans within the respective County Development Plans, (last accessed 4th February 2026) as well as taking into consideration the most popular tourist destinations in Counties Offaly, Westmeath, Galway, Laois, and Roscommon listed on Tripadvisor.ie. This section also identifies popular and sensitive cultural heritage receptors in the LVIA Study Area.

The impact assessment in this chapter considers the effects of the Proposed Project on cultural heritage receptors from the perspective of a visitor to a site, monument, or heritage landscape. In this regard, only prominent and popular cultural heritage receptors are identified in the visual baseline exercise. A comprehensive description and assessment of all cultural heritage receptors are provided in Chapter 13 of this *EIA*R Cultural Heritage.

Prominent outdoor tourism, recreational destinations and cultural heritage destinations identified within the LVIA study area are listed below in Table 14-18.

Table 14-18 Recreational, Cultural Heritage and Tourist Destinations within the LVIA Study Area

Destination	Description	Theoretical Visibility (TV)	Actual Visibility	Scoped In?
Up to 5km				
Lemanaghan Monastic Site (**includes St. Manchan's Church and Cemetery, St. Mella's Cell and Hermitage)	*"Lemanaghan Monastic Site, located near the boglands at Lemanaghan, Co. Offaly, was founded by St Manchan in the 7th century. The information board on site describes the church, holy well, toghers (wooden roads) and the oratory. You will also find directions to Boher Church to see the shrine to St Manchan."* (Discover Ireland Website)	Full TV.	Given the proximity to the proposed turbines visibility likely to occur.	Yes
Ferbane Railway Bridge	Historical Landmark	Full TV.	Visibility not likely to occur given the dense mature vegetation enclosing the landmark.	No
Ferbane Bog Boardwalk	Tourist attraction	Partial TV.	Visibility is not likely due to visual screening by dense vegetation and built infrastructure	No
Coole Castle	Historical Landmark	Full TV.	Visibility likely to occur given the open landscape.	Yes
Gallen Abbey / Gallen Cemetery	Historical Landmark	Full TV.	Visibility not likely to occur given the dense mature	Given that this is a designated monastic site, it has been scoped

			vegetation enclosing the landmark.	in as a precautionary measure
5-10km				
Rahan Monastic Site and Church Ruins (incl. Lemanaghan Hermitage)	Historical Landmark	Full TV.	Visibility is likely to occur; however, views will be limited given the natural vegetation surrounding the site.	Yes
The Gathering of Stones monument	Tourist attraction in Lough Boora Discovery Park	Full TV.	In reality, due to the dense vegetation within the area, views will be limited towards the turbines due to the substantial visual screening.	No
Dun Na Si Amenity & Heritage Park	Heritage Park on Moate, Co. Westmeath	Full TV.	In reality, visibility is very unlikely due to the dense vegetation within the area and built infrastructure screening views of the turbines.	No
10-15km				
Durrow Church and High Cross (Durrow Abbey)	Historical Landmark/ Religious Destination	Partial TV.	At this distance, and given the surrounding vegetation, visibility is not likely.	Given the sensitivity of this historical landmark, as a precautionary measure, it has been scoped in for assessment
Clonmacnoise (incl. Clonmacnoise Castle and The Nun's Church)	Monastery / Historical Landmark	Partial TV.	Actual visibility will not occur due to visual	Yes

			screening by vegetation and other infrastructure enclosing the heritage site; however, given the high sensitivity of this landmark as a UNESCO world heritage site, it has been scoped in for further assessment.	
15-20km				
Drum Monastic Site	Historical Landmark/ Religious Destination	None	No	No
Shannonridge Marina	Place of recreational activity	None	No	No
Shannon Bridge Fortifications	Historical landmark	Full TV.	Visibility may occur from elevated vantage points within the landmark.	No, given the distance, significant visual effects are not likely to occur
20-25km				
Hill of Uisneach	Protected Historical Site / UNESCO World Heritage Site	Patches of full TV.	Visibility may occur from elevated vantage points within the hill	Yes
Birr Conservatory	Protected Historical Site / UNESCO World Heritage Site	Small pocket of partial theoretical visibility.	Given the distance and screening from the built environment surrounding the Birr Conservatory, visibility of the proposed turbines is not likely to occur.	No

14.5.1.6 Transport Routes

Motorways, national primary and national secondary roads were identified within the LVIA Study Area. The visual baseline exercise determined that most visibility of the proposed turbines will occur in close proximity to the site; therefore, only national and regional roads within 10km of the proposed turbines were included in the Visual Baseline exercise. Further, regional roads and local transport routes within 3-5km (3km in the case of local roads and 5km in the case of regional or national roads) of the proposed turbines were assessed as part of the Route Screening Analysis included in Section 14.3.3.

Table 14-19 (below) lists the transport routes and the geographical extent of theoretical visibility upon each section of the identified transport routes as illustrated in the Visual Baseline and ZTV map. On-site appraisals determined that in most instances there will be limited visibility from large portions of these routes where the ZTV has indicated full theoretical visibility due to local topography and roadside screening. For the purpose of viewpoint selection, locations were identified where the most open visibility is likely to occur on these transport routes.

Table 14-19 Major Transport Routes within the LVIA Study Area

Transport Route	Theoretical Visibility	Scoped In?
Up to 5km		
N62 National Road	Primarily full theoretical visibility with patches of no theoretical visibility along the extent of the route.	Yes
R436 Regional Road	Full theoretical visibility within 5km of the proposed turbines, with pockets of no theoretical visibility beyond 5km.	Yes
R444 Regional Road	Full theoretical visibility with patches of no theoretical visibility along the extent of the route.	Yes
5-10km		
R446 Regional Road	Primarily full theoretical visibility within 10km of the proposed turbines with increased patches of no theoretical visibility beyond 10km.	No, given the distance from the proposed turbines and the dense vegetative screening bordering the regional road, views of the proposed turbines will be largely screened along the majority of the route. Where visibility does occur, it will be limited to occasional breaks in the vegetation, with the turbines appearing as small-scale elements in the distant background. Significant effects are not likely to occur.
R420 Regional Road	Primarily full theoretical visibility with a large patch of no theoretical visibility at 10km from the nearest proposed turbine.	No, given the distance from the proposed turbines and the dense vegetative screening bordering the regional road, views of the

		proposed turbines will be largely screened along the majority of the route. Where visibility does occur, it will be limited to occasional breaks in the vegetation, with the turbines appearing as small-scale elements in the distant background. Significant effects are not likely to occur.
R437 Regional Road	Primarily full theoretical visibility with small pockets of no theoretical visibility.	No, given the distance from the proposed turbines and the dense vegetative screening bordering the regional road, views of the proposed turbines will be largely screened along the majority of the route. Where visibility does occur, it will be limited to occasional breaks in the vegetation, with the turbines appearing as small-scale elements in the distant background. Significant effects are not likely to occur.
R357 Regional Road	Full theoretical visibility.	As this regional road is a designated scenic route in the local planning policy, it has been scoped in for further assessment as a precautionary measure.
M6 Motorway	Primarily full theoretical visibility within 10km of the site with increased patches of no theoretical visibility beyond 10km.	No, given the distance from the proposed turbines and the dense vegetative screening bordering the regional road, views of the proposed turbines will be largely screened along the majority of the route. Where visibility does occur, it will be limited to occasional breaks in the vegetation, with the turbines appearing as small-scale elements in the distant background. Significant effects are not likely to occur.

14.5.2 Visual Receptor Preliminary Analysis

After identifying all visual receptors in the LVIA Study Area, the preliminary analysis was carried out to determine the likely visibility of the proposed turbines using ZTV mapping and on-site visibility appraisals, as reported in the tables of the previous sections. Following this, the final list of visual receptors was selected for further assessment as part of this LVIA using viewpoint selection and photomontage visualisation, supplemented by photowire, or early-stage 'draft' photomontage, analysis. Viewpoints, photomontages and photowires are explained below in Section 14.7.3.2.1.

Below, Table 14-10 presents the final list of visual receptors selected for assessment in this LVIA and identifies the viewpoint number(s) (indicated by 'VP') and/or photowire number(s) (indicated by 'PW') representative of that receptor. All viewpoint and photowire locations are mapped along with the visual receptors below in the subsequent Section 14.5.

Table 14-20 Visual Receptors Scoped In for Further Assessment

Visual Receptor Category	Visual Receptor	Relevant Viewpoint (VP) / Photowire
Designated Scenic Routes and Views	O-V3	VP02, PWVP-B
	O-V10	PWVP-G
	O-V19	PWVP-D
	O-SR R357	VP08, PWVP-F
	W-Old Rail Trail	PWVP-J
	G-V52	PWVP-E
	W-V9	VP19
	W-V36	VP20
	O-V2	VP10
Osi Viewing Points	#134 Slieve Bloom Viewing Area	VP10
	#172 Slieve Bloom Viewing Area	VP10
	#207 Slieve Bloom Viewing Area	VP10
Settlements	Ferbane	PWVP-G, VP09, VP01, PWVP-L
	Pollagh	VP03
	Ballycumber	VP07, PWVP-P, PWVP-N, VP15
	Ballinahown	VP05
	Castledaly	PWVP-J

	Moate	PWVP-J
	Clara	PWVP-C, PWVP-A, VP04
	Belmont	PWVP-G
	Cloghan	VP08
	Kilcormac	PWVP-K
	Tullamore	VP06
	Mucklagh	VP06
Recreational Routes and Cultural Heritage & Tourist Destinations	Offaly Way	VP12, VP13, PWVP-P, PWVP-K
	Pilgrims Road to Clonmacnoise	VP02, VP05, VP70, VP18, PWVP-B
	Grand Canal Way	VP03, PWVP-D
	Lough Boora Turraun Cycle Route	VP08
	Green Heartlands Cycle Route	VP02
	Birr Cycle Hub Loop 3/3a	VP08
	Mullingar-Athlone Old Rail Trail Greenway	VP19, PWVP-J
	Birr Cycle Hub Loop 3//3b	VP08, PWVP-K
	Mullingar - Athlone Old Rail Trail Greenway	PWVP-J
	St Manchan's Church and Cemetery	VP07
	Slieve Bloom Way	VP10
	Giants Grave	VP10
	Kinnitty Castle Loop	VP10
	Coole Castle	PWVP-L
	Gallen Abbey / Cemetery	PWVP-G
	Lemanaghan Monastic Site, Lemanaghan Hermitage	VP12, VP13, VP14

	Rahan Monastic Site and Church Ruins	PWVP-D
	Clonmacnoise	PWVP-B
	Hill of Uisneach	VP20
Transport Routes	N62 National Road	VP05
	R436 Regional Road	VP11, VP01, PWVP-N, PWVP-P
	R444 Regional Road	VP05
	R357 Regional Road	VP08, PWVP-F

The viewpoints listed above were selected according to the key visual receptors identified in the Visual Baseline where open visibility of the proposed turbines is likely to occur.

14.5.3 Visual Amenity from Residential Receptors

The likely visibility of the proposed turbines was appraised during multiple surveys conducted during the years 2020 - 2025, which determined that most visibility would occur within 5km of the proposed turbines. The site is a flat landscape of cutaway peat, degraded bog and agricultural fields. It is a modified working landscape; however, it is also a settled landscape with residential housing organised along the local road network as well as within small settlement clusters. Residential receptors located in close proximity to the site will likely have views of the proposed turbines and are likely to have the greatest visual effects arising as a result of the proposed turbines. Several viewpoint (VP) locations representing residential receptors located in close proximity to the proposed turbines were assessed, resulting in 10 no. of the VPs in close proximity (within 5km) being selected to represent residential receptors (as well as other receptors) for inclusion as photomontages in the EIAR Volume 2 Photomontage Booklet accompanying this chapter. The photomontages are assessed in Appendix 14-3 and discussed later in this chapter. Furthermore, 6 no. VPs are presented as early-stage 'draft' photowires in the Photowire Visualisation Booklet (Appendix 14-5 of this EIAR) are also utilised to represent residential receptor (as well as other receptors). The following representative viewpoints are located in proximity to residential receptors and settlement centres within 5km from the proposed turbines.

- VP05 (Lackagh More)
- VP18 (Cooldorragh)
- VP15 (Kilpatrick)
- VP03 (Pollagh)
- VP16 (Straduff)
- VP11 (Lemanaghan)
- VP12 (Lemanaghan)
- VP13 (Lemanaghan)
- VP01 (Ballydaly)
- VP09 (Ballylin)
- PWVP-N (Cornafurrish and Corrabeg)
- PWVP-H (Grogan and Corroe)
- PWVP-P (Lemanaghan)
- PWVP-L (Coole)
- PWVP-G (Gallen)
- PWVP-O (Ballylin)

The impact of the proposed turbines on residential receptors is discussed in detail in Section 14.7.3.2.4.

14.6 Cumulative Context

In terms of assessing cumulative landscape and visual effects within the LVIA Study Area, other wind energy projects are of primary focus, as only these can be described as tall, vertical elements in the landscape which have the greatest potential to give rise to significant cumulative landscape and visual effects. As per best practice guidance detailed in Section 1.10 of Appendix 14-1 LVIA Methodology, the assessment of cumulative landscape and visual effects needs to be appropriate and proportional, with a key focus on identifying the scenarios where the greatest potential for significant cumulative effects are likely to arise. Based upon professional judgement and the experience of the assessment team, cumulative landscape and visual effects in combination with single turbines with a tip height lower than 50 metres beyond 3km from the proposed turbines have been scoped out of this assessment, as significant cumulative effects are unlikely to arise from these scenarios.

The purpose of this section is to identify all wind farm developments (existing, permitted, and proposed) 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 Project, both independently, as well as in combination with all other existing and operational wind farm development in the LVIA Study Area. This chapter also assesses the Proposed Project in combination with the '*likely future receiving environments'* (EPA, 2022) which includes all existing, permitted and proposed wind farm developments in the LVIA Study Area.

The effects reported both in this chapter and within the assessment appendices (Appendix 14-2: LCA Assessment; Appendix 14-3: Photomontage Assessment Tables) use appropriate and logical narrative to discuss cumulative interactions between the Proposed Project and all other wind energy developments.

Other wind energy developments within 25km of the proposed turbines were identified by a search of relevant online Planning Registers, reviews of relevant EIAR (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future projects. Please see the detailed cumulative assessment methodology in Section 2.10.1 of Chapter 2. 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 have been constructed.

The list of existing, permitted and proposed wind turbines present within the LVIA Study Area are listed in Table 14-21 below:

Table 14-21 Other Wind Farms within the LVIA Study Area

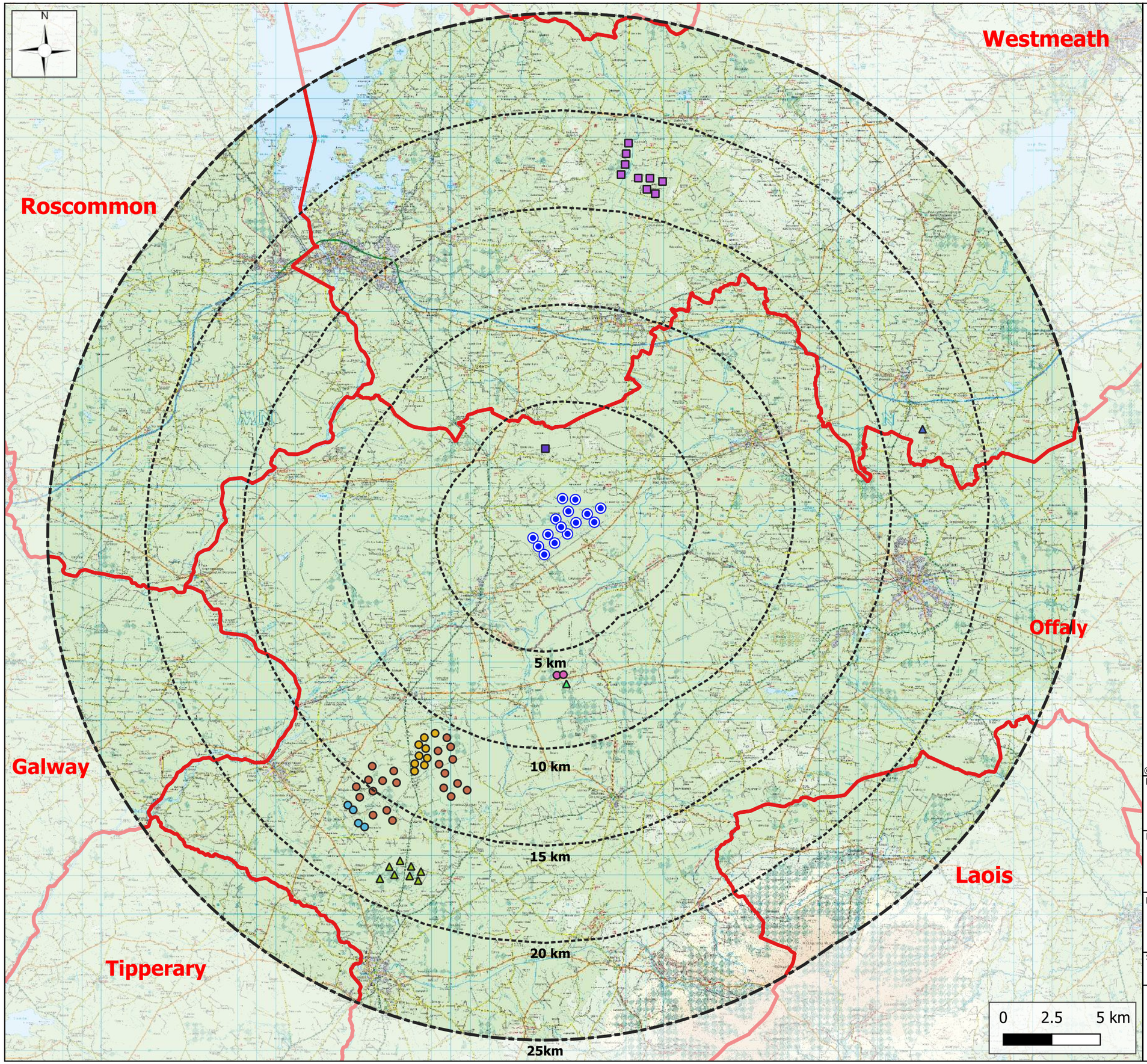
Other Wind Farms	Status	No. of Turbines within LVIA Study Areaa	Distance from the Nearest Proposed Turbine
5 to 10km			
Bellair Wind Farm	Proposed	Unknown	Indicative site location point is located 2.7km north of proposed turbine T10
Leabeg Wind Farm	Existing	2	6.2km south from proposed turbine T03
Lea Mor turbine	Permitted	1	6.8km south from proposed turbine T03

10 to 15km			
Derrinlough Wind Farm	Existing	21	10.7km south-west from proposed turbine T03
Cloghan Wind Farm	Existing	9	10.8km south-west from proposed turbine T03
15 to 20km			
Meenwaun Wind Farm	Existing	5	16.4km south-west from proposed turbine T03
Cush Wind Farm	Permitted	8	17.4km south-west from the nearest proposed turbine (T03)
Umma More Wind Farm	Proposed	9	16.2km north from the nearest proposed turbine (T10)
Kilbeggan Turbine	Permitted	1	17km east from the nearest proposed turbine (T15)

There are 4 no. existing, 1 no. permitted and 2 no. proposed wind farms within a 25km radius of the proposed turbines. There is also 2 no. permitted singular turbines within a 25km radius of the proposed turbines. The locations of these 7 no. wind farms, and 2 singular turbines are shown on the Cumulative Context Map, Figure 14-17 below. The cumulative turbines are primarily located to the southwest of the Proposed Project site. In the case of cumulative turbines being theoretically visible from the selected viewpoints of this LVIA, then all turbines were included within the proposed photomontage imagery in the Photomontage Booklet. The cumulative comparative theoretical visibility of these cumulative turbines and the proposed turbines are illustrated and discussed below in Section 14.7.3.2.6.

It is acknowledged that the proposed Bellair Wind Farm is located approximately 2.7 km north of the proposed turbines. However, at the time of writing, no detailed information regarding the Bellair Wind Farm, including turbine numbers and heights is available in the public domain. As a result, this has not been factored into the impact assessment of specific receptors. However, some discussion on cumulative landscape and visual interactions is provided in cumulative visual effects: See Section 14.7.3.2.6

An assessment of cumulative landscape and visual effects is included in the assessment of effects detailed in Section 14.7 – Likely Significant Landscape and Visual Effects.



Map Legend

- LVIA Study Area
- County Borders
- Proposed Turbine Locations

Cumulative Wind Farms within the LVIA Study Area

- Bellair Wind Farm (proposed)
- Cloghan Wind Farm (existing)
- Cush Wind Farm (permitted)
- Derrinlough Wind Farm (existing)
- Kilbeggan Turbine (permitted)
- Lea Mor Turbine (permitted)
- Leabeg Wind Farm (existing)
- Meenwaun Wind Farm (existing)
- Umma More Wind Farm (proposed)

Drawing No.

Figure 14-17

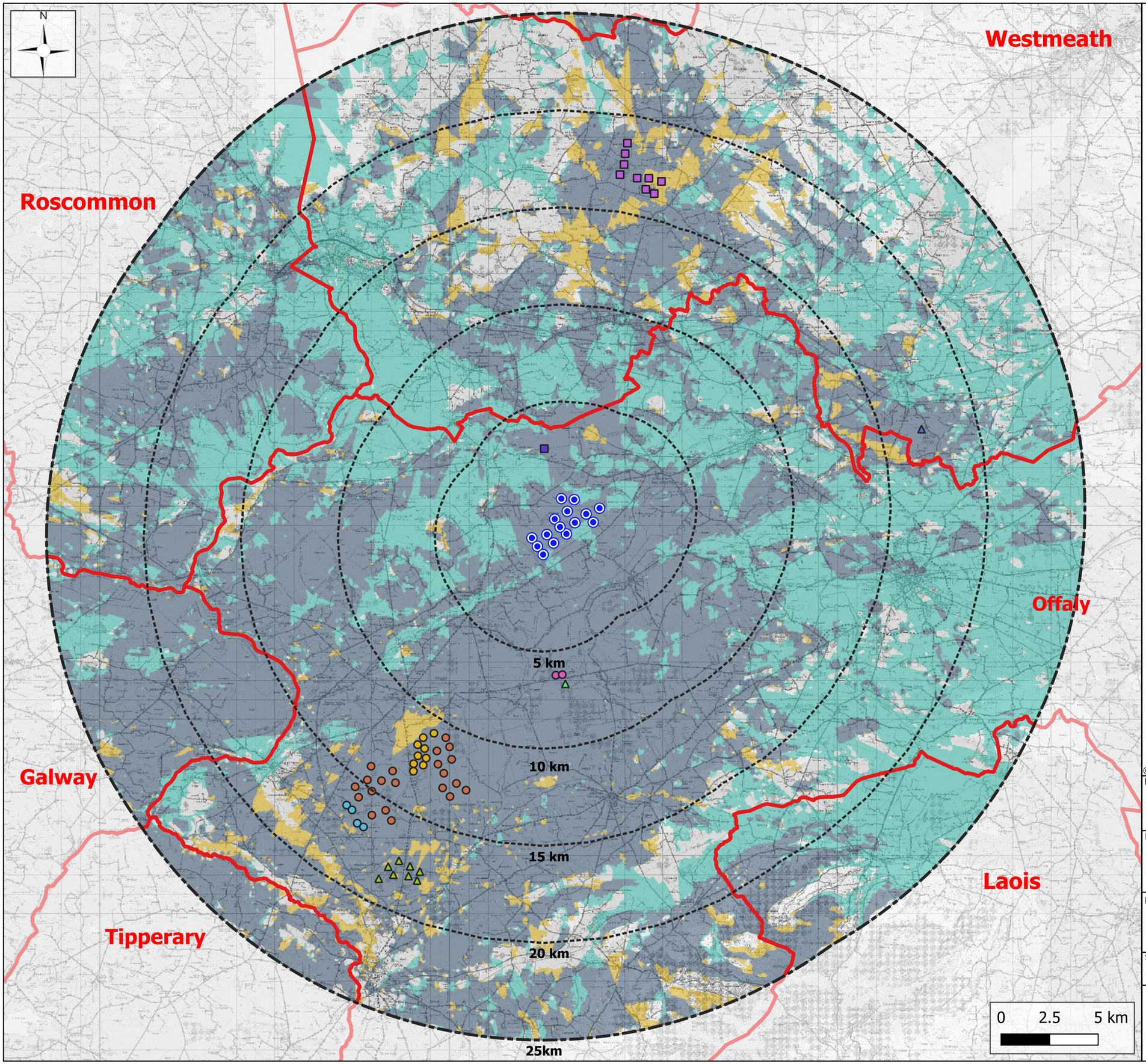
Drawing Title

Cumulative Context

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	30/01/2026	GL	DM



Map Legend

- LVIA Study Area
- County Borders
- Proposed Turbine Locations

Cumulative Wind Farms within the LVIA Study Area

- Bellair Wind Farm (proposed)
- Cloghan Wind Farm (existing)
- Cush Wind Farm (permitted)
- Derrinlough Wind Farm (existing)
- Kilbeggan Turbine (permitted)
- Lea Mor Turbine (permitted)
- Leabeg Wind Farm (existing)
- Meenwaun Wind Farm (existing)
- Umma More Wind Farm (proposed)

Cumulative Comparative ZTV

- Only Proposed Turbines Theoretically Visible
- Only Cumulative Turbines Theoretically Visible
- All Turbines Theoretically Visibile

Drawing No.

Figure 14-18

Drawing Title

Cumulative Comparative ZTV

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	30/01/2026	GL	DM

14.7 Likely Significant Landscape and Visual Effects

Based on the analysis of landscape and visual baseline information reported above in this Chapter, combined with considerations of the cumulative effects with other wind farms, this section reports the landscape and visual effects likely to occur during all three phases of the Proposed Project:

- Construction phase
- Operational phase
- Decommissioning phase

In addition, this section summarises the outcomes of LCA and photomontage (VP01—VP20) visual impact assessments (refer to Appendix 14-2 and Appendix 14-3, respectively). A comprehensive description of the guidance and methodology used for the assessment of landscape and visual effects are included in Appendix 14-1: LVIA Methodology, along with information about the photomontages as a tool used to inform the impact assessment, including their limitations (Appendix 14-1, Section 1.6.4: Limitations of Photomontage Visualisation).

14.7.1 'Do-Nothing' Scenario

If the Proposed Project were not to proceed, the site would continue to be managed under the requirements of the IPC licence (P0500-01) and therefore the ongoing decommissioning activities, site management and environmental monitoring would continue.

In the absence of the Proposed Project, natural revegetation processes would continue across the site. Areas of bare peat would progressively revegetate and transition through successional stages, potentially developing into heath communities, scrub or bog woodland over time, depending on local hydrological conditions. Therefore, the existing baseline of the landscape will transition from a predominantly industrial cutover peatland landscape, with open exposed peat surfaces and drainage features, to a more natural mosaic landscape of cutaway peatland, wetland and regenerating bog habitats.

The Proposed Project site is located on lands that are subject to ongoing and future peatland rehabilitation and decommissioning works required under the existing IPC Licence. Therefore, under a 'Do-Nothing' scenario, the implementation of the draft Cutaway Bog Decommissioning and Rehabilitation Plans as required under IPC License would continue. These rehabilitation works are mandatory and will proceed irrespective of whether the Proposed Project is permitted, in order to ensure compliance with the IPC Licence

Furthermore, in implementing the 'Do-Nothing' alternative, the opportunity to capture a significant amount of County Offaly's valuable renewable energy resource would be lost, as would the opportunity to contribute to meeting the Irish Government's as well as the European Union's (EU) targets for the production and consumption of electricity from renewable resources and the reduction of greenhouse gas emissions. The opportunity to generate local employment and investment and to diversify the local economy would also be lost.

14.7.2 Construction Phase Effects

It is estimated that the construction phase of the Proposed Project will last between 18-24 months and will be Short-Term. The construction will involve the erection of 15 no. turbines with a total blade tip height of 220m and all associated works, as well as the proposed onsite 220kV substation and associated works, including new proposed steel masts breaking the existing OHL.

Construction phase effects also include 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 Proposed Project elements.

14.7.2.1 Landscape Effects (Construction Phase)

Associated earthworks, such as the cut and fill required to facilitate construction of the Proposed Project, have the greatest potential for landscape effects. Where excavation is required, the 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 the construction. Where peat and spoil arising from construction activities is managed within the Proposed Project site, the vegetative top-soil layer will be removed and reinstated following the completion of works, where possible. All remaining peat and spoil will be transported to the designated peat deposition areas or landscaped locally to the Proposed Project infrastructure, as per the PSMP (Appendix 4-3). The construction activities may potentially cause effects on the landscape such as the creation of temporary structures, dust, minor soil erosion and minor alterations to drainage. In general, it is considered that the construction phase will have a 'Moderate', 'Short-term', 'Negative' effect, while the landscape of the Proposed Project site is a construction site. On balance, these effects are not considered significant. These effects will be localised to the site itself due to the flat nature of the landscape and enclosure by boundary vegetation, therefore effects on landscape character outside of the site will be 'Not Significant'.

The construction works shall be short-term in nature and completed within 2.5 years as per the construction programme. All construction activities will follow best practice methods to reduce impacts upon the environment and landscape of the Proposed Project. Further details are presented in the Construction and Environmental Management Plan (CEMP) contained in Appendix 4-4 of this EIAR.

14.7.2.2 Visual Effects (Construction Phase)

14.7.2.2.1 *Effects arising from the proposed turbines during the Construction Phase*

The most substantial visual effects will arise from requisite construction activities such as building tower sections and erection of the proposed turbines. These will be temporary scenarios during the construction phase where the proposed turbines will be partially assembled and may be seen as either standalone tower sections, or incomplete turbines where only one or two blades are visible. The equipment and vehicles required to transport and erect the proposed turbines include large cranes and large haulage vehicles. These construction activities will cause 'Moderate', 'Short-Term' and 'Negative' visual effects. These effects will be localised to the Proposed Wind Farm itself due to the flat nature of the landscape and enclosure by boundary vegetation, therefore visual effects on visual receptors outside of the site will be 'Not Significant' for the majority of the construction phase, excepting for the temporary works required to build and erect the proposed turbines. A small number of residential receptors in the townland of Cooldorragh will experience 'Moderate' visual effects during the construction phase due to their location on a slightly elevated vantage point to the north-east of the site where they will have views across the bog and construction activities. On balance, these effects are not considered significant.

General housekeeping measures, necessary for Health and Safety requirements, will ensure that the active construction areas will be kept tidy, mitigating localised visual impacts during the construction phase. A detailed description of the Proposed Project is included in Chapter 4 of this EIAR. The following sections assess the visual effects associated with the construction phase of the other (non-turbine) components of the Proposed Project.

14.7.2.3 Effects arising from Ancillary Project Elements during the Construction Phase

14.7.2.3.1 *Site Access Roads and Hardstand Areas*

Construction of the proposed internal roads and hardstand areas will be most visible within their immediate surroundings, i.e., within the Proposed Project site. Some existing access tracks will be upgraded appropriately whilst several stretches of new internal roads will need to be constructed (floating and excavation techniques to be deployed – see Section 4.10 of Chapter 4 for details on construction methodology). The landscape and visual impact of the construction of these flat and hard surfaces will be very localised. Greatest visual effects will occur where construction is visible from small number of residential receptors to the north in the townland of Cooldorragh and also where junction upgrades are required with the public road network. The visual effects arising from construction of the access roads and hardstand areas are considered to be localised, 'Negative', 'Short-Term', and 'Slight'. On balance, these effects are not considered significant.

14.7.2.3.2 *Borrow Pit and Spoil Management Areas*

It is proposed to construct 4 no. borrow pits located approx. 80m north and 290m south-east of proposed turbine T09, approx. 214m north of turbine T03 and approx. 226m east of turbine T04. The extraction of material from the borrow pits is a construction phase activity only, done through means of rock breaking. The direct effects of the borrow pit on the physical fabric of the landscape itself will be localised within the bog, enclosed by dense vegetation within the bog, as seen in Plate 14-27 below.

Plate 14-27 Views north towards proposed Borrow Pit 3, from approx. 30m south from proposed turbine T09

Given the flat nature of the landscape, the proposed borrow pits will be largely screened by the dense vegetation within the Proposed Project site. However, instances may occur where the borrow pits will be visible from the elevated locations surrounding the Proposed Wind Farm or through gaps in the vegetation and will therefore have an effect on landscape character in combination with the construction of proposed turbines and other infrastructure. The proposed borrow pits are located within areas of degraded peatland, with high levels of human modification and is deemed to be of low sensitivity. The magnitude of change is deemed to be a 'Slight', 'Short-term' 'Negative' landscape effect. On balance, these effects are not considered significant.

Several rehabilitation measures will be implemented post-construction phase. For example, the borrow pit will be backfilled with peat and spoil and then reseeded or left to vegetate naturally. Following rehabilitation, the landscape and visual effects will be 'Not Significant' during the operational phase.

To manage any excess overburden generated through construction activities, spoil management areas have been selected within the site. The effects of peat deposition areas will be localised within the

Proposed Project site. Therefore, the creation of peat deposition areas will have a 'Short-term', 'Slight' and localised 'Negative' effect on the landscape during the construction phase. On balance, these effects are not considered significant. Following regrading and re-establishment of vegetation of these areas following completion of the construction phase, effects will be 'Not Significant' during the operational phase.

14.7.2.3.3 *Anemometry Mast*

One anemometry (met) mast is proposed as part of the Proposed Wind Farm. The met mast will be equipped with wind monitoring equipment at various heights. The proposed met mast will be located 350m west of proposed turbine T02. The met mast will be a free-standing slender lattice structure 145 metres in height. It will be constructed on a hard-standing area sufficiently large to accommodate the equipment that will be used to erect the mast. Within the Proposed Wind Farm and its immediate landscape setting, the landscape and visual effects arising from the construction of the met mast are considered to be localised 'Negative,' 'Short-Term', 'Slight' effects. On balance, this is not considered significant.

14.7.2.3.4 *Temporary Construction Compounds*

There will be 5 no. temporary construction compounds proposed as part of the Proposed Project, located along the newly proposed internal access roads. A detailed description of the construction compounds is provided in Section 4.4.1.5 of Chapter 4.

The landscape and visual effects of the construction compounds will be localised, considering that construction activities related to them will be most visible within their immediate surroundings. Within the Proposed Project site and its immediate landscape setting, the landscape and visual effects arising from the temporary construction compounds are considered to be of localised 'Negative,' 'Short-Term', 'Slight' effects. On balance, these effects are not considered to be significant.

14.7.2.4 Proposed Grid Connection

The Proposed Grid Connection will connect to the national electricity grid via a proposed 220kV substation which will be sited in the northern extent of the Proposed Project site. The Proposed Grid Connection will consist of approximately 0.8km of overhead line, 4 no. new steel masts, 2 no. gantry structures, and the removal of 1 no. existing steel mast.

14.7.2.4.1 *Proposed 220kV Substation – Construction Phase Effect*

Visual effects will occur as the proposed onsite 220kV substation is built due to the earthworks and requisite construction activities, these will cause a substantial but localised change to views in the immediate vicinity. As established in the baseline investigations, the proposed onsite 220kV substation is within the northernmost extent of the Proposed Project site. The nearest residential receptor is located approx. 356m north of the proposed onsite 220kV substation location, along the L7001 local road.

Intermittent visibility of the proposed onsite 220kV substation construction will occur from nearby residential receptors, particularly from the north along the L7001 local road, which is at an elevated position overlooking the Proposed Project site. However, many of these residential receptors, as well as the road itself, are surrounded by treelines and hedgerows that will provide visual screening towards the proposed onsite 220kV substation.

A temporary construction compound will also be located adjacent the proposed 220kV substation. As discussed above, landscape and visual effects arising from the temporary construction compounds are considered to be highly localised 'Negative,' 'Short-Term', 'Slight' effects. On balance, these effects are not considered significant.

The landscape and visual effects arising from the construction of the proposed onsite 220kV substation and associated temporary construction compound are considered to be 'Negative', 'Short-Term' (as longer-term visual effects will occur during the Operational Phase) 'Moderate' effects. On balance, these effects are not considered significant.

The following measures will be implemented to mitigate effects during and upon completion of the construction phase of the Proposed Substation (See Landscape Plan – Appendix 14-6):

- Construction of 2m x 8m berms along the eastern perimeter of the substation at the start of the construction phase.
- Toward the end of construction, berms will be built around the northern extent of the proposed onsite 220kV substation underneath the overhead line and on top of the hardstand area.
- Following completion of the infrastructure, planting is proposed along the eastern boundary of the proposed onsite 220kV substation, both on the berm and adjacent to the access roads, which will serve as landscape and visual mitigation during the operational phase.
- Planting is proposed further north of the proposed onsite 220kV substation, and within the inner perimeter of the road to provide ecological connectivity with existing vegetation at the site boundary and also provide landscape and visual mitigation from residential receptors throughout the operational phase.

Connection to Existing Overhead Line

The Shannonbridge-Maynooth 220kV Overhead Transmission Line (OHL) traverses part of the Proposed Project site in a southwest to northeast direction, approximately 2km from the nearest proposed turbine (T10). Along the OHL, 2 no. new steel masts will be constructed at the proposed onsite 220kV substation, and 2 no. new steel masts will be constructed underneath the existing Shannonbridge-Maynooth 220kV OHL. 1 no. existing steel mast will be removed to facilitate the new OHL loop from the proposed onsite 220kV substation into the Shannonbridge-Maynooth 220kV OHL. The addition of the additional electricity masts will add to the density of the existing masts within the area; however, they will be of similar scale to the existing masts within the wider landscape (as discussed in Section 14.4.2) and will be further set back from residential receptors than the existing steel mast that is to be removed. Overall, the 4-no. proposed new steel masts will not substantially alter the visual amenity or landscape character of the wider landscape. The proposed addition of the steel masts to facilitate the connection to the OHL is likely to cause 'Permanent' 'Slight' 'Negative' landscape and visual effects. On balance, these effects are not considered significant.

The following measures will be implemented to mitigate landscape and visual effects during the construction phase of the Proposed Grid Connection to the OHL:

- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible.
- Any areas of bare soil remaining after the landscaping phase will be reseeded and left to revegetate naturally.

14.7.2.4.2 *Telecommunications Tower*

One telecommunications tower is proposed next to the proposed onsite 220kV substation to provide a communication link during the operational stage and to relay data between the Proposed Project and external monitoring/management stations. The telecommunications tower will be a free-standing slender lattice structure 36m in height. It will be constructed on a hard-standing area of 15m by 15m to accommodate the equipment that will be used to erect the tower. Within the site and its immediate landscape setting, the landscape and visual effects arising from the construction of the

telecommunications tower are considered to be of highly localised 'Negative,' 'Short-Term' 'Imperceptible' effect. On balance, these effects are not considered significant.

14.7.2.5 Proposed Amenity Pathways

As discussed in Chapter 4 (and shown in Appendix 4-1), the Proposed Project will upgrade approximately 1.14km of existing track within the site and provide approximately 16.9km of new roads to be used for maintenance and monitoring activity as well as for amenity purposes such as walkways and cycleways when the Proposed Wind Farm becomes operational. An additional 3.9km of new dedicated amenity link, along with the further upgrade of approximately 1.8km of existing track, for the purposes of amenity, is also proposed as part of the Proposed Project to provide a greater variety of walking loops. If planning permission is granted for the Proposed Wind Farm, the associated amenity pathways will connect into the permitted Offaly West portion of the Midlands Trail Network (MTN).

Within the site and its immediate landscape setting, the landscape and visual effects arising from the associated short-term earthworks and surfacing of amenity pathways with granular material are considered to be of highly localised 'Negative,' 'Short-Term' 'Imperceptible' effect. On balance, these effects are not considered significant.

Once operational, these amenity tracks will contribute positively to the visitor experience for some users by providing improved safe access and recreational opportunities within Lemanaghan Bog and the surrounding areas.

14.7.3 Operational Phase

This section reports the landscape and visual effects anticipated during the operational lifetime of the Proposed Project. This section is organised as follows:

- **Landscape Effects**: Reporting landscape effects for the Proposed Project
- **LCA Assessment Outcomes:** A summary of the landscape impact assessment outcomes for each LCA in the (15km) LCA Study Area as is comprehensively reported in *Appendix 14-2: LCA Assessment*
- **Photomontage Viewpoint Assessment Outcomes:** A summary of the visual impact assessment outcomes in the (25km) LVIA Study Area for each photomontage as is comprehensively reported in *Appendix 14-3: Photomontage Assessment Tables*
- **Visual Effects: Receptors:** Discussion of visual effects on the specific visual receptors selected for assessment within the visual baseline exercises with reference to photomontages and photowires
- **Residential Visual Amenity:** Discussion of visual effects on residential receptors within close proximity to the site
- **Visual Effects: Ancillary Project Elements:** Discussion of visual effects of the non-turbine infrastructure of the Proposed Project
- **Cumulative Effects**: Discussion of landscape and visual effects expected to occur in combination with the Proposed Project, and all identified existing, permitted and proposed wind farms identified in the LVIA Study Area.

Planning permission is being sought for a thirty-five-year operational life of the Proposed Project from the date of full commissioning of the wind farm. It is proposed that upon decommissioning the proposed turbines will be removed from the site. Potential effects of the Proposed Project during the operational phase are defined as 'Long-Term' as per the definition for duration in the EPA Guidance (2022). It is proposed that the proposed turbines would be removed from the site at the end of the operational phase. Therefore, potential landscape and visual impacts effects on receptors caused by the proposed turbines are not permanent and are reversible.

14.7.3.1 Landscape Effects (Operational Phase)

14.7.3.1.1 *Landscape of the Proposed Project site*

The landscape character of the Proposed Project site will undergo major changes in the landscape by the introduction of vertical man-made structures within the landscape of the site. There will be a substantial magnitude of change to the landscape in the localised areas within the site where the landscape is materially altered (infrastructure footprint).

In a local context, the site is located in a modified, remote, degraded peatland landscape of local value. Degraded peatland and cutover bog are the dominant landcover of the flat, low-lying landscape within the Proposed Project site itself. The landscape value and sensitivity of the site is deemed to be Low in Section 14.4.3 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 localised to the footprint of the Proposed Project.

Mitigation of Landscape Effects within the Landscape of the site

The following measures have been included in the Proposed Project design in order to avoid or reduce direct effects on landscape receptors (individual landscape features and the landscape character of the site as a whole) on the site:

- The spatial configuration of the proposed infrastructure footprint has been carefully designed to minimise the loss of valuable landscape receptors on the Proposed Project site, such as remnants of uncut raised bog, mature woodland or features of cultural heritage value.
- The internal site road layout makes use of the existing roads wherever possible, to minimise the requirement for new tracks within the site.
- To minimise cut and fill activities required to construct the Proposed Project, the proposed access roads, and other infrastructure such as hardstands have been designed to align with the existing terrain within the landscape of the site
- In all circumstances, excavation depths and volumes will be minimised, and excavated material will be re-used where possible.
- Dedicated public walking trails are included in the Amenity Plan as part of the Proposed Wind Farm and will add recreational value to the landscape of the Proposed Wind Farm.
- A dedicated Landscape Plan including proposed berms and planting areas are included to mitigate landscape and visual effects of the proposed onsite 220kV substation. This is presented and discussed in more detail in Section 14.7.2.4.1 above.

Residual Landscape Effects

Once the Proposed Project is operational and the construction activity is complete, the landscape will naturally re-vegetate around the Proposed Project footprint. Also, over time, with aid of the peatland rehabilitation plans and the Biodiversity Management and Enhancement Plan (Appendix 6-5), the landscape of the bogs surrounding the wind farm infrastructure will improve in quality in terms of environment and biodiversity, resulting in an improved landscape character. Considering the mitigation measures above, residual effects upon the landscape of the proposed turbines are deemed to be 'Long-term', 'Negative' and 'Slight', whilst the residual effects upon the landscape resulting from the proposed internal roads and Proposed Grid Connection infrastructure are deemed to be 'Permanent', 'Negative' and 'Slight'. On balance, these effects are not considered significant.

14.7.3.1.2 LCA Assessment Outcomes

An assessment of the effects on landscape character based on designated LCAs was undertaken for the 6 no. LCAs within the LCA Study Area selected for assessment; these were mapped previously in Figure 14-14 Landscape Character Areas & ZTV. The individual assessments for each LCA are summarised below in Table 14-22 and presented in detail in *Appendix 14-2: LCA Assessment*. The assessment criteria and grading scales which aided the assessment of landscape character effects are detailed in *Appendix 14-1: LVIA Methodology* (Section 1.7: Assessing Landscape Effects).

Table 14-22: LCA Assessment Summary

LCA Ref.	Name	LCA Sensitivity	Magnitude of Change in LCA	Residual Significance of Effect
Offaly ILCA 4	North-western Lowland Farmland and Marginal Peatland	Medium	Moderate	**Moderate**
Offaly ILCA 6	Grand Canal Corridor	High	Slight	**Slight**
Offaly ILCA 3	Central Wetlands	High	Slight	**Slight**
Offaly ILCA 1	Birr Plains	Low	Slight	**Not Significant**
Offaly ILCA 5	River Shannon and Callows	High	Slight	**Not Significant**
Westmeath LCA 7	Western Lowlands	Medium	Slight	**Slight**

The largest magnitude of change (Moderate) will occur within ILCA 4 - North-western Lowland Farmland and Marginal Peatland as the proposed turbines will materially alter the landscape of this ILCA. The proposed turbines are likely to be most visible within 5km as well as from elevated vantage points within this ILCA. On-site appraisals determined that there will be more limited visibility of the proposed turbines in parts of this ILCA beyond 5km due to the visual screening from intervening vegetation in the landscape which limits views of the proposed turbines in these flat landscapes.

Review of the landscape policy reported above (Section 14.4.1) concludes that the Proposed Project is sited within an area of Moderate sensitivity, which has the capacity to accommodate wind energy development, particularly when compared to other ILCAs in County Offaly. Furthermore, it is noted that all of the proposed turbines are located within an area classified as *'Open to Consideration'* in the OCDP with the exception of proposed turbine T05 which is located on the boundary of an area 'Not Deemed Suitable' for wind energy. However, as discussed in Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context, and with specific respect to landscape character, the landscape immediately adjacent to the WES boundary delineation (including the location of proposed turbine T05) comprises the same landscape type (Flat Peatlands) and sensitivity (Moderate as per the OCDP).

The proposed turbines will have a 'Long-term', 'Negative', 'Moderate' residual effect on ILCA 4 - North-western Lowland Farmland and Marginal Peatland. On balance, these effects are not considered significant.

The proposed turbines will not materially alter any of the other ILCAs or LCAs in the LCA Study Area and therefore the proposed turbines will give rise to a 'Long-term', 'Negative', 'Not Significant' or 'Slight' residual landscape effect. On balance, these effects are not considered significant.

14.7.3.1.3 Effects on Designated Landscape Receptors of Areas of High Amenity

Several designated landscape receptors were identified in the landscape baseline as having high sensitivity and some theoretical visibility indicated by the ZTV, the likely landscape effects on these receptors are discussed below. The Proposed Project will not directly alter the physical fabric of these landscape receptors and therefore any landscape effects are only likely to impact their character or setting. In all instances there will be no significant impact on the sensitivities of these receptors due to the large set back distances and limited visibility of the Proposed Project from them.

County Offaly - Grand Canal (AHA and Walking Route)

The Grand Canal stretches from the south-west of the Proposed Project site to the west of the site and is a designated Area of High Amenity (AHA) of County Offaly of high landscape sensitivity. At its closest point, this AHA is located 3.3km east from the nearest proposed turbine, T14, and extends beyond 25km from the nearest proposed turbine. *Section 4.13.1* of the OCDP states the following in relation to the Grand Canal:

> *"The Grand Canal is a focus for a wide range of uses, especially for recreation and tourism purposes. The visual quality of the surrounding areas is intrinsic to maintain the attractiveness of the Grand Canal corridor. Hence, the corridor is especially sensitive to large development structures, insensitively designed or sited housing and large-scale land uses such as extractive industries.*
>
> *The recreational value of the Grand Canal is recognised, and it is intended to preserve its attractiveness by carefully controlling development in order to protect its amenity and tourism potential."*

The proposed turbines and the ancillary infrastructure of the Proposed Project are not located within this AHA, and as such will not materially alter the physical fabric of this landscape.

Within the LVIA Study Area, the entirety of the Grand Canal AHA falls within an area of full theoretical visibility. However, on-site appraisals determined that visibility is far less, given the topography of the landscape. The canal following the low-lying contours of the landscape, with dense vegetation along its banks, provides dense screening along the majority of the route. Long-ranging visibility of the proposed turbines is primarily confined to elevated vantage points—such as bridges along the canal—where, even then, views are intermittent. This can be seen at VP03, where the proposed turbines are visible in the distant background; however, the majority of the turbines are either partially or fully screened by intervening vegetation and built infrastructure. As outlined in Appendix 14-3, residual visual effects at this viewpoint were deemed to be 'Moderate'.

Effects on the character and setting of this landscape receptor will occur. However, the proposed turbines are set back 3.3km from the canal at its nearest point and they will be mostly screened from view along the majority of the canal due to vegetation providing visual enclosure within the canal corridor. Where intermittent visibility does occur, from elevated vantage points or through breaks in vegetation, the proposed turbines will be seen in the background of views. The proposed turbines do not impact the integrity of the immediate landscape setting, landscape character and visual qualities along the canal corridor, the proposed turbines only seen in the background of views from occasional vantage points over bridge crossings. The magnitude of change on this landscape receptor is therefore 'Slight', and an overall residual visual effect of 'Long-term', 'Negative' 'Not Significant' is deemed to arise in relation to the Grand Canal. On balance, these effects are not considered significant.

Furthermore, the Grand Canal already features views of existing wind energy developments along its extent, including the existing Cloghan and Derrinlough Wind Farms, located approx. 4km from the Grand Canal Way at their closest point. As such, it is clear that the wider landscape has the capacity to accommodate nearby wind energy developments whilst still maintaining the *"visual quality"* and *"attractiveness of the Grand Canal corridor,"* as noted in the OCDP.

County Offaly – Lough Boora Discovery Park

Lough Boora Discovery Park is a designated AHA with high landscape sensitivity in County Offaly and is located approximately 3.2km southeast of the nearest proposed turbine (T15) at its closest point. The landscape of the AHA is primarily characterised by flat, open expanses of bogland, agricultural grasslands and forests such as Turraun Nature Park. The existing Derrinlough and Cloghan Wind Farms are partially located on the western extent of this AHA, as illustrated in Plate 14-28 below, indicating that this AHA has the capacity to accommodate wind energy developments.

Plate 14-28 Views north-east from the N62 National Road towards the existing Cloghan Wind Farm

The proposed turbines and the ancillary infrastructure of the Proposed Project are not located within this AHA, and will therefore not materially alter the physical fabric of this landscape. While theoretical visibility is indicated for the entire AHA, visibility is far less. Tracts of forestry and broadleaf woodland within this AHA (such as Turraun Nature Park) provide large stretches of vegetative screening, limiting views towards the proposed turbines. Additionally, dense roadside vegetation along the road network within this AHA further restricts views in the direction of the proposed turbines. Where open visibility does exist (such as in Plate 14-28 above), the turbines will generally appear as small-scale vertical elements, occupying a short horizontal extent within the flat landscape, such as at VP08. Cumulative effects occur with the existing turbines on the landscape of Lough Boora Discovery Park; however, the contribution of the proposed turbines is very minor. Visual effects on visual receptors in Lough Boora Discovery Park are addressed in Section 14.7.3.2.3.

While the proposed turbines will introduce new elements into some distant views from within the AHA, they will not materially alter the key characteristics of the landscape, nor detract from its overall amenity value. The Proposed Project aligns with the evolving baseline trends and is not considered likely to result in significant landscape effects. Overall, the residual landscape effect on this AHA is deemed to be 'Long-term', 'Negative' and 'Slight'. On balance, these effects are not considered significant.

County Offaly – Clara Bog

Clara Bog is a designated AHA within County Offaly and is a landscape of high sensitivity as it is an intact raised bog which is used for recreational purposes. Clara Bog is located approximately 4.5km east from the nearest proposed turbine (T15) and falls within an area of predominantly full theoretical visibility. VP04 was captured from within Clara Bog, along the publicly accessible boardwalk. An impact assessment from a visual receptor perspective is included in Appendix 14-3, the proposed turbines appear as small-scale elements in the distant background, partially screened by intervening vegetation. Overall, 'Long-Term', 'Negative', 'Slight' residual effects on landscape character are deemed to arise on this AHA. On balance, these effects are not considered significant.

County Offaly – River Shannon and Callows

The River Shannon and Callows is a designated AHA in County Offaly, extending along the county's western boundary with counties Galway and Roscommon. At its closest point, this AHA is located approximately 13.6km west of the nearest proposed turbine (T15) and features intermittent stretches of full theoretical visibility along its length. The River Shannon and associated callows follow the low-lying contours of the river valley and are situated within a flat landscape. As such, in reality, given the low-lying topography and the presence of mature riparian vegetation and woodland along the river corridor within this AHA, long-range views toward the proposed turbines are very limited, as verified by many site visits.

Where intermittent visibility does occur, typically from elevated vantage points such as bridges along the River Shannon, the proposed turbines are situated in the distant background (beyond 13km away), often screened by intervening vegetation. This can be seen in photowires PWVP-E and PWVP-F, both captured from bridges along the Shannon corridor. In both views, the proposed turbines are situated in the distant background, full screened by intervening vegetation and built form.

Overall, the proposed turbines will not materially alter the physical fabric of the River Shannon itself or the callows. Furthermore, given the distance and limited visibility of the proposed turbines, the proposed turbines will not significantly alter the surrounding landscape character of the River Shannon, and as such will not compromise the *"local scenic views along the river"* or the views of *"local heritage sites such as Clonmacnoise and the Callows",* as outlined in the OCDP. While seasonal variation in foliage may alter the extent of vegetative screening during winter months, given the distance from the proposed turbines within this flat low-lying landscape, Significant effects on the landscape character or visual amenity on this AHA are not likely to occur. As such, an overall 'Long-Term', 'Negative' 'Not Significant' residual landscape effect is deemed to arise for this AHA. On balance, these effects are not considered significant.

Counties Offaly / Laois – Slieve Bloom Mountains

The northern extent of the Slieve Bloom Mountains, designated as an AHA within County Offaly and of high sensitivity in County Laois, is situated primarily 20-25 km southeast of the Proposed Project. While the Slieve Bloom Mountains encompass a large and expansive upland landscape, only a small portion of this area lies within the LVIA Study Area. Where visibility does occur, it is limited to elevated vantage points within this upland landscape.

VP10 was captured from the Slieve Bloom Mountains, at an OSi Viewing Point, overlooking the flat low-lying landscape. At this distance, the proposed turbines appear as small-scale elements in the distant background. As discussed in Appendix 14-3, this viewpoint already includes a horizontal spread of several existing wind energy developments, including the Derrinlough, Cloghan, Leabeg Wind Farm and the permitted Lea Mor Turbine. While the proposed turbines, located to the north-east of the existing windfarms and permitted single turbine, would extend the overall horizontal spread of wind energy developments visible from this landscape.

Overall, while the proposed turbines introduce new elements into some distant views from the Slieve Bloom Mountains, their presence, at this distance does not result in a *"disproportionate visual impact"*. Given the scale and distance, the proposed turbines are not considered to *"significantly interfere with or detract from the scenic upland vistas"*, or *"designated scenic routes, viewpoints"* within the Slieve Bloom Mountains. Where visibility does occur, the proposed turbines appear as small-scale elements, consistent with the existing and emerging baseline trends in the wider landscape. Given the setback distance of 23km, overall residual effects on the character of the Slieve Bloom Mountains is 'Long-Term', 'Negative' and 'Not Significant'. On balance, these effects are not considered significant. Visual effects on visual receptors in the Slieve Bloom Mountains are addressed in Section 14.7.3.2.3

County Offaly – Clonmacnoise

Clonmacnoise Heritage Zone, located 7.8km west from the nearest proposed turbine (T01) and is a designated AHA of County Offaly of high landscape sensitivity. It comprises the Clonmacnoise Monastic Site (located 13.7km west from the nearest proposed turbine (T01), Clonmacnoise Heritage Zone and some of the Clonmacnoise Esker System and has primarily full theoretical visibility. The landscape of the Clonmacnoise Heritage Zone is considered a landscape receptor of 'Very High' sensitivity in this LVIA. *Section 4.13.1* of the OCDP states the following in relation to Clonmacnoise:

> *"Clonmacnoise is one of Ireland's foremost national monuments and is of international importance as a spiritual, historic, archaeological and cultural center. The unique atmosphere and attractiveness of Clonmacnoise derives not only from the monastic site itself but its relationship to the River Shannon and the Callows together with the sense of enclosure provided by the eskers. The effect is heightened by the unfolding of the site as it is approached either from the river or any of the three approach roads."*

The proposed turbines and the ancillary infrastructure of the Proposed Project are not located within this AHA, and will therefore, not materially alter the physical fabric of this landscape. As discussed in further detail in Section 14.5.1 there is little to no theoretical visibility from the landscape of the Clonmacnoise Monastic Site itself, the key sensitive receptor of this AHA. Nevertheless, given the sensitivity of this site, PWVP-B was captured from within Clonmacnoise Monastic Site, to show the dense screening occurring with Clonmacnoise Monastic Site by intervening topography and vegetation. As such, no visual or landscape effects will occur on or within Clonmacnoise Monastic Site itself.

Efforts were made to determine if the proposed turbines would have potential to impact the setting or character of the Clonmacnoise Heritage Zone from other vantage points outside of the heritage enclosure itself. For example, locations where the proposed turbines are actually visible, as well as locations where the monastic landscape of the Clonmacnoise Heritage Zone is seen and appreciated from a particular location. Geographically this can only potentially occur from boats on the Shannon immediately north or west of the Clonmacnoise Heritage Zone, or the north-western bank of the Shannon where there are views in the direction of both the Clonmacnoise Heritage Zone and the proposed turbines. Due to the set back (7.8km) and the very low base elevation of receptors on the Shannon, or on the north-western bank, and also the low base elevation of the proposed turbines, a disproportionate screening effect occurs (see Section 14.3.2.2) and all of the intervening landforms ('*enclosure provided by the eskers*') will obscure the proposed turbines from view. Therefore, there will be no impact on the landscape setting of the Clonmacnoise Heritage Zone or its relationship with the River Shannon.

In relation to the wider AHA, views may occur from elevated vantage points, such as along the esker systems. VP02 was captured from within this AHA along an esker and is representative of the typical long-range views available from vantage points atop eskers within this AHA. As discussed in Section 14.7.3.2.3 below, views west from VP02 is not considered to be of particularly high scenic quality and is representative of a typical modified working landscape. Overall, the landscape within this AHA includes features such as flat peatlands, agricultural fields, and dense vegetation, similar to the receiving environment in which the proposed turbines are situated in. Furthermore, there are some distant views of the existing Derrinlough and Cloghan Wind Farms from within this AHA, indicating that wind

energy development in the wider landscape has been deemed appropriate in the case of the wider landscape context.

While the proposed turbines will be visible from some elevated vantage points within this AHA, the proposed turbines will be seen in the distant background and will not materially alter the key characteristics of this landscape (Clonmacnoise Monastic Site itself), nor will they significantly impact designated scenic routes, walking trails, or the tourism value associated with this AHA (See Section 14.7.3.2.3 for further discussion on these receptors). Given the nature of the views, the separation distance, and the scale of visibility, the magnitude of change is deemed 'Slight' on this AHA, resulting in an overall residual landscape effect of 'Long-Term', 'Negative', and 'Slight'. On balance, these effects are not considered significant.

County Offaly - Durrow Monastic Site and Demesne

Durrow Monastic Site and Demesne, a designated AHA of high landscape sensitivity, is located approximately 14.3km east from the nearest proposed turbine (T15) and has pockets of full theoretical visibility. St. Columba's Church at Durrow Abbey, located within this AHA (as discussed in detail in Section 14.7.3.2.3 below) is enclosed by dense vegetation surrounding the abbey, and therefore, will have little to no views of the proposed turbines.

In relation to the broader AHA as a landscape receptor, it is emphasised that the AHA is located more than 10km from the nearest proposed turbine and is primarily characterised by a heavily vegetated landscape. VP06, located approximately 2km south of the AHA and within the same geographic context, was captured to represent more open views from the surrounding area. At a distance of 14.5km from the nearest proposed turbine within this flat landscape, the proposed turbines are barely discernible within the view, with only partial blade tips visible above intervening vegetation. Given the greater level of vegetative screening within the Durrow AHA itself, visibility will be far less than at VP06. Therefore, any views of the proposed turbines from within the Durrow Monastic Site and Demesne AHA, where they occur at all, will be very limited and will not materially alter the overall character of this landscape receptor. An overall 'Long-Term', 'Negative', 'Imperceptible' residual landscape effect is deemed to arise on this AHA. On balance, these effects are not considered significant.

14.7.3.1.4 *Effects on Local Landscape Receptors*

Lemanaghan Monastic Complex (Lemanaghan Monastic Site and Hermitage)

Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context includes a detailed historic landscape and visual context pertaining to the Lemanaghan Monastic Complex. Appendix 13-5 includes mapping, and drone visualisations and descriptions which have informed the impact assessment in this section.

The Lemanaghan Monastic Site, which forms part of the Lemanaghan Monastic Complex, is located 1.2km from the nearest proposed turbine (T05) and is a cultural heritage receptor of high sensitivity. As seen in the Plate 14-31 below, the monastic site is physically set back from the location of the proposed turbines by multiple agricultural fields, farms, residences and is enclosed by mature vegetation and boundary walls. The Proposed Project will not directly impact the physical fabric of the landscape of the Lemanaghan Monastic Complex, site investigations determined effects on this landscape will only be in relation to landscape character and setting of monuments.

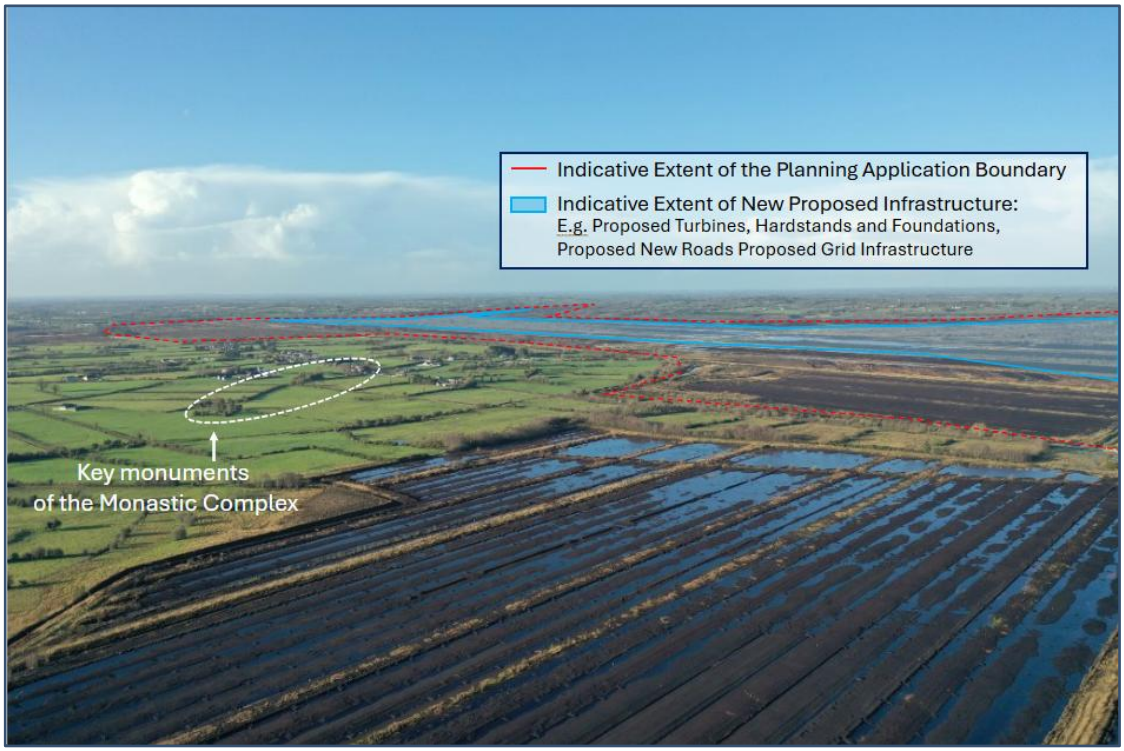


Plate 14-29 View north-west captured from a drone to the south-east of the Lemanaghan Monastic Complex: Annotations have been added to the aerial image to show the location of the Proposed Wind Farm Relative to the Lemanaghan Monastic Complex, Please Note: Lines are 'indicative', please consult mapping figures for high accuracy representation.

As seen in the imagery above (and as discussed in Section 14.7.3.2.3 later) – the proposed turbines are not situated within the immediate visual context of the monastic site. Given the setback of 1.2km at its closest point, the proposed turbines will not alter the physical fabric of the cultural heritage features within the Lemanaghan Monastic Complex, including the church ruins and grave markers within the monastic site, and the ruins at the Lemanaghan Hermitage. As such, the proposed turbines will not materially affect the landscape of the Monastic Complex.

Two viewpoints were produced to show the impact on the landscape setting (VP12 and VP13) of the Monastic Site, and one viewpoint (VP14) was produced to show the impact on the landscape setting of the hermitage. The landscape setting is of 'High' sensitivity on account of the monastic monuments, and the magnitude of change to the setting is deemed to be 'Moderate' in VP12 and VP13, and 'Slight' in VP14, as illustrated by the photomontages.

As shown in both VP12 and VP13, the baseline view is typical of a rural working landscape and includes features such as houses, utility poles and agricultural buildings. The views shown in the photomontages are of a landscape setting already subjected to a high degree of human modification. The visual setting of the Lemanaghan monastic site is therefore already strongly influenced and characterised by the existing trend of development. The grove of trees enclosing the monastic site provides some visual screening of the proposed turbines, mitigating impacts on the immediate setting and reduces the horizontal extent of visible turbines impacting the setting of the monastic site. Whilst there is a moderate degree of change to the landscape setting, these are short-range views of heritage monuments within a setting already characterised by existing residential and agricultural development. It is not a landscape protected in county level landscape planning policy, nor is it specifically recognised as a landscape of regional or national renown.

Furthermore, as detailed in Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context, the Proposed Wind Farm is set-back beyond the buffer specifically created to mitigate impacts on the Lemanaghan Monastic Site as set out in local planning policy through the 2021 amended Wind Energy Zoning (as per the Chief Executive's Report), with the exception of turbine

T05, which is only located approximately 1.9 metres within the buffer Given the adherence to the set-back from the monastic site in the local planning policy, and other mitigating factors detailed above, the overall residual effects on the landscape setting of the Monastic Site are 'Long-Term', 'Negative' and 'Moderate'.

As shown in VP14, the baseline view is more enclosed than VP12 and VP13, and the visual setting is primarily defined by the Hermitage itself, the mound it is located on, and the grove of mature trees enclosing the site.

The grove of trees enclosing the Hermitage provides partial visual screening of the proposed turbines, even in winter when trees have lost their foliage, mitigating impacts on the immediate setting and reducing the horizontal extent of visible turbines in views from within the site. Where visible, the turbines are seen in the background of the view and at a smaller apparent scale than those shown in VP12 and VP13. Whilst there is a degree of change to the wider landscape setting, these are short-range views of the Hermitage within a setting already characterised by existing residential and agricultural development immediately beyond it. The magnitude of change is deemed to be 'Slight'. Overall, residual effects on the landscape setting of the Hermitage are deemed to be 'Long-Term', 'Negative' and 'Slight'.

14.7.3.1.5 *Effects on Tentative UNESCO Landscape Receptors*

One site of cultural heritage significance, the Hill of Uisneach, is located on Ireland's tentative list as a potential UNESCO World Heritage Site. An individual impact assessment on the landscapes of this site is included below. Firstly, some context is provided to provide clarity on the status of a site on the tentative list and the appropriate and proportionate level of impact assessment which can or cannot be conducted for sites on the UNESCO tentative list. The following documents provide guidance for the impact assessment of wind energy developments on UNESCO world heritage:

- Guidance and Toolkit for Impact Assessments in a World Heritage Context (UNESCO, 2022) Hereafter referred to as 'UNESCO Toolkit Guidance'
- Guidance for Wind Energy Projects in a World Heritage Context (UNESCO, 2022) – Hereafter referred to as 'UNESCO Wind Guidance'

The UNESCO Toolkit Guidance is specifically designed to assess impacts on properties that are already inscribed on the UNESCO World Heritage List or those with formally adopted Statements of Outstanding Universal Value (OUV). World Heritage properties are inscribed on the World Heritage List for their exceptional cultural and/or natural values for all humanity. This importance is expressed through the Outstanding Universal Value (OUV) of a site. The OUV is endorsed by the World Heritage Committee in the Statement of Outstanding Universal Value (SOUV), usually at the time of inscription. The OUV is established at the time of inscription and can only be changed by a new nomination process with approval by the World Heritage Committee.

The Hill of Uisneach, as one of the 'Royal Sites of Ireland' is currently proposed for nomination for UNESCO World Heritage status. A nominated tentative property, such as the Hill of Uisneach, does not have an officially recognised OUV by the World Heritage Committee. The UNESCO guidance has been developed to assess potential impacts on properties that:

- Have been formally inscribed on the World Heritage List
- Have an adopted Statement of OUV
- Are already subject to the requirements of the World Heritage Convention.

The UNESCO guidance for impact assessment comprises an approach tailored to protect sites whose OUV is recognised and binding. In contrast, tentative sites are not yet inscribed, meaning they do not have formal protection under the Operational Guidelines for the Implementation of the World Heritage Convention. Tentative sites do not have a formally adopted OUV, meaning there is no agreed framework against which to assess the impact of a development. The tentative list status means a

country has proposed a site for potential future nomination, but it has no legal or procedural standing under the World Heritage Convention. Assessing the Proposed Project in accordance with the UNESCO Guidance is not applicable in the case of Hill of Uisneach, the assessment process can be informed by the guidelines, along with the UNESCO Guidance for Wind Energy Projects in a World Heritage Context.

Currently, there is **no** definitive statement of what constitutes OUV for the Hill of Uisneach, therefore complete alignment with the UNESCO guidance is not currently possible. However, there are suggested frameworks and technical tools within the guidance which have been considered and adopted in the assessments of this Chapter to ensure a robust and proportionate assessment in the absence any defined OUV.

The Toolkit Guidance quotes EIA as being an appropriate mechanism for conducting impact assessments. The key distinction between the Toolkit and EIA is the requirement to assess impacts on OUV of a site. As part of evaluating potential impacts on World Heritage Sites, it is important to define the type of change that will occur and if this change is reversible, temporary or permanent. In the context of the Proposed Project, it is only the proposed turbines which have the potential to impact the Hill of Uisneach (located approx. 23km from the nearest proposed turbine T15). The effects are therefore reversible as it is proposed that the proposed turbines will be decommissioned and removed at the end of their operational life.

Note 5 of the UNESCO Wind Guidance relates to Visual Impact Assessment. The methodology, tools and process for visual impact assessment in Note 5 are very much aligned with the methods used for this LVIA which follow best practice guidelines for the LVIA of wind energy developments in Ireland. The main differences would arise in the concept of assessing OUV, which is not possible in this case. Landscape effects are reported below, and visual effects on visual receptors from the Hill of Uisneach are reported separately in Section 14.7.3.2.3.

County Westmeath – Hill of Uisneach

The Hill of Uisneach, located 23km north-east from the nearest proposed turbine, has pockets of full theoretical visibility of the Proposed Wind Farm from the peak of the hill. It is a landscape of Very High sensitivity on account of its cultural heritage value, relevant designations in the WCDP and position on Ireland's tentative UNESCO heritage list. It is not visible from within the site itself, as seen in the drone image Plate 14-27 below, the South Central Hills of Westmeath are very distant, barely discernible even from the bird's eye view of the drone on a clear day.

Plate 14-30 Drone Image for Landscape Context: View to the northeast overlooking the site, towards the South Central Hills of Westmeath including Knockastia and the Hill of Uisneach

As the nearest proposed turbine is located 23km from the peak of the Hill of Uisneach, the proposed turbines will not alter the physical fabric of the Hill of Uisneach itself and only perceptual effects on the character of the landscape of the Hill have any potential to occur. Whilst the proposed turbines will be visible from elevated vantage points on the Hill, the proposed turbines will not alter the immediate setting, appearance and context of cultural heritage monuments at the Hill of Uisneach and its immediate landscape. An assessment of visual effects on the scenic amenity at the Hill of Uisneach is discussed and reported in the Section 14.7.3.1.5 below.

14.7.3.1.6 Discussion of Cumulative Landscape Effects

Cumulative impacts on the character of the wider landscape are most likely to occur as a result of the proposed turbines, where they are visible in combination with other wind farm developments. A description of the cumulative visual interactions between the proposed turbines and other cumulative projects in the LVIA Study Area is included in the photomontage assessment tables contained in Appendix 14-3. A comprehensive assessment of likely visual effects arising from the intervisibility of the Proposed Project and other wind farms is included in *Section 14.7.3.1.6 – Discussion of Cumulative Visual Effects*. Cumulative effects on landscape character are included in the impact assessment outlined in Appendix 14-2. No Significant cumulative landscape effects were deemed to arise.

The wider landscape already consists of a number of existing, permitted and proposed wind energy developments (particularly to the south), which contribute to the overall cumulative baseline within the LVIA Study Area. While the LVIA Study Area includes a broad range of cumulative wind farms—many of which are existing and permitted—the degree to which a 'proposed' wind farm (in planning or pre-planning) may influence potential cumulative effects on landscape character is uncertain and reliant on the outcome of the planning process.

To the south, the existing Leabeg Wind Farm and permitted Lea Mor turbine are located approximately 6.3km and 6.8km from the nearest proposed turbine (T03), respectively. Further southwest, approximately 10 km from the proposed turbines, the Derrinlough, Cloghan, and Meenwaun Wind Farms contribute to the cumulative baseline within the LVIA Study Area. The permitted Cush Wind Farm is situated directly south of these cumulative developments. To the east, the singular Kilbeggan turbine is located 17km east of the nearest proposed turbine (T15). To the north, the

proposed Umma More Wind Farm is located approximately 16.9km from the nearest proposed turbine (T15).

The proposed Bellair Wind Farm, which has an indicative site location within the public domain but no turbine dimensions or layouts publicly available, is assumed to be located approximately 2.7km north of the Proposed Project. In an uncertain future receiving environment, the largest cumulative effects will most likely occur within 5km of the Proposed Project, where the proposed turbines and the proposed Bellair Wind Farm will be viewed together in the landscape.

The proposed turbines do add to the cumulative number of turbines within the landscape. However, due to the large setback distance between the proposed and cumulative turbines, where in combination or in succession views of the proposed turbines do occur, the turbines will appear as small-scale elements in the distant background. This is in line with the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines for peatland landscape types, which state that *"more than one wind energy development might be acceptable in the distant background provided it was only faintly visible under normal atmospheric conditions."* As noted previously, the closest cumulative wind farms are the Leabeg Wind Farm, consisting of only two turbines, and the permitted Lea Mor turbine, while all other turbines being located more than 10 km from the proposed turbines. As such, where proposed and cumulative turbines are seen together, they will appear as small-scale elements relative to the landscape in the distant background, as seen in photomontage viewpoints 10, and 19. While the proposed Bellair Wind Farm is located c.2.7km north, detailed information on turbine dimensions and layouts is not currently in the public domain. Its visual impact in a future receiving environment is therefore unable to be fully assessed in this EIAR.

In general, the LVIA Study Area is characterised by a large, flat, and expansive landscape, with vegetation throughout, making it an acceptable area to accommodate a wind energy development of this scale. Any cumulative effects on the overall character of the landscape are likely to be noticeable only from elevated vantage points which offer open views over the flat lowland terrain. From these elevated locations, the proposed turbines may not always be visible in combination with other wind farm developments and may be viewed in different directions from certain viewpoints. In such instances, the separation distance between the proposed and cumulative wind farm developments ensures that the turbines are perceived as small-scale elements in the distant background, with little to no visual clutter occurring between the various wind energy developments.

A description of the cumulative visual interactions between the proposed turbines and other cumulative projects from visual receptors is included in the Photomontage Assessment Tables (Appendix 14-3). While the proposed turbines will introduce some new areas within the landscape where turbine visibility will occur, other than elevated vantage points, views beyond 5km will generally be very limited and intermittent throughout the landscape. The proposed turbines appear as small-scale element in the distant background, where it can be seen that the expansive character of the flat landscape can absorb a wind energy development of this scale without resulting in significant cumulative landscape effects.

The highest level of cumulative landscape effect was assessed in relation to ILCA 4 as the proposed turbines will add to the cumulative turbines within the wider landscape, particularly as viewed from within this ILCA. As detailed in Appendix 14-2, an overall 'Slight' negative residual landscape effect.

14.7.3.2 Visual Effects (Operational Phase)

14.7.3.2.1 *Selection of Photomontage Viewpoints*

Photomontages were used to assess the visual effects from 20 no. viewpoint locations, which are presented in EIAR Volume 2: Photomontage Booklet. These 20 no. viewpoint locations are on the A0 Map – Appendix 14-4 LVIA Baseline Map and on Figure 14-19 and Figure 14-20 below. 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 locations, which based on a desktop review had the potential for views of the proposed turbines, had complete intervening visual 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 turbines.

Multiple on-site surveys and visibility appraisals conducted throughout the years from 2020-2025 determined that visibility of the proposed turbines is greatest from the locations in close proximity to the site due to the characteristics of the surrounding landscape. Due to this, viewpoint selection was particularly focused on locations proximate to the proposed turbines. In this regard, it is important to note that the visual impact of the proposed turbines shown in the photomontages selected for the EIAR Volume 2: Photomontage Booklet is not entirely representative of visual effects in the wider landscape of the 25km LVIA Study Area, where in reality very little visibility occurs.

Alternative Photomontage Viewpoints – Photowires

Photomontage imagery was captured from many locations in the LVIA Study Area other than the 20 no. Photomontage viewpoints that were selected for the EIAR Volume 2: Photomontage Booklet. Photowires are early-stage photomontage visualisations comprising panoramic photos with overlaid wirelines (Classified as Type 3 Visualisations in the Landscape Institute Technical Guidance Note, 2019). Photowires were produced from 15 other viewpoint locations in the LVIA Study Area. These viewpoints were not selected for inclusion in the EIAR Volume 2: Photomontage Booklet due to limited visibility of the proposed turbines or a more appropriate nearby location being included in Volume 2 instead. These Photowires do not form part of the assessment of visual effects included in Appendix 14-3. However, 16 no. Photowires are presented within Appendix 14-5, and they are discussed later in this section of the Chapter to illustrate certain points. The location of Photowire viewpoints in Appendix 14-5 are marked as orange icons in Figure 14-19 and Figure 14-20, and are discussed throughout the chapter as Photowire Viewpoint Locations (referred to as PWVPs (e.g., PWVP-A, etc.))

14.7.3.2.2 Photomontage Viewpoint Assessment Outcomes

Visual Effects were assessed using the assessment methodology described in Appendix 14-1. Each Viewpoint location is shown in Figure 14-19. The individual, comprehensive and detailed assessment from the 20 no. viewpoints are presented in Appendix 14-3 of this EIAR – *Photomontage Assessment Tables* and summarised in Table 14-23 below. Appendix 14-3 should be read in conjunction with the photomontage booklet forming Volume 2 of the EIAR.

The visual effect of the Proposed Project was assessed from each viewpoint in terms of the sensitivity of the visual receptors, along with the magnitude of change. Mitigating factors are then considered to arrive at a residual visual effect aligned with the definition of significance in the EPA Guidance (2022). This, in conjunction with a detailed review of the photomontages themselves as well as the likely visibility of the Proposed Project 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 Project, 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 below are Long-Term, Negative and Direct effects.

Table 14-23: Summary of Viewpoint Impact Assessment Results

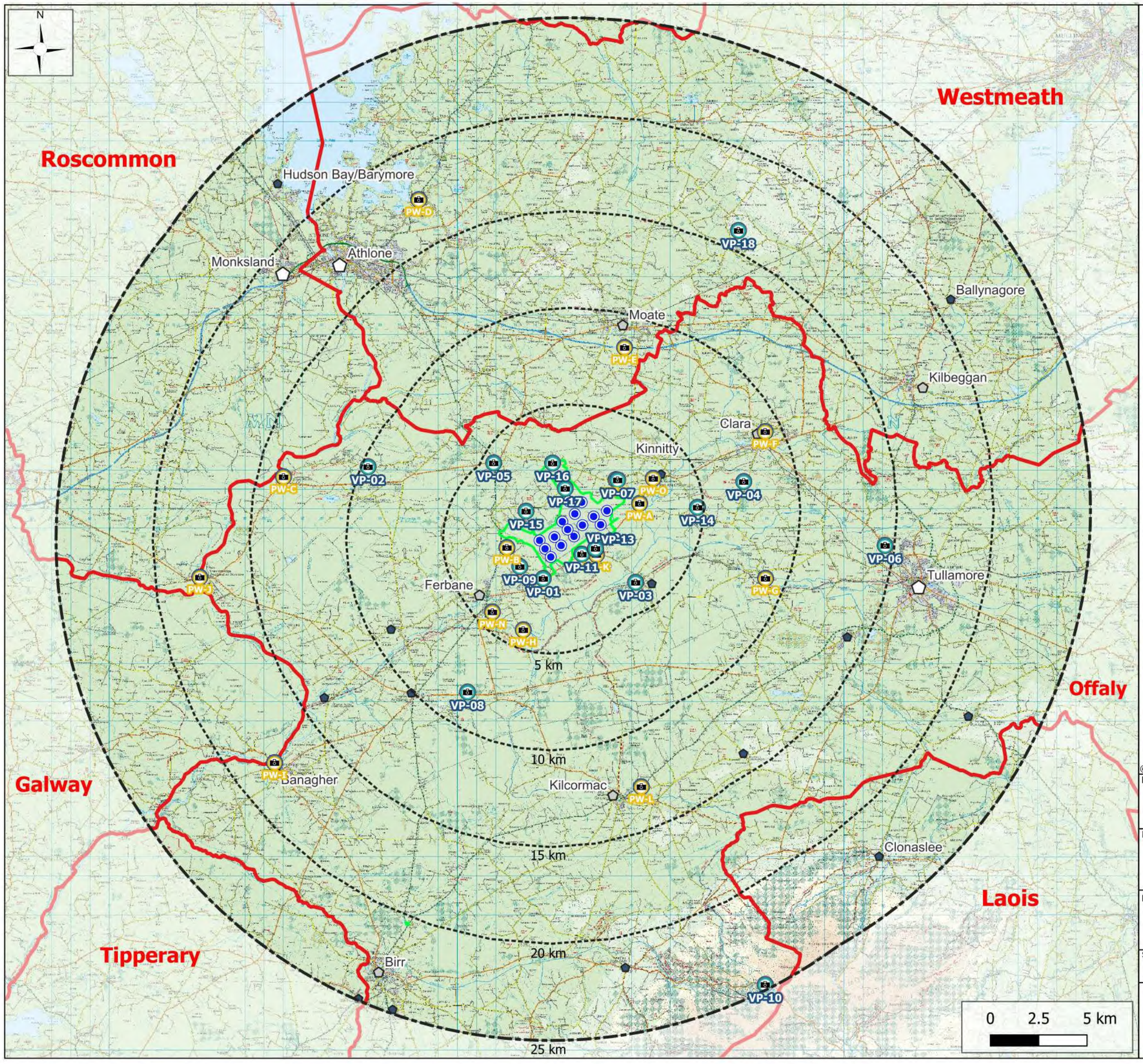
VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
VP01	**Ballydaly** View from the R436 Regional Road in the townland of Ballydaly, located approximately 1.1km south of the nearest proposed turbine (T03)	E: 614,388 N: 725,409	High	Moderate	**Moderate**
VP02	**Clonascra** View from the L7013 Local Road in the townland of Clonascra, located approximately 9.8km west of the nearest proposed turbine (T01). This viewpoint is also located at designated Scenic View 3 in the Offaly County Development Plan (OCDP) and on the 'Pilgrim's Road to Clonmacnoise' walking trail.	E: 605,163.5 N: 731,244	High	Slight	**Slight**
VP03	**Pollagh Bridge** View from the L7020 Local Road in the townland of Pollagh, located approximately 3.4km south of the nearest proposed turbine (T14). This viewpoint is located on the Grand Canal Way.	E: 619,166 N: 725,211	High	Moderate	**Moderate**
VP04	**Clara Bog Nature Reserve** View from the Clara Bog Nature Reserve in the townland of Erry, located approximately 7.2km east of the nearest proposed turbine (T15).	E: 624,757 N: 730,420	High	Slight	**Slight**

VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
VP05	**Doon Crossroads** View from the N62 National Road in the townland of Lackagh More, located approximately 4.3km from the nearest proposed turbine (T10). This viewpoint is located on the Pilgrims Road to Clonmacnoise, a designated walking trail in the OCDP.	E: 611,828 N: 731,385	Medium	Slight	**Not Significant**
VP06	**Tullamore** View from the R420 Regional Road in the townland of Ballyduff, located approximately 14.4km east of the nearest proposed turbine (T14).	E: 632,065 N: 727,119	Low	Negligible	**Imperceptible**
VP07	**St. Manchan's Cemetery** View from St Manchan's Cemetery, in the townland of Parkaree or Boherfadda, located approximately 1.6km northeast of the nearest proposed turbine (T15).	E: 618,236 N: 730,504	High	Slight	**Slight**
VP08	**Cloghan Lake** View from Cloghan Lake, located approximately 8.2km southwest of the nearest proposed turbine (T3).	E: 610,476 N: 719,537	High	Slight	**Slight**
VP09	**Ballylin**	E: 613,178	High	Moderate	**Moderate**

VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
	View from the L30047 Local Road in the townland of Ballylin, located approximately 1.6km west of the nearest proposed turbine (T3)	N: 726,027			
VP10	**Slieve Bloom Mountains** View from the R440 Regional Road in the townland of Glenregan within the Slieve Bloom Mountains, located approximately 24.7km southeast of the nearest proposed turbine (T3).	E: 625,970 N: 704,393	Very High	Negligible	**Slight**
VP11	**Lemanaghan** View from the R436 Regional Road in the townland of Lemanaghan, located approximately 998 metres southeast of the nearest proposed turbine (T5).	E: 616,388 N: 726,670	High	Substantial	**Significant**
VP12	**St. Manchan's Estate** View from the L7020 Local Road (St. Manchan's Estate) in the townland of Lemanaghan, located approximately 1.3km from the nearest proposed turbine (T05). Located along the Offaly Way walking route.	E: 617,079 N: 726,914	High	Substantial	**Moderate**
VP13	**Lemanaghan Monastic Site** View from the Lemanaghan Monastic Site, located approximately 1.2km southeast of the nearest proposed turbine (T5)	E: 617,094	High	Moderate	**Moderate**

VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
		N: 726,964			
VP14	**Hermitage** View from the Lemanaghan Hermitage Site in the townland of Lemanaghan, Co. Offaly. This viewpoint location was requested by the National Monuments Service (NMS). Located approximately 1.28km south of the nearest proposed turbine (T14).	E: 617,527 N: 726,917	High	Slight	**Slight**
VP15	**Kilpatrick** View from the L2016 Local Road in the townland of Kilpatrick, located approximately 4.6km east of the nearest proposed turbine (T15).	E: 622,365 N: 729,091	Low	Slight	**Not Significant**
VP16	**Straduff** View from the L70026 in the townland of Straduff, located approximately 1.6km northwest of the nearest proposed turbine (T01)	E: 613,501 N: 728,891	High	Moderate	**Moderate**
VP17	**Tumbeagh** View from the L7002 Local Road in the townland of Tumbeagh, located approximately 690m north from the nearest proposed turbine T10.	E: 615,527 N: 730,064	Low	Substantial	**Moderate**

VP No.	Description	Grid Ref.	Sensitivity of Receptor(s) (at Viewpoint)	Magnitude of Change	Significance of Residual Visual Effect
VP18	**Cooldorragh** View from the L7001 Local Road in the townland of Cooldorragh, located approximately 2.1km north of the nearest proposed turbine (T10)	E: 614,876 N: 731,380	High	Moderate	**Moderate**
VP19	**Knockastia Hill** View from Knockastia Hill in the townland of Coolatoor, located approximately 16km northeast of the nearest proposed turbine (T15). This viewpoint is located at Protected View 9 in the Westmeath County Development Plan 2021-2027	E: 624,483 N: 743,404	High	Negligible	**Slight**
VP20	**Hill of Uisneach** Rendered wireline view from the top of the Hill of Uisneach, located approximately 23.5km from the nearest proposed turbine. This viewpoint is located on Protected View 36 in the Westmeath County Development Plan 2021-2027	E: 629,030 N: 748,000	Very High	Negligible	**Slight**



Map Legend

- LVIA Study Area
- County Borders
- EIAR Site Boundary
- Proposed Turbine Locations
- Photomontage Viewpoint Locations
- Photowire Viewpoint Locations

Settlements within 25km

- County Hub Town
- Town
- Village

Drawing No.

Figure 14-19

Drawing Title

Photomontage & Photowire Viewpoints Map

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:190,000	200804	22/02/2026	JC	DM

Map Legend

- 5km Buffer
- County Border
- Proposed Turbines
- Photomontage Viewpoint Locations
- Photowire Viewpoint Locations

Co. Offaly Settlements

- Town
- Village

Drawing No.

Figure 14-20

Drawing Title

Photomontage & Photowire Viewpoints Map (zoomed)

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:46,000	200804	19/03/2026	JC	DM

MKO

The assessment of visual effects determined the residual significance of the visual effects to range from 'Significant' to 'Not Significant'. The significance of the residual visual effect was not considered to be Profound or Very Significant at any of the 20 viewpoint locations. The residual effects were found to be Significant (1), Moderate (8), Slight (8), Not Significant (2) and Imperceptible (1).

The viewpoint assessment results (see Appendix 14-3) will be summarised and discussed in more detail in the following sections.

14.7.3.2.3 *Discussion of Visibility and Visual Effects on Specific Receptors in the LVIA Study Area*

The assessment of visual effects uses photomontages shown in the Volume 2 Photomontage Booklet, and discussion of these effects is aided by the photowires presented in Appendix 14-5. Visibility appraisals during site visits as well as ZTV mapping were also used for scoping receptors in and out and selection of photomontage viewpoints. The following section discusses the visual effects arising at key sensitive visual receptors within the ZTV and scoped in for assessment previously in Section 14.5 - Visual Baseline.

Designated Scenic Routes, Views and Prospects

Co. Offaly Scenic View 3 (Map Ref. O-V3)

This scenic view located approximately 9.3km northwest from the nearest proposed turbine (T09) is described in the OCDP as encompassing views towards *"Clonmacnoise and River Shannon, Eskers, Mongan Bog and Finlough".* While this location has full theoretical visibility, the key focus of the scenic view – including the cultural receptor of Clonmacnoise, as well as the river Shannon, Mongan Bog and Fin Lough - are directed to the west, away from the proposed turbines. As such, the proposed turbines are not located in the direction of the key scenic view and therefore will not impact any sensitive aspect of the view, in line with Policy **BLP-43** of the OCDP (see Section 14.4.1 previously). Views eastward, as demonstrated by VP02, are not of any particular unique scenic quality, and reflect the typical characteristics of the cutover peatland and agricultural landscape which is common in this area of the Irish midlands. As discussed in Appendix 14-3, the proposed turbines appear as distant, small-scale vertical elements, occupying a moderate horizontal extent within the broader agricultural, peatland landscape, and do not obstruct or intrude upon any scenic views of regional or international renown. VP02 has been assigned a 'High' sensitivity and a 'Slight' magnitude of change. Overall, as detailed in Appendix 14-3, a 'Long-Term', 'Negative', 'Slight' residual visual effect is deemed to arise. On balance, these effects are not considered significant.

Co. Offaly Scenic View 10 (Map Ref. O-V10)

This scenic view located approximately 6.3km southwest from the nearest proposed turbine, it is described in the OCDP as encompassing *"views southwards towards Slieve Bloom Mountains" and* has full theoretical visibility of the proposed turbines. While the location is within an area of full theoretical visibility of the proposed turbines, the designated scenic view is oriented southward—away from the proposed turbines. Views north-east, towards the proposed turbines, are not the intended focus of the scenic view and are characteristic of a typical agricultural landscape.

At Scenic View 10, vegetative screening along the L-03004 local road will limit visibility toward the proposed turbines. While intermittent glimpses will occur through occasional breaks in vegetation, in any such views, the turbines will be viewed as moderately scaled elements setback within a broad, rural landscape. Overall, given that the focus of the scenic view is not oriented in the direction of the proposed turbines, and given the vegetative screening along the local road, an overall 'Long-Term', 'Negative' 'Not Significant' residual visual effect is deemed to arise for this scenic view. On balance, these effects are not considered significant.

VP08 was captured at Cloghan Lake, from a more open location within the same geographic area as O-V10, it is representative of views directed northeast from nearby this scenic view. VP08 is not actually located at this protected view as there was limited visibility there. From this viewpoint, the proposed turbines are seen to their full extent, as small-scale vertical elements in the distant background, occupying an overall short horizontal extent. VP08 has been assigned a 'High' sensitivity, with a 'Slight' magnitude of change. As detailed in Appendix 14-3, an overall 'Slight' residual visual effect was deemed to arise. VP08 also represents views from Offaly Scenic Route R357, discussed below.

Co. Offaly Scenic Route R357 (Map Ref. O – SR R357)

Scenic Route R357 is described in the OCDP as the route which "*links the N52 at Blueball to Shannonbridge. It passes through esker landscape, peatlands, undulating agricultural lands, Lough Boora Discovery Park and the Callows area of the River Shannon in particular.*" At its closest point, this scenic route is located approximately 6.4km south of the nearest proposed turbine (T3) and has primarily full theoretical visibility along the extent of the route. However, the route traverses predominantly low-lying terrain, which, when combined with dense roadside vegetation, results in limited long-range views and very intermittent visibility of the proposed turbines.

VP08 and PWVP-F are representative viewpoints for this scenic route. Residual visual effects from VP08 were 'Slight' as discussed above. Actual views along the scenic route will be far less than shown in VP08 due to the presence of dense roadside vegetation. At distances beyond 10km, the turbines will be primarily screened or appear as small elements relative to the landscape in the distant background. This can be seen in PWVP-F, where the turbines are seen to be fully screened from view by intervening vegetation.

There may be occasional instances where the proposed turbines are potentially visible through gaps in roadside vegetation from this scenic route. In such these scenarios, visual effects will be intermittent and momentary for receptors travelling the route and the proposed turbines will not be seen within any views of unique scenic quality. Overall, due to intermittent instances of visibility, the combination of low-lying topography and vegetative screening, a 'Slight' magnitude of change was assigned to this scenic route. Overall, visual effects on the R357 Scenic Route ranges from 'Slight' to 'Imperceptible'. On balance, these effects are not considered significant.

Co. Offaly Scenic View 19 (Map Ref. O-V19)

This scenic view, located approximately 9 km southeast of the nearest proposed turbine, is described in the OCDP as views toward *"churches and earthworks."* The primary focus of this view is directed north and northeast, toward the Rahan Monastic Site and associated church ruins, and therefore oriented away from the Proposed Project.

Photowire PWVP-D was captured from within the Rahan Monastic Site and is representative of the typical views surrounding the site, including those experienced from the scenic view. As illustrated in PWVP-D, the proposed turbines are fully screened by intervening vegetation, and no visibility will occur from within the Monastic Site itself. Similarly, views from the nearby scenic view will be of similar nature. Given the separation distance and the extent of vegetative screening, no visual effects will arise for receptors at this scenic view.

Co. Galway Protected View 52

As outlined in the GCDP, this protected view is from *'the middle of Banagher Bridge'*, and *'the focus of this view is the Shannon River, Banagher Park and the Castle ruins'.* This protected view is located approximately 17.8km southwest of the nearest proposed turbine (T3) and has primarily full theoretical visibility of the proposed turbines. However, in reality, at this distance, within the flat landscape and screening form intervening vegetation and built form, visibility will not occur, which can be seen by photowire PWVP-E. No visual effects will occur at this protected view.

Co. Westmeath Protected View 9

As outlined in the WCDP, this protected view comprises *"Panoramic views from Knockastia Hill."* Located approximately 16 km northeast of the nearest proposed turbine (T15), the view has theoretical visibility of the proposed turbines from the western extent of the hill. VP19, captured from this location, illustrates long ranging and expansive panoramic views across the flat and open landscape. At this distance, the proposed turbines are perceived as small-scale features in the far background, occupying a very limited horizontal extent within the wider landscape. This viewpoint was assigned a 'High' sensitivity due to its designation as a protected view in the WCDP, though, it is only of *"local"* significance in the WCDP. Given that the proposed turbines are seen as very small features a large setback distance from the viewpoint, an overall 'Negligible' magnitude of change was deemed to occur. Overall, as set out in Appendix 14-3, a residual visual effect of 'Long-Term', 'Negative', 'Slight' is deemed to arise. On balance, these effects are not considered significant.

County Offaly Scenic View 2 / Osi Viewing Points #40, #134, #172, #207

As described in the OCDP, this designated scenic view is oriented toward the *"Slieve Bloom Mountains, River Shannon, northwards over lowlands*," and includes associated OSi Viewing Points located within the Slieve Bloom uplands. VP10 was captured from one such OSi location, overlooking the expansive flat and low-lying landscape in the distant background. At this distance, the proposed turbines appear as small vertical elements within the flat low-lying landscape. As discussed previously, this view already accommodates a broad horizontal spread of existing wind energy developments, including the Derrinlough, Croghan, Leabeg Wind Farms and Lea Mor turbine. The proposed turbines do not obstruct any landscape features or significantly impact the quality or sensitivities of this long-ranging panoramic view. An overall residual visual effect of 'Long-Term', 'Negative', 'Slight' was deemed to arise at this viewpoint. On balance, these effects are not considered significant.

Settlements

Pollagh

Pollagh village is located approximately 3.4km south of the nearest proposed turbine (T14) and is one of the closest settlements to the Proposed Project. While the ZTV indicates full theoretical visibility of the proposed turbines, on-site appraisals determined that actual visibility within the settlement is far less. This is primarily due to the visual screening occurring from the built environment and intervening vegetation within this low-lying settlement. Figure 14-4 within the Route Screening Analysis shows that the majority of roads within the village of Pollagh, as well as those on the periphery of the settlement, are classified as having 'Full/Dense' Visual Screening or 'Partial/Intermittent' Visual Screening. As a result, visibility of the proposed turbines within the low-lying streetscapes of Pollagh will be limited.

VP03 was captured from an elevated vantage point along a bridge crossing the Grand Canal, where open views towards the proposed turbines occur. As discussed in Appendix 14-3, from this viewpoint, the proposed turbines appear as moderately scaled elements spanning a relatively wide horizontal extent. While the turbines occupy a moderate horizontal extent, several of the proposed turbines are either partially or fully screened by the intervening vegetation and built form. Furthermore, the proposed turbines, while visible, appear above the distant horizon as a coherent arrangement of turbines, generally regularly spaces, featuring an overall even vertical profile. This layout aligns with the guidelines set out in the DoEHLG 2006 Guidelines') and the Draft DoHPLG 2019 Guidelines, that a *"preferred even profile"* is most suited for this landscape type. As detailed in Appendix 14-3, a 'Moderate' magnitude of change was deemed to occur at this viewpoint, with an overall residual visual effect of 'Moderate.'

Overall, while instances of open visibility toward the proposed turbines will occur from occasional elevated locations in and around Pollagh, such as from second-storey windows or during the winter

months when trees have shed their foliage, the majority of visibility within the settlement is largely screened by the built form within the village. In areas where visibility does occur, the proposed turbines will appear visually set-back beyond multiple agricultural fields, forming a coherent arrangement of turbines, in line with DoEHLG 2006 Guidelines and Draft DoHPLG 2019 Guidelines.

An overall 'Slight' residual effect was deemed to arise for the settlement of Pollagh, with a residual visual effect of 'Moderate' significance for the small number of receptors at the northern extent of the town which will have open views of the proposed turbines. Overall, visual effects within the settlement of Pollagh ranges from 'Moderate' to 'Slight'. On balance, these effects are not considered significant.

Ferbane

The centre of Ferbane town is located approximately 3.8km southwest of the nearest proposed turbine (T3). Residential areas of Ferbane extend east in close proximity to the proposed turbines – effects on these residential receptors on the eastern outskirts of Ferbane are addressed in detail in Section 14.7.3.2.4

The ZTV shows full theoretical visibility of the proposed turbines in Ferbane, however, on-site appraisals determined that actual visibility within the settlement itself is much lower, due to screening from the built environment and surrounding vegetation within this low-lying settlement. This was verified by early-stage photomontage modelling from the centre of Ferbane, which determined no visibility will occur.

Figure 14-4 of the Route Screening Analysis (see Section 14.3.3) shows that the roads within the settlement of Ferbane are primarily classified as having either 'Full/Dense' Visual Screening or 'Partial/Intermittent' Visual Screening. As a result, 'Not Significant' residual visual effects occur from the streetscape and street level receptors within the centre area of Ferbane town. However, there will likely be greater visibility of the proposed turbines on the outskirts of the town to the east, where more open views towards the proposed turbines occur.

VP01 was captured along the R436 Regional Road as it exits Ferbane to the east within the townland of Ballydaly, within an area of 'Little/No' Visual Screening and is representative of the most open views from this area. From this location, turbines T01, T02, and T03 are visible to their full extent as tall vertical elements, while the remaining turbines appear as smaller-scale features, partially screened by intervening vegetation. Five of the proposed turbines are fully screened from view, illustrating how the visibility of the proposed turbines diminishes with distance in this very flay landscape. As detailed in Appendix 14-3, a 'Moderate' magnitude of change was assigned to this viewpoint, and an overall residual effect of 'Moderate' was deemed to occur. It is important to note that VP01 is located closer to the proposed turbines than the settlement of Ferbane, and as such, the level of visibility and visual effects from within the town, particularly from street level will be further mitigated due to distance and additional screening from the built environment. Overall, visual effects in the settlement of Ferbane ranges from 'Not Significant' to 'Moderate'. On balance, these effects are not considered significant.

Ballycumber

Ballycumber village is located approximately 3.7km east from the nearest proposed turbine (T15) and is within an area of full theoretical visibility. However, on-site appraisals determined that actual visibility within the settlement itself will be far less due to the visual screening occurring from the built environment and surrounding vegetation. The Route Screening Analysis (See Section 14.3.3) indicates that the majority of the settlement and its outskirts experience primarily 'Full/Dense' Visual Screening or 'Partial/Intermittent' Visual Screening, with only limited instances of 'Little/No' Visual Screening.

VP15, captured from a similar distance and geographic orientation as Ballycumber, provides one of the most open views towards the proposed turbines. From this viewpoint the turbines appear as small-scale elements occupying a short horizontal extent in the distant background, partially screened by intervening vegetation. As detailed in Appendix 14-3, a 'Not Significant' residual effect was deemed to

arise at this viewpoint. However, visibility from within the settlement of Ballycumber itself will be far less than shown in VP15 due to the visual screening occurring from the built environment of the village. PWVP-H, taken from within the settlement, within an area of 'Little/No' Visual Screening, shows that at a distance of 3.7km, dense vegetation largely screens visibility of the proposed turbines. While it is acknowledged that more visibility may occur during the winter months, no Significant visual effects are likely to occur. Where visibility does occur, the turbines will occupy a relatively short horizontal extent and will be seen as moderately scaled elements in the background, visually set-back beyond multiple agricultural fields.

Additional viewpoints (PWVP-N and VP07), taken further from Ballycumber at approximately 2.3km and 1.9km, respectively, show that in both cases, the majority of the turbines are screened from view by intervening vegetation. In PWVP-N, the turbines occupy a generally short horizontal extent, while in VP07, only two turbines are visible at their full extent, appearing as moderately scaled elements. From Ballycumber, located approximately 2km further away, views of the proposed turbines will be further mitigated by distance and visual screening. Overall, visual effects in the settlement of Ballycumber ranges from 'Not Significant' to 'Slight'. On balance, these effects are not considered significant.

Ballinahown

Ballinahown village is located approximately 6.9km northwest of the nearest proposed turbine (T10) and has full theoretical visibility of the proposed turbines. VP05, captured on the N62 at the Doon Crossroads, is at a similar distance and geographic orientation as Ballinahown, and is therefore representative of views from the settlement. As discussed in Appendix 14-3, at this distance, the proposed turbines appear as small-scale elements in the distant background, with some turbines either partially or fully screened by intervening vegetation. A 'Not Significant' residual effect was deemed to arise at this viewpoint. The settlement of Ballinahown is located further from the proposed turbines than VP05, resulting in visibility being further mitigated by distance. Where visibility does occur, the proposed turbines will be visible as small-scale elements in the background resulting in slight levels of change within the settlement from Ballinahown. An overall residual visual effect of 'Long-term', 'Negative' and 'Slight'. On balance, these effects are not considered significant.

Moate

Moate town is located approximately 9.2km north of the proposed turbines and has full theoretical visibility of the proposed turbines. PWVP-J, captured 8.4km north of the proposed turbines, is at a similar distance and geographic orientation as Moate and is representative of the views from the settlement. PWVP-J, taken from an elevated location at a bridge crossing over the M8 Motorway, where the majority of the proposed turbines are largely screened by intervening vegetation, with only blade tips visible. Within the settlement of Moate itself, visibility will be further reduced due to the visual screening provided by the built environment and the low-lying topography of the settlement. An overall negative 'Long-Term', 'Negative', and 'Not Significant' residual visual effect was deemed to arise for Moate. On balance, these effects are not considered significant.

Castledaly

Castledaly village is located approximately 7.4km north of the nearest proposed turbine (T10) and has full theoretical visibility of the proposed turbines. PWVP-J, captured 8.4km north of the proposed turbines, is at a similar distance and geographic orientation as Casteldaly and is representative of the views from the settlement. PWVP-J, taken from an elevated location at a bridge crossing over the M8 Motorway, and shows that the majority of the proposed turbines are largely screened by intervening vegetation, with only blade tips visible. Castledaly, located in a generally low-lying area, will experience similar views as those is in PWVP-J, with dense vegetation further screening visibility of the proposed turbines. An overall 'Long-Term', 'Negative' and 'Not Significant' residual visual effect was deemed to arise for the settlement of Castledaly. On balance, these effects are not considered significant.

Clara

Clara town is located approximately 8.6 km east of the proposed turbines and has full theoretical visibility of the proposed turbines. There are some localised areas of elevation associated with the esker landscape on the outskirts of the town, which may permit occasional long-range views towards the proposed turbines. However, within the settlement itself, visibility is largely screened by the built form and vegetative screening within. PWVP-C was captured from within a residential estate from an elevated vantage point in Clara town and shows that the proposed turbines are largely screened by intervening vegetation. Such screening is typical throughout the settlement. Visibility will become more open during the winter months (than shown in PWVP-C) when trees have lost their foliage. VP04, captured from Clara Bog approximately 2.2 km south of Clara town, is representative of the more typical views from the outskirts of Clara, where an absence of the built form within the settlement provides more open views. As discussed in Appendix 14-3, from this location, the proposed turbines appear as small-scale elements in the distant background, partially screened by intervening vegetation. While there is some visual separation between proposed turbines T11 and T10 and the other turbines, the overall turbine layout appears to have a generally even vertical profile, with a moderate horizontal extent within the flat landscape. An overall 'Slight' magnitude of change was deemed to arise at this viewpoint. Overall, a 'Slight' magnitude of change was determined to occur for the settlement of Clara, with an overall residual visual effect of 'Long-Term', 'Negative' and 'Slight'. On balance, these effects are not considered significant.

Belmont

Belmont village is located approximately 8.4km west of the nearest proposed turbine (T2) and has full theoretical visibility of the proposed turbines. VP08, captured from a more open location from within the same geographic area but not in the settlement of Belmont, is representative of the open views from this part of the landscape where visibility does occasionally occur. As discussed previously (in relation to Scenic View 10) an overall 'Slight' residual visual effect was deemed to arise VP08. Visual effects on the settlement of Belmont, located >8 km from the nearest proposed turbine, will be further mitigated by distance and the visual screening from the built form within the settlement. An overall 'Long-Term', 'Negative' and 'Not Significant' residual visual effect was deemed to arise for the settlement of Belmont. On balance, these effects are not considered significant.

Cloghan

Cloghan village is located approximately 9.9km southwest of the nearest proposed turbine (T03) and has primarily full theoretical visibility of the proposed turbines. VP08 was captured approx. 2.7km east from the settlement of Cloghan and is representative of views from this settlement. As stated previously, the proposed turbines are seen to their full extent, as small-scale vertical elements in the distant background, occupying a short horizontal extent. Visual effects on the settlement of Cloghan, will be further mitigated by distance and the visual screening from the built form within the settlement. An overall 'Long-Term', 'Negative' and 'Not Significant' residual visual effect was deemed to arise for the settlement of Cloghan. On balance, these effects are not considered significant.

Kilcormac

Kilcormac town is located approximately 12.9km south of the nearest proposed turbine (T3) and has full theoretical visibility of the proposed turbines. PWVP-K was captured from the N52 National Road, on the outskirts of Kilcormac, and is representative of the typical views from outside this settlement. As seen in the photowire, at this distance, the majority of the proposed turbines appear in the distant background, and are either fully screened by intervening vegetation, or partially screened at the lower tower sections. Within the settlement itself, visibility will further mitigate due to the visual screening from the built form. An overall 'Long-Term', 'Negative', 'Not Significant' residual visual effect is deemed to arise for the settlement of Kilcormac.

Tullamore

Tullamore, a key town within County Offaly is located approximately 16.6km east from the nearest proposed turbine (T15). VP06 was captured from the R443 Regional Road as it exists the settlement of Tullamore. As discussed in Appendix 14-3, at this distance, the proposed turbines are barely discernible within the view, with only partial blade tips visible above intervening vegetation. An overall 'Negligible' magnitude of change was deemed to arise at this viewpoint. Within Tullamore itself, at a distance of >16km away from the proposed turbines, the turbines will be largely mitigated by distance. Any potential visibility that may occur, will be further screened by the built form of the settlement itself. An overall 'Long-term', 'Negative', 'Imperceptible' residual visual effect was deemed to arise for the settlement of Tullamore. On balance, these effects are not considered significant.

Mucklagh

The village of Mucklagh is located approximately 14km southeast of the nearest proposed turbine (T14) and has primarily full theoretical visibility of the proposed turbines. VP06 is located approximately 4.9km north of Mucklagh, within the same geographic orientation, and is representative of views from within this settlement. As discussed above, only the blade tips of the proposed turbines are discernible above intervening vegetation in VP06. Any visibility that occurs from Mucklagh will be of similar scale and extent. At this distance, the proposed turbines will be barely discernible in the distant background. An overall 'Long-Term', 'Negative', 'Imperceptible' residual visual effect was deemed to arise for the settlement of Mucklagh. On balance, these effects are not considered significant.

Recreational Routes

Offaly Way

The Offaly Way is a long-distance walking trail that runs in a south-north direction from the Slieve Bloom Mountains to St. Manchan's Well at Lemanaghan. Within the LVIA Study Area, the trail follows the local road network and has primarily full theoretical visibility along the route. However, the route generally follows the low-lying contours of the landscape, and as established throughout this chapter, visibility within such flat landscapes, particularly beyond 5km is largely mitigated due to the combined screening effects of distance and intervening vegetation. As such, visibility will be greatest within 5km from the proposed turbines. VP12 and PWVP-P are representative viewpoints within 5km of the nearest proposed turbine. In both instances, the proposed turbines appear as moderately scaled elements within the landscape. As discussed in Appendix 14-3, while the proposed turbines in VP12 occupy a wide horizontal extent, they are partially screened by intervening vegetation and visually set-back beyond multiple agricultural fields. An overall 'Moderate' residual effect was deemed to arise at this viewpoint. The route itself follows a low-lying path with varied levels of vegetative screening. Beyond 5km, visibility towards the proposed turbines will be limited. This can be seen at PWVP-K, which shows that the majority of the proposed turbines appear as small-scale elements in the distant background, either fully screened by intervening vegetation, or partially screened at the lower tower sections.

Greatest visual effects will occur within 5km of the proposed turbines; however, views are generally intermittent, with many of the proposed turbines screened from view. Where visibility does occur beyond 5km, the visual impact of the proposed turbines will be largely mitigated by distance. Overall, residual visual effects on the Offaly Way ranges from 'Slight' to 'Moderate'. On balance, these effects are not considered significant.

Pilgrims Road to Clonmacnoise

Pilgrims Road to Clonmacnoise is located approximately 1.5km north of the nearest proposed turbine (T11) at its closest point. The route primarily follows the local road network, while also traversing the R444 Regional Road. VP18 is located on this walking trail and also represents residential receptors, it is the closest viewpoint to the proposed turbines. VP18 shows the most open views of the Proposed Wind

Farm where there are views down into the cutover peatlands of Lemanaghan bog from an elevated vantage point. At this location, the proposed turbines, proposed substation and grid infrastructure will be visible. As described in more detail in Section 14.7.2.4.1, a landscape plan is included as part of the Proposed Project to soften the visual impact of the proposed substation from this vantage point and mitigate visual effects. Residual effect of 'Moderate' was deemed to arise at this viewpoint in Appendix 14-3.

There are limited instances where the proposed turbines are visible to their full extent from the Pilgrims Road to Clonmacnoise, due to visual screening from small undulations in localised landform and mature boundary vegetation, particularly with distance. This can be seen from VP05, where the route passes through Doon Crossroads, where the proposed turbines appear as small-scale elements in the distant background, with some of the proposed turbines either partially or fully screened by intervening vegetation. This shows that actual visibility along the route is significantly reduced compared to the ZTV map, due to the visual screening effects of above ground features within the flat landscape. This is further evidenced by photowires PWVP-H and PWVP-K, which show that from various orientations along this route, actual visibility is far less than indicated by the ZTV map within this heavily vegetated flat landscape.

As discussed throughout this chapter, at distances beyond 5km, visibility significantly reduces with distance, with the turbines appearing as small-scale elements in the distant background. This can be seen at VP02, where, although all proposed turbines are visible, they are perceived as small-scale elements in the distant background, partially screened by intervening vegetation. Further west along this route, within Clonmacnoise itself, the proposed turbines are primarily fully screened within this heavily vegetated landscape. This can be seen by PWVP-B, which shows that the proposed turbines are not visible from within Clonmacnoise.

Overall, visibility of the proposed turbines along the extent of this walking trail will be intermittent. There are only limited instances where the proposed turbines are visible to their full extent, primarily within the immediate vicinity of the Proposed Project site. For the remaining stretch of the route, views will be brief and intermittent while travelling along the local road. This is further evidenced by the Route Screening Analysis (see Section 14.3.3), which characterises the majority of local road within 5km of the turbines as having 'Full/Dense' Visual Screening or 'Partial/Intermittent' Visual Screening. Where visibility does occur beyond 5km, the visual impact of the proposed turbines will be largely mitigated by distance, and vegetative screening within the flat landscape. Overall, residual visual effects on this route ranges from 'Moderate' to 'Imperceptible'. On balance, these effects are not considered significant.

Lough Boora Turraun Cycle Route

The Lough Boora Turraun Cycle Route is a looped cycle route located 4.3km south from the nearest proposed turbine (T03) and has primarily full theoretical visibility. However, on-site appraisals determined that actual visibility will be far less, particularly to the southern extent, where the forested area of Lough Boora Discovery Park provides dense visual screening of the proposed turbines. Where visibility does occur, the proposed turbines will be visible in the distant background, largely screened from view by intervening vegetation.

Open visibility towards the proposed turbines will be primarily limited to the northern extent of the loop. VP03 was captured approx. 3.2km north-east from the recreational route from an elevated vantage point and shows that the proposed turbines appear as moderately scaled elements occupying a wide horizontal extent, with several of the proposed turbines either partially or fully screened by the intervening vegetation. Visibility from the recreational route, which is situated at a greater setback distance and lower elevation than VP03, will be further mitigated by distance and vegetative screening. Where open views do occur, visibility will be similar as from VP08, where the proposed turbines will be seen to their full extent, as small-scale vertical elements in the distant background, occupying a short horizontal extent.

The Lough Boora Turraun Cycle Route currently traverses areas containing existing wind energy developments, including the Leabeg Wind Farm and Lea Mor turbine, and features distant views of the existing Derinlough, Cloghan and Meenwaun Wind Farms. Therefore, cumulative visual effects will occur on this walking trail. Overall, residual visual effects on this route ranges from 'Moderate' to 'Slight'. On balance, these effects are not considered significant.

Birr Cycle Loop 3, 3a and 3b

The Birr Cycle Loops, collectively, stretch from approx. 10km to 25km to the south-east from the nearest proposed turbine. Within 10km, visibility is largely restricted due to screening from roadside vegetation, though occasional instances of open visibility do occur. VP08 was captured approx. 155m north of this recreational route, from Cloghan Lake, where residual visual effects are 'Slight'.

No visual effects will occur from the Birr Cycle Loops at distances beyond 10km, excepting from the occasional elevated vantage point where residual visual effects will be 'Not Significant'. On balance, these effects are not considered significant.

Mullingar-Athlone Old Rail Trail Greenway

The Mullingar-Athlone Old Rail Trail is a long-distance cycle way that is located 9.3km north from the nearest proposed turbine and has primarily full theoretical visibility along its route, with some pockets of no visibility due to localised undulations. As the route enters the LVIA Study Area to the north-east, it traverses elevated topography before gradually descending into lower-lying terrain as it travels towards the settlement of Athlone. Within 10km of the proposed turbines, visibility along the route is largely restricted due to screening from roadside vegetation, though occasional instances of open visibility do occur. PWVP-J was captured 1.5km south of the cycle way and shows that the proposed turbines are largely screened by intervening vegetation. Visibility at this cycle route, which is located further away than this photowire, will be further mitigated by distance and intervening vegetation. Beyond 10km, where visibility does occur form elevated vantage points, visibility will be of similar scale as at VP19, where the proposed turbines will be seen as small-scale, distant features and will not be considered to have any 'Significant' visual effects on this recreational route. Overall, a residual visual effect of 'Imperceptible' was deemed to arise for the Mullingar-Athlone Old Rail Trail Greenway. On balance, these effects are not considered significant.

Green Heartlands Cycle Trail

The Green Heartlands Cycle Trail, stretch from approx. 10km to 25km to the north-west from the nearest proposed turbine. Within 10km, visibility is largely restricted due to screening from roadside vegetation, though occasional instances of open visibility do occur. VP02, captured 2.6km east from this this recreational route shows that the proposed turbines are perceived as small-scale elements in the distant background, partially screened by intervening vegetation. It is important to note that VP02 is located closer to the proposed turbines than the recreational route to the north-west. As such, visibility from this cycle trail, will be further mitigated by distance and vegetative screening. At distances beyond 10km, the proposed turbines will be further mitigated by distance and intervening vegetation. Where visibility does occur, the proposed turbines will be seen as distant features and will not be considered to have a 'Significant' impact of these recreational routes. Overall, the residual visual effects on the Green Heartlands Cycle Trail is 'Imperceptible'. On balance, these effects are not considered significant.

Slieve Bloom Walking Trails : Slieve Bloom Way / Giants Grave / Kinnitty Castle Loop

The Slieve Bloom Mountains have various walking trails, short and long, including the Slieve Bloom Way, Giants Grave and Kinnity Castle Loop which have pockets of theoretical visibility primarily confined to the summit of the mountain. The summit that is within the LVIA Study Area offers panoramic views of the surrounding flat landscape, including existing wind energy developments, such as the Derrinlough Wind Farm, as seen in VP10. As such, views of existing turbines already form part of the visual context from the Slieve Bloom Mountains and its walking trails. At this distance, views of

the proposed turbines, as seen in VP10 will appear as small, slender vertical features within the distant landscape and do not give rise to any 'Significant' visual effects along any of the routes. Overall, the residual visual effect of the Slieve Bloom Walking trails is 'Long-Term', 'Negative', and 'Slight'. On balance, these effects are not considered significant.

Recreational Destinations , Cultural Heritage and Tourist Destinations

Lemanaghan Monastic Complex (Monastic Site and Hermitage)

The Lemanaghan Monastic Site is a cultural heritage receptor of high sensitivity and is located 1.2km from the nearest proposed turbine (T05). As seen in the Plate 14-31 below, the monastic site is physically set back from the location of the proposed turbines by multiple agricultural fields and is enclosed by mature vegetation and boundary walls.

The visual impact assessment considers visitors to the Monastic Complex. Section 1.4 of Appendix 13-5 Lemanaghan Monastic Complex: Historic, Landscape, and Visual Context discusses the journey scenario of a visual receptor through the monuments at the Monastic Complex.

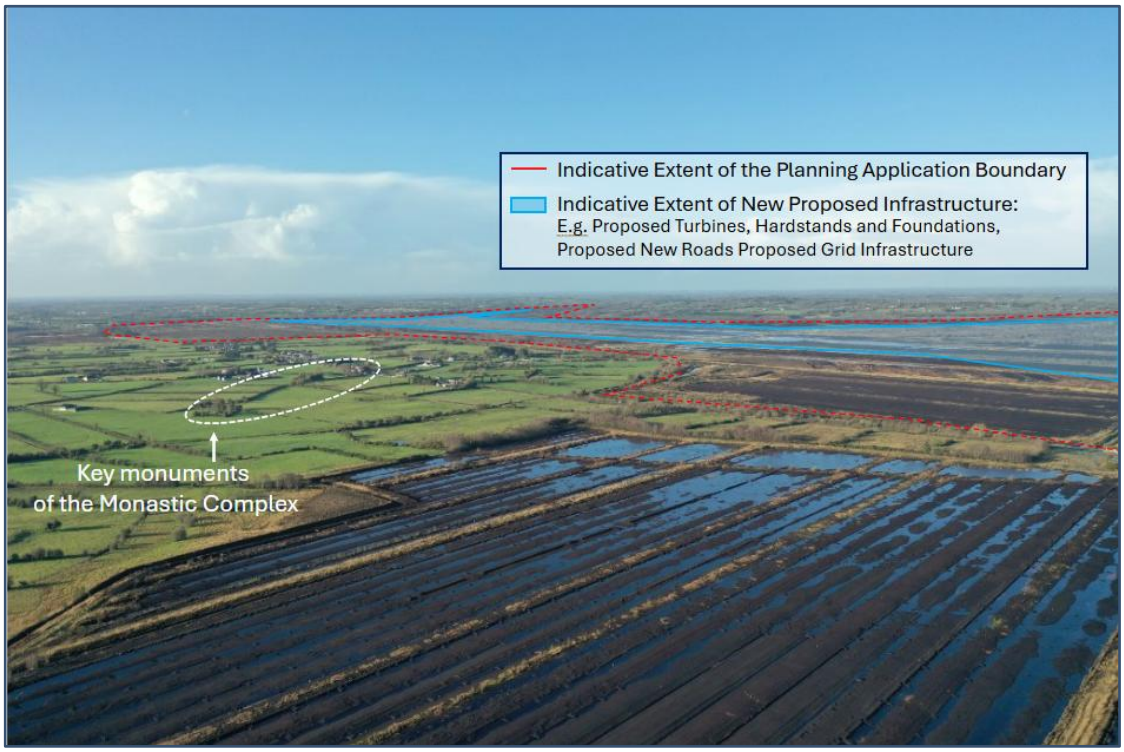


Plate 14-31 Drone Image for Landscape Context: Views north overlooking Lemanaghan Monastic Site and the Proposed Project site

VP13 was captured from within the Lemanaghan Monastic site itself, and VP12 was captured further south along the 'Offaly Way' to show the visual impact on the landscape setting of the monastic site. VP14 was captured from within the Lemanaghan hermitage. As discussed in Appendix 14-3, the majority of the proposed turbines are screened from view by the grove of trees enclosing the ruins of the monastic site/hermitage. While there is an impact on the visual setting of the landscape, this visual setting is already characterised by existing residential and agricultural development, as well as overhead lines and utility poles.

While the turbines will introduce new elements into the wider landscape that will be visible from within the monastic complex, their location is consistent with established planning policy. Given the nature of views, the setback distance, and existing vegetative screening, the proposed turbines will not materially

alter the key characteristics of this sensitive receptor and as a result, will not result in Significant visual impacts. As requested by NMS (detailed in Section 14.1.4), a winter-view photomontage was prepared for the Lemanaghan Monastic Site, with both 90-degree and 53.5-degree fields of view provided (VP13 in Volume 2: Photomontage Booklet), and as detailed in Appendix 14-3, the magnitude of change which was deemed to be 'Moderate' remains the same.

The Proposed Wind Farm is set-back beyond the buffer specifically created to mitigate impacts on the Lemanaghan Monastic Site as set out in local planning policy through the 2021 amended Wind Energy Zoning (as per the Chief Executive's Report), with the exception of turbine T05, which is only located approximately 2 metres within the buffer, resulting in a residual visual effect of 'Long-Term', 'Negative' and 'Moderate'. On balance, these effects are not considered significant.

Coole Castle

Coole Castle is a historic monument located approximately 4 km southwest of the nearest proposed turbine (T03) and lies within an area of full theoretical visibility. On site appraisals determined that in reality, visibility is far less than indicated by the ZTV, as views are largely screened by intervening vegetation. This can be seen in PWVP-L, which was captured from Coole Castle and shows that the proposed turbines are mostly screened, with only blade tips visible above the treeline. Overall, given the extent of screening from trees and hedgerows, along with the setback distance, the proposed turbines will not significantly alter the visual setting of the landscape at Coole Castle. While some partial turbine visibility will occur, the turbines will appear as small-scale elements in the distant background. As such, the overall residual visual effect is considered to be 'Long-Term', 'Negative', and 'Not Significant'. On balance, these effects are not considered significant.

Gallen Abbey / Cemetery

Gallen Abbey / Cemetery is a monastic site located approximately 4.2 km southwest of the nearest proposed turbine (T03) and falls within an area of full theoretical visibility. In reality, visibility of the proposed turbines is significantly reduced due to dense vegetative screening enclosing the abbey. PWVP-G, captured directly north of the Gallen Cemetery was captured to illustrate this and shows that the proposed turbines are located beyond a dense stretch of forestry and are not visible from this receptor. As such, no visual effects will occur at Gallen Abbey.

Rahan Monastic Site and Church Ruins

Rahan Monastic Site and Church Ruins, recognised as a sensitive cultural heritage location due to its status as an early monastic complex, is located approximately 8.9 km east of the nearest proposed turbine (T14). While ZTV shows full theoretical visibility, the monastic site itself is enclosed by dense hedgerow vegetation. This, in combination with the presence of intervening vegetation across the low-lying and the flat landscape between Rahan Monastic Site and the proposed turbines, results in a substantial reduction in visibility. This can be seen by PWVP-D, where the proposed turbines are fully screened from within the Monastic Site. Overall, given the distance, and limited visibility, no direct visual effects will occur on the Rahan Monastic Site.

Clonmacnoise

Clonmacnoise Monastic Site is a nationally and internationally renowned cultural heritage receptor of Very High sensitivity, located approximately located 13.7km west of the nearest proposed turbine (T01). As shown in the ZTV mapping (Figure 14-1), the Monastic Site itself has very limited instances where theoretical visibility occurs due to the surrounding esker-like landform, which encloses the site (see Figure 14-21).

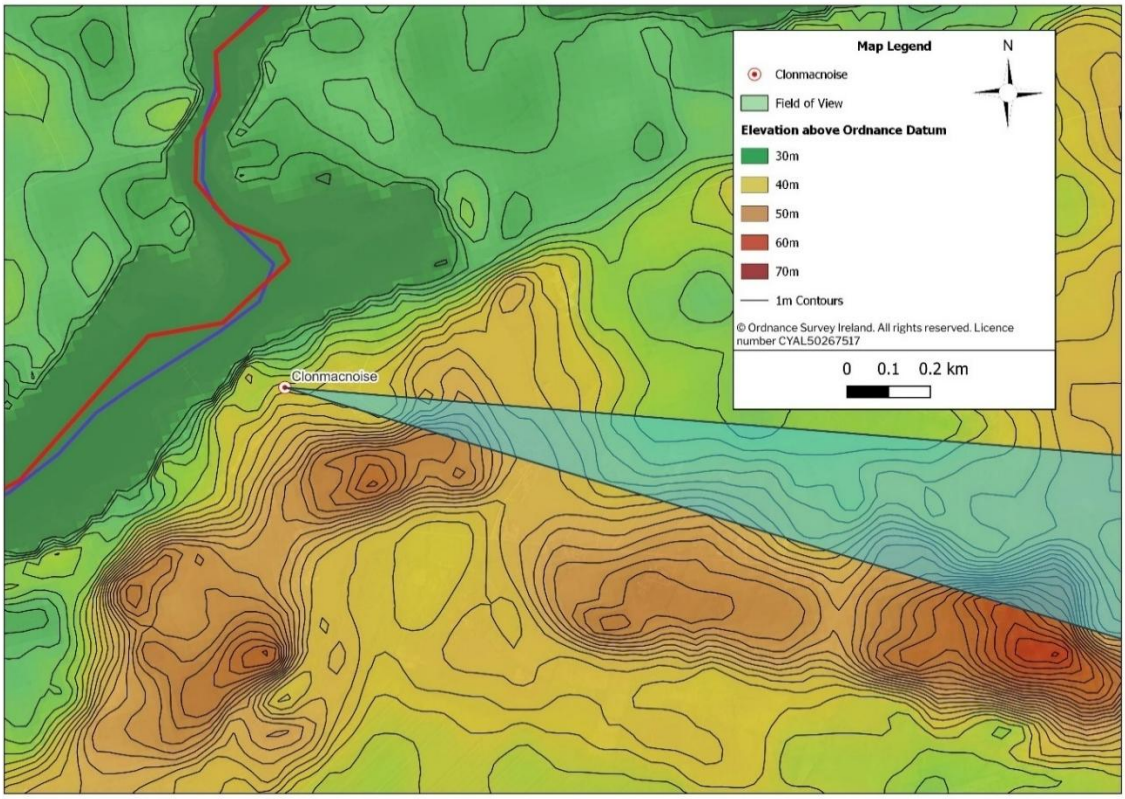


Figure 14-21 Field of View from Clonmacnoise with Elevation above Ordnance Datum

Where pockets of full theoretical visibility does occur, Clonmacnoise Monastic Site is further enclosed by dense vegetation, boundary walls, and mature trees, particularly to the east, further limiting visibility towards the proposed turbines, as seen Figure 14-22 and Plate 14-32 below. This can be seen at PWVP-B, which shows that from the most elevated vantage point within the monastic site itself, no visibility of turbines occur due to the combination of set-back distance, intervening landform, and dense vegetation. While there is a very small potential for limited distant visibility during winter months when vegetation is less dense, any views would consist of intermittent glimpses of turbine blade tips in the distant background, where Significant visual effects are not likely to occur. Views westward, towards the River Shannon and the Callows, remain unobstructed by the proposed turbines.

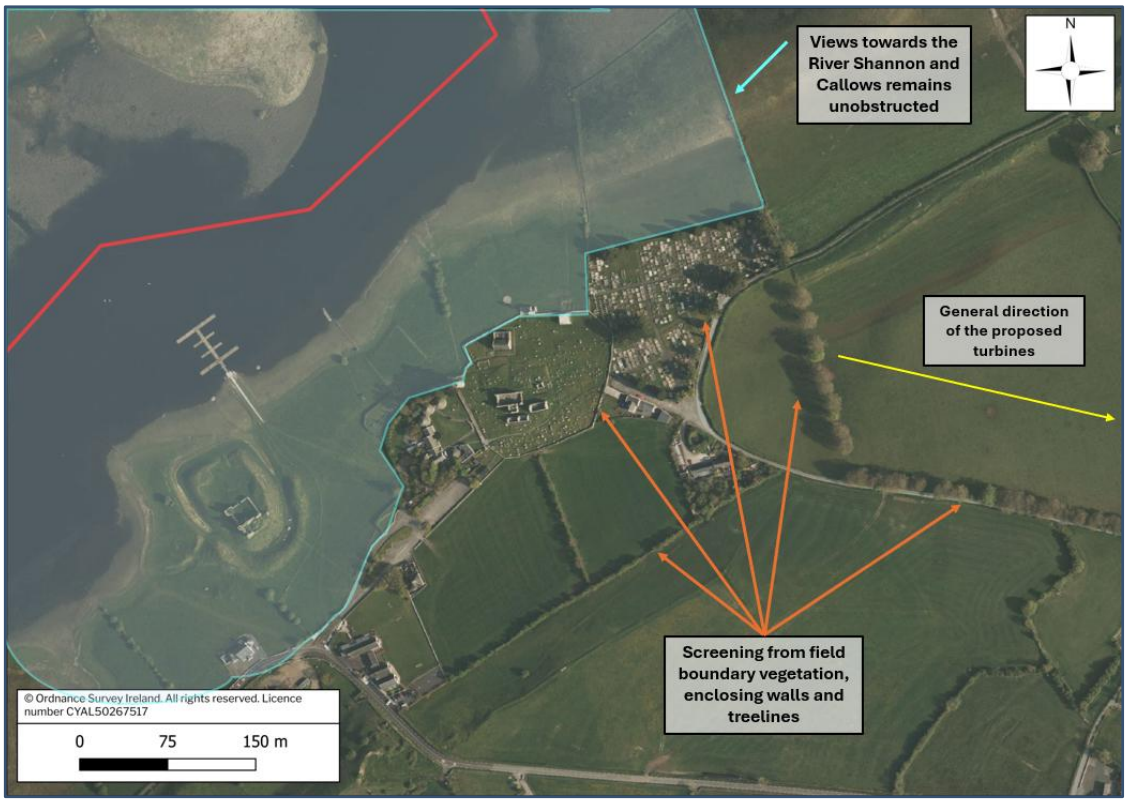


Figure 14-22 Visibility from Clonmacnoise

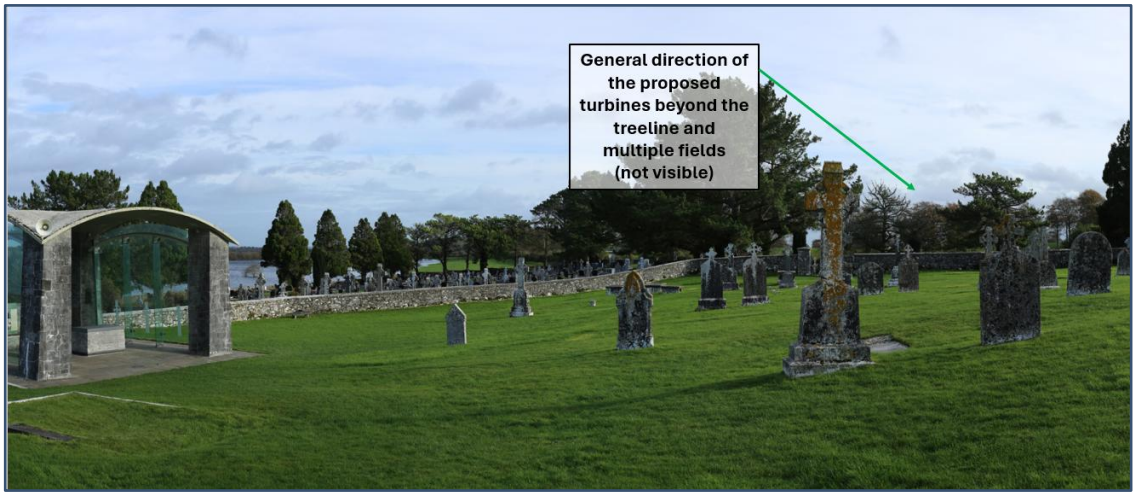


Plate 14-32 Views east towards the proposed turbines from Clonmacnoise

Overall, the proposed turbines will not alter the physical fabric of the character of the monastic site and will not detract from any of the key views from within the monastic site. Where instances of visibility may occur (rare occasions in the winter months), views will be limited to intermittent glimpses of turbine blade tips and will be barely distinguishable in the distance.

Given the nature of views, the significant setback distance, and the high level of screening and visual enclosure, the proposed turbines will not significantly impact the visual setting or sensitive scenic amenity within the Clonmacnoise enclosure. Any change that does occur will be barely noticeable, and as such, the magnitude of change is considered 'Negligible', resulting in a residual visual effect of 'Long-Term', 'Negative' and 'Imperceptible'. On balance, these effects are not considered significant.

Durrow Church and High Cross

Durrow Abbey is situated approximately 13km east of the nearest proposed turbine and is enclosed by dense pockets of woodland, as shown in Figure 14-23 below. Due to this extensive vegetation, visibility from Durrow Abbey itself will not occur. VP06, located approximately 3.6km south of Durrow Abbey, is within the same geographic orientation as Durrow Abbey and is representative of the open views from this general direction. As discussed in Appendix 13-3, from this location, the proposed turbines are barely discernible, with only partial blade tips visible above intervening vegetation. Given the greater level of screening within Durrow Abbey itself, visibility from the heritage site will be even more restricted, and views of the turbines will not occur. As such, no visual effects will occur.

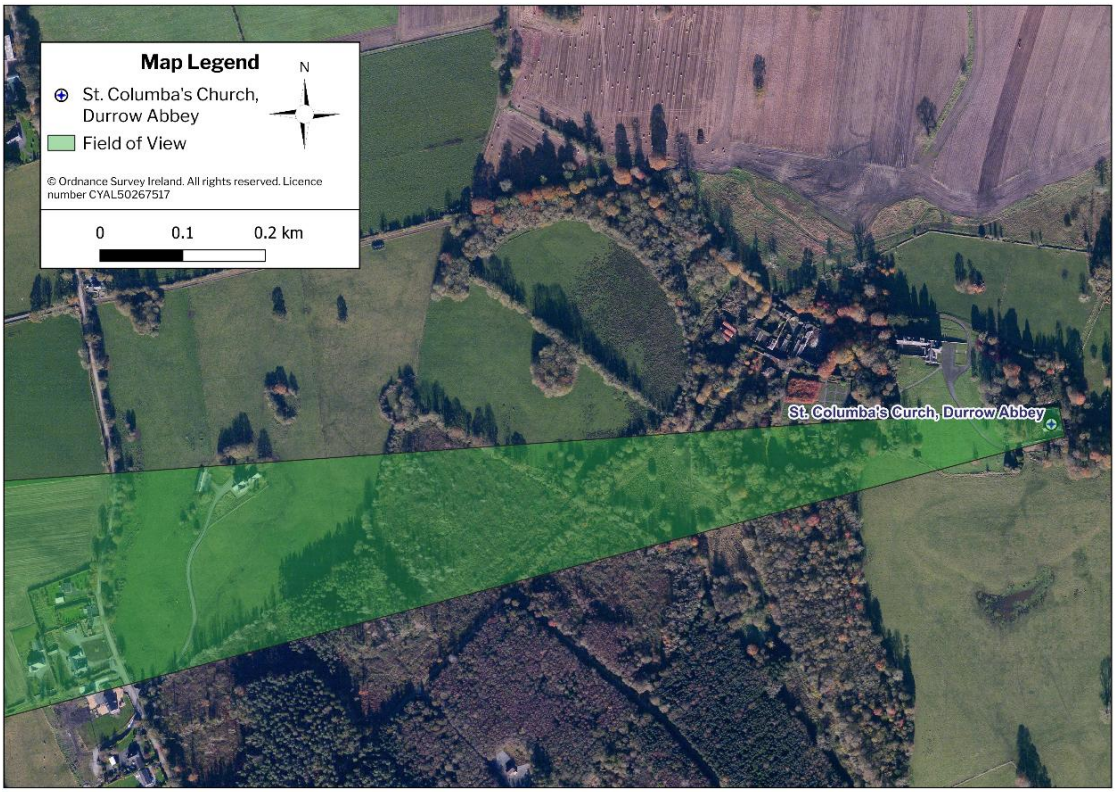


Figure 14-23 Field of view towards the proposed turbines from Durrow Abbey

Hill of Uisneach (Westmeath Protected View 36)

The Hill of Uisneach, which is on the Tentative UNESCO List is located approx. 23km north-east of the nearest proposed turbine. Visual Receptors at the Hill of Uisneach are considered to be 'Very High' on account of the importance and significance of the Hill and the likelihood that most receptors are visiting in a recreational capacity to experience the monuments on the Hill and its landscape setting, as well as take in the panoramic views available from elevated vantage points. It is also a protected view in the local planning policy.

The Hill of Uisneach is privately owned land and there is **no** public access to the hill or its monuments, only paid access at the permission of the landowner. As set out in Appendix 14-3, no permission was granted to access the hill to capture data for photomontage production. Therefore, a drone photomontage was produced from atop of the hill (VP20) and is included in the Photomontage Booklet and assessed in Appendix 14-3. This is an adequate visual aid to inform the impact assessment showing the scale, form, and arrangement of the proposed turbines as experienced from the summit of the hill at a distance of 23.5km away.

As shown by the drone photomontage, the proposed turbines are sited within the lower lands of the landscape, to the left of Knockastia Hill as very small features in a neat linear array in the distant

background of the view. The proposed turbines are located 23.5km south-west from the Hill of Uisneach, at a significant distance from this viewpoint, where they are seen as very small features in the distant landscape. The proposed turbines are viewed as a neat, compact and coherent linear array of turbines comprising an extremely narrow spatial extent within an otherwise expansive panoramic landscape view. The magnitude of change was deemed to be 'Negligible'.

The substantial set back distance in combination with intervening features of the landscape such as the rolling landform, varied field patterns and the abundance of mature vegetation provide a physical landscape buffer between the proposed turbines and the Hill of Uisneach landscape and the setting of the important cultural heritage monuments at this location. The proposed turbines are located 16km beyond Knockastia Hill, in the distant background, as seen in the rendered wireline view and therefore there is substantial separation in the landscape, and they do not directly disrupt any visual connectivity between the Hill of Uisneach and Knockastia Hill. The proposed turbines do not obstruct intervisibility between any heritage sites and the Hill of Uisneach and do not compromise the integrity of any visual links between the Hill and the wider cultural landscape.

The proposed turbines will not fundamentally detract from the visitor experience of the Hill, its landscape and monuments, or any visual connectivity with other landmarks or places of significance elsewhere in the wider landscape. Overall, residual visual effects were deemed to be 'Long-Term', 'Negative' and 'Slight', accounting for the 'Very High' sensitivity of the views and receptors. On balance, these effects are not considered significant.

Major Transport Routes

N62 National Road

The N62 National Road traverses the western extent of the LVIA Study Area and connects the settlements of Athlone, Ballinahown, Ferbane, Cloghan and Birr. While the ZTV map indicates full theoretical visibility along the majority of the route, as discussed throughout the entirety for this chapter, visibility beyond 5km will be limited, due to the dense roadside vegetation within this flat landscape. As outlined in the Route Screening Analysis, within 5km of the site, the majority of the route is characterised by 'Dense/Full' Visual Screening and 'Partial/Intermittent' Visual Screening, with limited instances of 'Little/No' Visual Screening. VP05 was captured along this route, at Doon Cross Roads, where the proposed turbines appear as small-scale vertical elements relative to the receiving landscape, beyond multiple fields, largely screened by intervening vegetation. A 'Not Significant' residual visual effect was deemed to occur at this viewpoint. In general, where visibility does occur within 5km along this route, views will be brief and intermittent, with visibility further reducing beyond 5km. An overall 'Not Significant' residual effect was deemed to arise for the N62 National Road. On balance, these effects are not considered significant.

R436 Regional Road

The R436 Regional located is located to the south of the proposed turbines and is located 735m south from the nearest proposed turbine at its closest point. The road travels in a west-east direction within the LVIA Study Area, from the settlement of Ferbane to the settlements of Ballycumber, Clara and Kilbeggan. As outlined in the Route Screening Analysis, within 5km of the site, the route is primarily characterised by 'Partial/Intermittent' Visual Screening, long stretches of 'Little/No' Visual Screening and some instances of 'Dense/Full' Visual Screening.

VP01, VP11, and PWVP-N were captured along different sections of the route. At VP01, the proposed turbines appear as tall vertical elements, occupying a moderate horizontal extent within the landscape, with some of the turbines screened by intervening vegetation. At VP11, the proposed turbines are located perpendicular to the direction of travel along the road. While the proposed turbines occupy a relatively large horizontal extent of turbines (shown in both an 11A view and 11B view), the turbines appear visually set back beyond multiple treelines, partially screened by intervening scrub and tree vegetation. It is important to note that, that the short stretch (approx. 600m) of the regional road

immediately south of the proposed turbines is the only section of the road with open visibility towards the proposed turbines where 'Little/No' Visual Screening occurs. Beyond this, visibility is largely mitigated by distance and intervening vegetation. This can be seen in PWVP-N, which shows that that the majority of the proposed turbines are largely screened by intervening vegetation. Beyond 5km, visibility of the proposed turbines will be further reduced by distance and vegetative screening within the landscape. Where instances of open visibility do occur form breaks in vegetation, the turbines will appear as small-scale elements in the distant background. Overall, residual visual effects on the R436 Regional Road ranges from 'Significant' (localised to the 600m stretch immediately south of the Proposed Wind Farm) to 'Moderate'. On balance, these effects are not considered significant.

R444 Regional Road

The R444 Regional Road is located to the north-west of the proposed turbines as it travels from the settlement of Shannonbridge, through Clonmacnoise to the settlement of Castledaly. Within 5km of the proposed turbines, as outlined in the Route Screening Analysis, the majority of the route is characterised by 'Dense/Full' Visual Screening and 'Partial/Intermittent' Visual Screening, with very limited instances of 'Little/No' Visual Screening. VP05, at Doon Cross Roads, as discussed above shows that at this distance, the proposed turbines are visually set back from the road in the distant background and are largely screened by intervening vegetation. Beyond 5km, visibility will be further mitigated by distance in the flat landscape, where roadside vegetation will largely screen views towards the proposed turbines along the majority of the route. Where instances of open visibility do occur, views will of similar extent as in VP02 (VP located on a local road, 930km north from the R444 Regional Road), where the turbines will be seen as small vertical elements in the distant background, arranged in a coherent array. Overall, residual visual effects on the R444 Regional Road ranges from 'Moderate' to 'Slight'. On balance, these effects are not considered significant.

R357 Regional Road

The R357 Regional Road enters the LVIA Study Area to the west, travelling in an eastward direction and has primarily full theoretical visibility of the proposed turbines. The route forms part of the O-SR-R357 Scenic Route. As discussed previously, visibility of the proposed turbines are limited along the extent of the route, due to distance and extensive roadside screening within this low-lying terrain. VP08 and PWVP-F were captured along different sections of this route. VP08, captured approximately 150 m north of the route at Cloghan Lake, shows a more open views of the proposed turbines, where they appear as small-scale vertical elements in the distant background, occupying a short horizontal extent. In reality, visibility along the route will be further mitigated by roadside vegetation. At distances beyond 10km, the turbines will be primarily screened or appear as very small elements in the distant background relative to the receiving landscape. This can be seen in PWVP-F, where the turbines are seen to be fully screened by intervening vegetation. Overall, any visibility that does occur along the regional road will be short and intermittent. Overall, residual visual effects on the R444 Regional Road ranges from 'Slight' to 'Imperceptible'. On balance, these effects are not considered significant.

14.7.3.2.4 *Residential Receptors*

During the iterative design process, early stage LVIA appraisals identified local residential receptors as the most locally sensitive receptors with the greatest potential to be impacted by the proposed turbines with regard to visual impacts. Consequently, residential visual amenity was of key consideration throughout the iterative design process for the Proposed Project. This section of the LVIA firstly states how design measures have been used to mitigate the potential for significant visual effects on some areas of residential amenity, then gives an overview of the residential context in terms of population density in the surrounding area and the geographic arrangement of residential receptors in close proximity to the Proposed Project site. Finally, a visual impact assessment of each cluster of residences is reported, these assessments use analysis of aerial maps, photomontages and photowire visualisations with the intention of identifying the worst-case scenario for potential visual effects on these residential receptors in close proximity to the Proposed Project site.

The design of the Proposed Project has been informed by industry best practice set-back distances, with regard to the siting of the proposed turbines relative to residential receptors, including the following measures:

- All proposed turbines exceed the mandatory 500m set-back distance from residential receptors set out in the DoEHLG 2006 Guidelines.
- All proposed turbines adhere to the recommended 4-times-tip-height set-back distance (880m) from domestic curtilage for residential visual amenity as prescribed by the Draft DoHPLG 2019 Guidelines.

Residential Context: Population Density and Arrangement of Dwellings

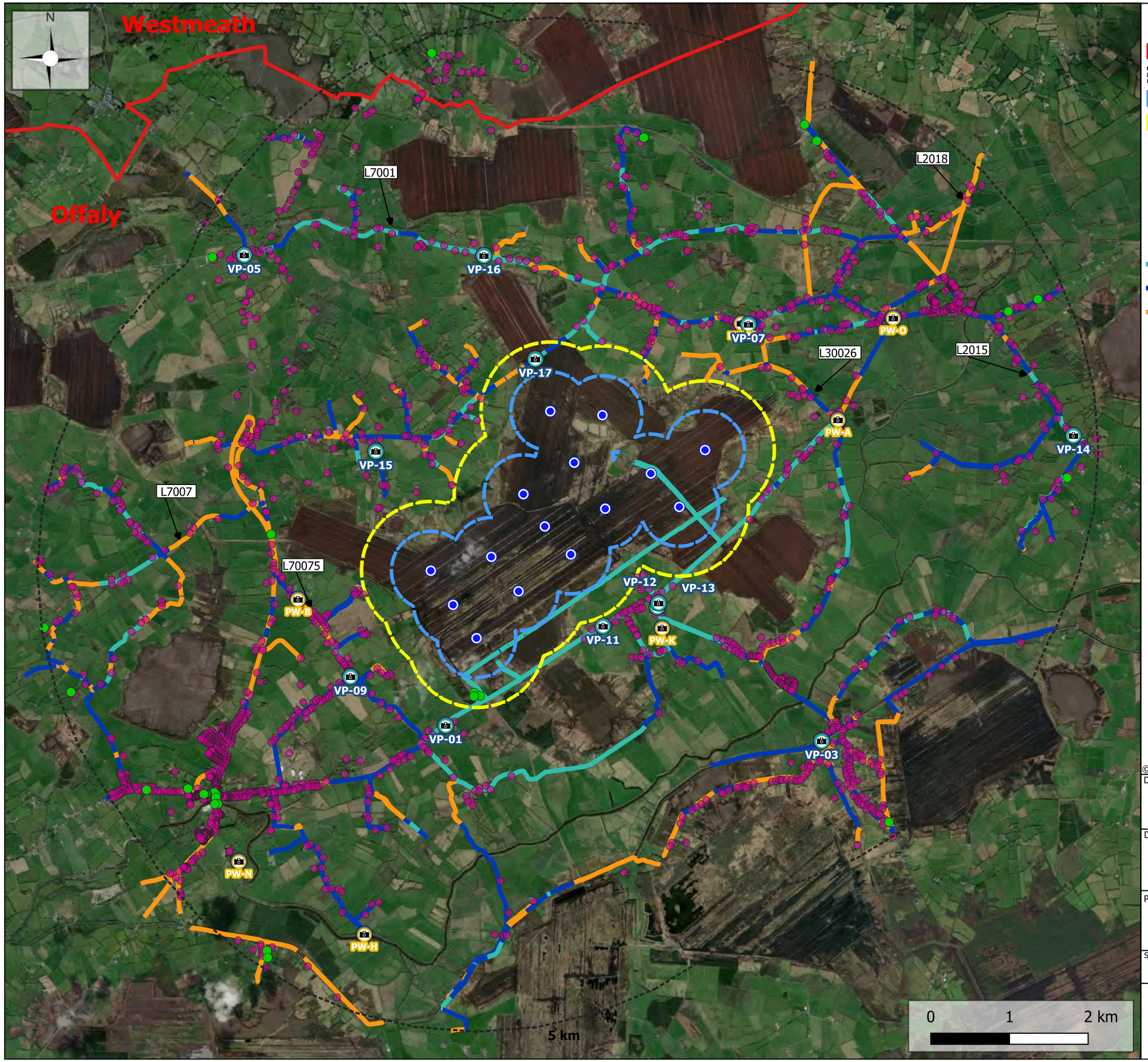
As previously reported in the landscape baseline (see previous Section 14.4.2 Landscape Character of the Proposed Project site), the Proposed Project itself is located within a large, uninhabited area, of peatland. The surrounding area, where the proposed turbines are actually visible is a sparsely settled rural landscape. It is not a densely populated area, and as established previously, very limited visibility occurs from the vast majority of residential receptors in the nearby settlement of Ferbane. The below Residential Receptors Map (Figure 14-24) illustrates how the proposed turbines are set-back from residential receptors in the surrounding landscape with respect to distances compliant with guidance in the DoEHLG 2006 Guidelines and Draft DoHPLG 2019 Guidelines. There are 21 no. sensitive receptors (inhabitable dwellings, a derelict property and an office building) located within 1 km of proposed turbines. The closest residential receptor is located approximately 896m from the nearest proposed turbine (T10) i.e. greater than the minimum recommended setback as identified in the DoEHLG 2006 Guidelines (500m) and greater 4x tip height set back (880m) as identified in the Draft DoHPLG 2019 Guidelines.

It is to be anticipated that wind farms inevitably cause some 'Significant' visual effects on proximate sensitive visual receptors due to the prominence of turbines within landscape views and the 'Substantial' magnitude of change which will arise in close proximity to a wind farm development. A key focus in this LVIA is identifying the scenarios where the greatest likelihood of significant effects occurs. Significant residual visual impacts have been determined from 1 photomontage viewpoint representing residential visual amenity in closest proximity to the Proposed turbines (see Appendix 14-3). It is key to note that the residual significant impacts only occur for a small number of receptors and is not representative of effects on receptors in a vast proportion of the LVIA Study Area.

Assessment of Residential Amenity – Photomontages

12 photomontage viewpoints were taken within 5km of the proposed turbines to represent the residential receptors in close proximity to the Proposed Project site, along with 6 no. photowire viewpoints, which were not ultimately brought forward as photomontages due to lesser visibility (these can be seen in Appendix 14-5).

Photomontages are just one of the tools employed during the LVIA that was conducted in order to inform the assessment of landscape and visual effects. The visual impact assessment is strongly informed by site visits and the reading of the landscape on the ground. It would be a disproportionate measure to include an individual photomontage from every residential receptor, and this is not required to conduct a thorough and robust assessment of landscape and visual effects. In line with the guidance laid out in GLVIA3, the viewpoints selected for the LVIA conducted were informed by a range of factors including the *"ZTV analysis, by fieldwork, and by desk research"* (para 6.18, GLVIA3). Furthermore, GLVIA3 states that representative viewpoints are *"selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the significant effects are unlikely to differ"* (para 6.19 GLVIA3). The large number of viewpoints used in the conduct of the LVIA particularly in very close proximity to the proposed turbines are sufficient to represent the residential receptors within the LVIA Study Area, including the *"distribution of population"* (para 6.18, GLVIA3).



Map Legend

- County Border
- 5km Buffer
- 500m Buffer (DoHPLG, 2006)
- Buffer (4x Tip-Height Set-Back Distance) (DoHPLG, 2019)
- Proposed Turbines
- Photomontage Viewpoint Locations
- Photowire Viewpoint Locations

Route Screening Analysis

- No / Very Little Visual Screening
- Partial / Intermittent Visual Screening
- Dense / Full Visual Screening

Residential Receptors within 5km

- Involved Landowners
- Residential Dwellings

Drawing No.

Figure 14-24

Drawing Title

Residential Visual Amenity

Project Title

Lemanaghan Wind Farm, Co. Offaly

Scale	Project No.	Date	Drawn By	Checked By
1:47,000	200804	19/03/2026	GL	DM

MKO

Residential Receptors to the West of the Proposed Project site

To the west of the proposed turbines (north of Ferbane), the rural character of the landscape is primarily defined by agricultural fields enclosed by dense shrub vegetation (see Plate 14-33 below). Where residential receptors are present, they are typically located along the local road network. The Route Screening Analysis (See Section 14.3.3 previously) notes that the road network to the west of the proposed turbines is primarily classified with 'Partial/Intermittent Screening' Visual Screening or 'Dense/Full Screening' Visual Screening, with some limited instances of 'No/Very Little Screening'.

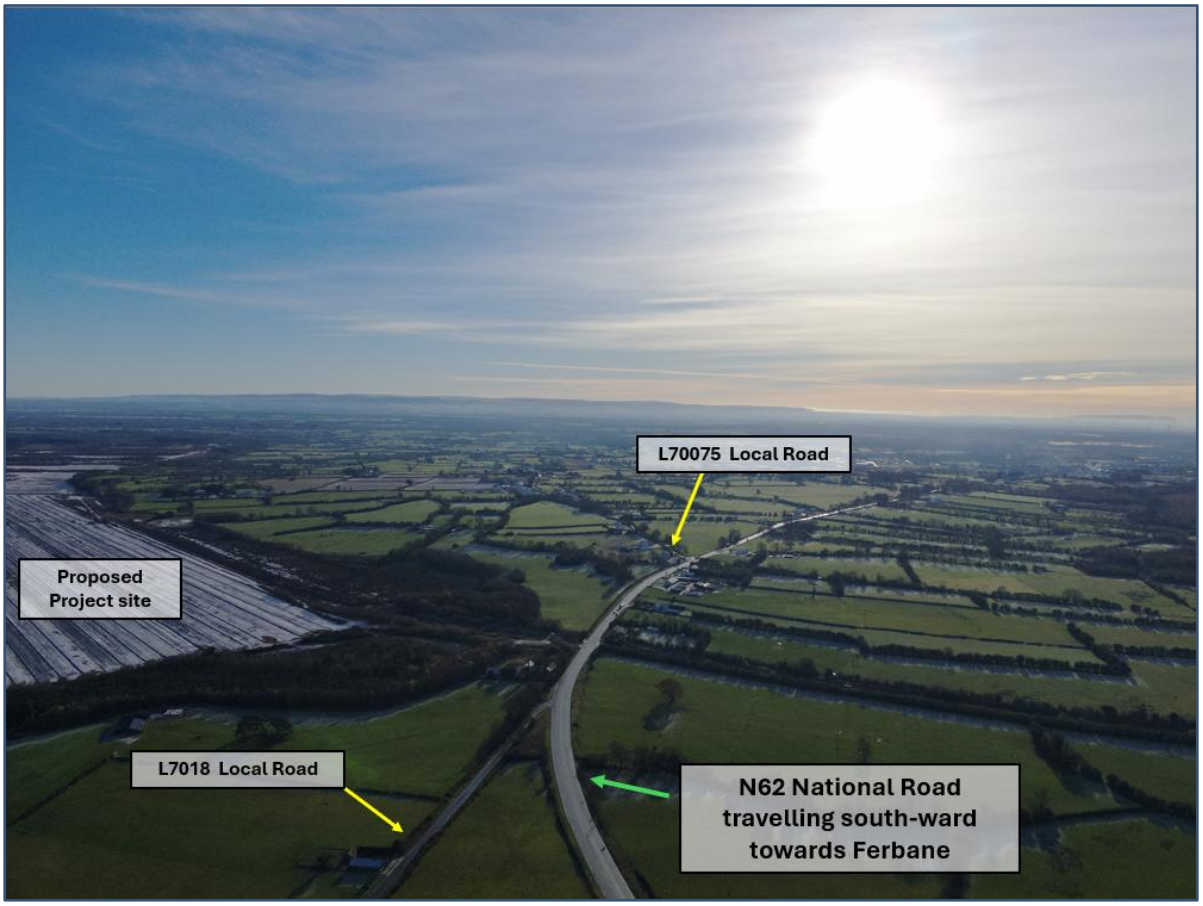


Plate 14-33 Drone Image for Landscape Context: Views south overlooking the residential receptors to the west of the Proposed Project site

VP09 is located along the L30047 local road, within the townland of Ballylin and is representative of typical views towards the proposed turbines experienced by residential receptors to the west. This image was taken from a local road adjacent the Proposed Project site and illustrates a relatively open view towards the proposed turbines. Despite the proximity (1.6km from the nearest proposed turbine (T01)), the grid-like layout of the proposed turbines within the bog limits their overall spatial extent in the view, with the turbines occupying a relatively moderate horizontal extent. Proposed turbines T08 and T11 are fully screened from view by mature treelines, while the visible turbines appear as moderately scaled vertical features at varying heights due its grid-like layout. As seen in VP09, the upward-sloping agricultural field and roadside shrub vegetation provide further screening of the lower sections of the turbines, creating a sense that the turbines are visually set back from the viewpoint. Furthermore, many residential properties in this area have mature boundary vegetation surrounding their properties, which will reduce visibility of the proposed turbines and effects on residential visual amenity. Residential visual amenity effects are mitigated by strategic siting, greater than 4x tip height separation and appropriate scaling. As discussed in Appendix 14-3, a 'Moderate' magnitude of change was deemed to arise at VP09 with an overall 'Moderate' residual effect. On balance, this is not considered to be significant.

PWVP-O was captured further north along the L-70075 local road, approximately 1.7 km west of the nearest proposed turbine (T01) and shows the variation in roadside screening along this route that residential receptors are likely to experience to the west of the proposed turbines. At this location, all proposed turbines are either partially or fully screened by intervening vegetation.

VP01 was captured along the R436 Regional Road within the townland of Ballydaly, approximately 1.2 km from the nearest proposed turbine. It lies within an area of 'Little/No' Visual Screening and is representative of the typical views experienced by residential receptors to the southwest. As discussed in Appendix 14-3, turbines T01, T02, and T03 are visible to their full extent as tall vertical elements; while the remaining turbines appear as moderately scaled features relative to the receiving landscape, in the background, partially screened by intervening vegetation. Seasonal variation will influence visibility of turbines during winter months when deciduous trees have shed their foliage, and this has been accounted for in the impact assessment. As detailed in Appendix 14-3, a 'Moderate' magnitude of change was assigned to this viewpoint, with an overall 'Moderate' residual visual effect. On balance, this is not considered to be significant. Furthermore, VP01 is located closer to the proposed turbines than the majority of residential receptors to the southwest. As such, visibility from these residential properties, often enclosed by mature boundary vegetation—will be further mitigated by distance in this flat landscape.

Residential Receptors to the South of the Site

Similar as the west, the rural character of the landscape to the south is primarily defined by agricultural fields enclosed by dense shrub and tree vegetation (see Plate 14-34 below). Where residential receptors are present, they are typically arranged in small clusters along the local road network. As outlined in the Route Screening Analysis (see Section 14.3.3), the road network to the south of the proposed turbines is predominantly classified as having 'No/Very Little Screening' in areas closer to the turbines (such as the R436 Regional Road). However, stretches of 'Dense/Full' Visual Screening and 'Partial/Intermittent' Visual Screening occur on some local roads further south.

Plate 14-34 Drone Image for Landscape Context: Views north overlooking Proposed Project site. Located approx. 1.6km south from the nearest proposed turbine (T05)

VP11 was captured along the R436 Regional Road in the townland of Lemanaghan. This view is representative of residential receptors with open views towards the site in close proximity (within <1km from the site). For effects on residential visual amenity, a relatively large horizontal extent of turbines is visible to both the west and east of this viewpoint (shown in both an 11A view and 11B view), as such, a substantial change will occur for these residential receptors. A 'Significant' residual visual effect was deemed to occur at this viewpoint. However, this location represents one of the few areas where such open views toward the proposed turbines are available; most residential receptors in the surrounding area will not experience comparable levels of visibility. As noted in Appendix 14-3, while the proposed turbines appear as tall vertical elements occupying a wide horizontal extent within this viewpoint, the proposed turbines read coherently in the view. The arrangement and spacing of the proposed turbines gives an orderly and visually coherent appearance within the view, with limited overlap of turbine components, avoiding visual confusion and supporting their assimilation into the landscape. Furthermore, many residential properties within this area have mature boundary vegetation surrounding their properties, which will further reduce visibility of the proposed turbines and effects on residential visual amenity. The proposed turbines are set back beyond the mandatory and recommended distances from these receptors.

VP12 was captured 733m further south from VP11 from the L3002 local road. This demonstrates a notable reduction in visibility compared to VP11 due to the disproportionate screening effects that occur in the very flat landscape. While the turbines still occupy a relatively broad horizontal extent, they appear visually set back, with a reduced level of visual exposure due to increased screening from intervening vegetation and built form. All turbine bases are screened by intervening vegetation, with some turbines even fully screened. Although turbine visibility may increase in winter months, VP12, located approximately 1.3 km from the nearest proposed turbine (T5), illustrates how visibility of the proposed turbines diminishes with distance in this very flat landscape, mitigating effects on residential visual amenity. Further along this road, PWVP-P was captured from the Offaly Way walking trail and presents a similar orientation to the proposed turbines as seen in VP12, demonstrating that even where open views occur, the turbines are seen to be located beyond distant treelines, providing a sense of spatial separation, further reducing visual prominence for residential receptors.

Residential Receptors to the East of the Site

To the east, residential receptors are primarily situated in clusters along the local road network, with some dispersed one-off houses, as seen in Plate 14-35 below. The local road network to the east experiences a mosaic of vegetative roadside screening, ranging from 'No/Very Little Screening' to 'Partial/Intermittent' Visual Screening and 'Dense/Full' Visual Screening, as outlined in the Route Screening Analysis in Section 14.3.3.

Plate 14-35 Drone Image for Landscape Context: Views south-east from the Proposed Project site showing the sparsely settled rural landscape setting. Located approx. 1.2km north from the nearest proposed turbine (T10)

VP07 was captured from St' Manchan's Graveyard and is representative of the more open views towards the proposed turbines from the east. As discussed in Appendix 14-3, proposed turbine T14 and T15 are visible to their full extent within the view, while the remaining turbines are either fully or partially screened by intervening vegetation. The proposed turbines are sited at a lower base elevation relative to the elevated vantage point of this viewpoint and the settlement of Boher. This factor reduces the visual prominence of the proposed turbines when they are visible and also causes the mature vegetation to the south-west of the village to have a disproportionate screening effect, obscuring views of the majority of the proposed turbines from most residential receptors in this area. Furthermore, many residential properties in this area have mature boundary vegetation surrounding their properties, which further reduces visibility of the proposed turbines and effects on residential visual amenity. Residential visual amenity effects are further mitigated by strategic siting, greater than 4x tip height separation and appropriate scaling. As discussed in Appendix 14-3, a 'Slight' magnitude of change was deemed to arise at VP07 with an overall 'Slight' residual effect. On balance, this is not considered to be significant.

PWVP-M was captured along the L-7001 Local Road, approximately 90m north from VP07 and shows the variation in roadside vegetation along this route that residential receptors are likely to experience to the east of the Proposed Project site. At this location, all proposed turbines are either partially or fully screened by intervening vegetation. Such views are typical along the local road network to the east, as shown by the Route Screening Analysis.

Photowires, including PWVP-N, which was captured from the townland of Cornafurrish and Corrabeg, approximately 1.7 km east of the nearest turbine, and PWVP-H, captured from a more distant location of 2.9 km east of the nearest turbine further show that the proposed turbines are largely screened by intervening vegetation from many areas on the eastern periphery of the proposed turbines.

In a general sense, where visibility does occur (as seen in PWVP-N, PWVP-H and PWVP-M), the proposed turbines are generally seen to occupy a relatively short horizontal extent. This is due to the grid-like arrangement of the turbines within the bog, consolidating them into a cluster of a short horizontal extent. In general, to the east, the proposed turbines are seen as moderately scaled vertical elements relative to the receiving landscape. VP15 was taken approximately 5.6km east from the nearest proposed turbine, T15, further emphasising that within this flat landscape, the turbines scale and visibility is significantly reduced with distance and vegetative screening within these flat landscapes. Given the level of visual screening from mature vegetation, the flat terrain, and the spatial layout of the proposed turbines, significant effects on residential visual amenity to the east are not likely to occur.

Residential Receptors to the North of the Proposed Project site

To the north, residential receptors are primarily located in a linear array along the local road network, where, as discussed in the Route Screening Analysis, the roads are characterised by a mix of roadside vegetation. The most open views will appear directly north along the L7002 local road, which traverses a slightly elevated ridgeline relative to the surrounding flat landscape within the townland of Cooldorragh.

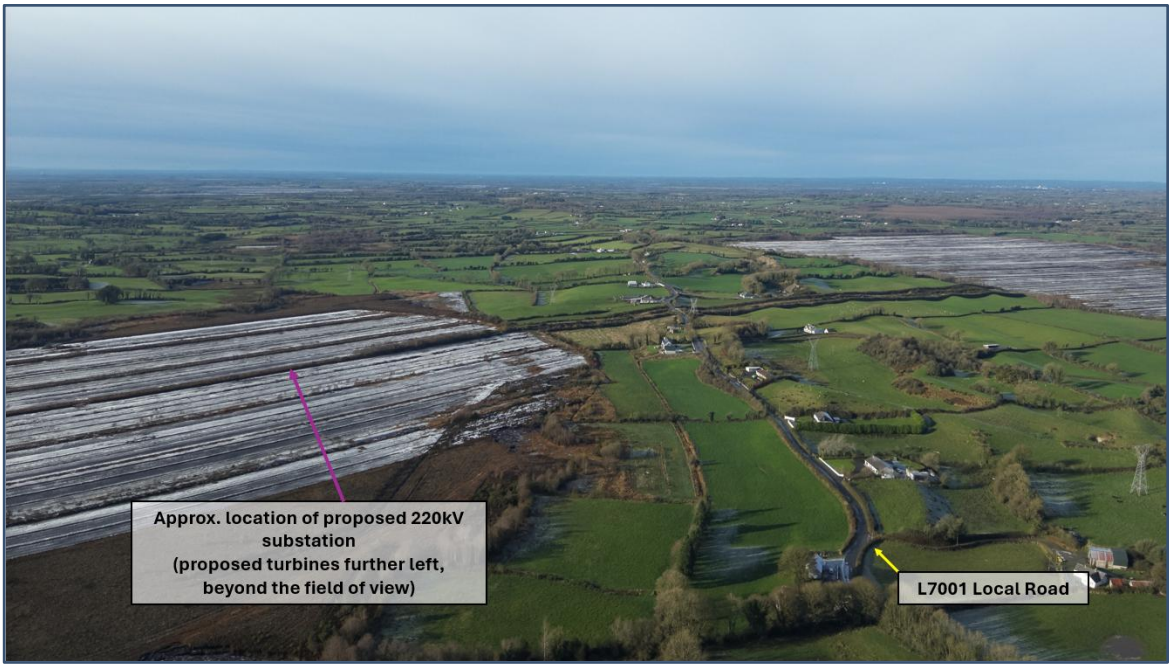


Plate 14-36 Drone Image for Landscape Context: Views to the residential receptors north of Lemanaghan Bog, overlooking the L7001 Local road

VP18 was captured along the L7001 local road in the townland of Cooldorragh and is representative of residential receptors from the north. This viewpoint represents one of the few areas along this road where such open views toward the proposed turbines occur, afforded by an unobstructed view from an elevated vantage point on a bridge. A residual 'Moderate' visual effect was deemed to occur for this viewpoint, where the proposed turbines and the grid infrastructure are clearly visible from an elevated vantage point, but appropriately set back and read coherently within the expansive cutover peatland landscape. On balance, this is not considered to be significant. Specific measures such as planting and berms are proposed to soften and mitigate the visual impact of the proposed 220kV substation from residential receptors in the townland if Cooldorragh (please see Appendix 14-6 for further information).

Many receptors in the surrounding area, such as residences, will not experience comparable levels of visibility as shown in VP18 due to roadside screening and due to mature boundary vegetation surrounding their properties, which further obscures views of the proposed turbines. Such open views will only occur for a very small number of residential receptors to the north in this townland of Cooldorragh. As discussed throughout this chapter, within the flat receiving landscape, visibility of the turbines diminishes significantly with distance, further mitigating potential effects on residential visual amenity.

For many residential receptors further west along this L7001 local road, views will be similar as to those experienced at VP16. From this viewpoint, the proposed turbines are moderately scaled features in the background relative to the receiving landscape in the background of the view, with the intervening vegetation further softening the visual impact of the proposed turbines.

Summary of Visual Effects on Residential Receptors

Within the LVIA Study Area, the visual impact on residential receptors ranges from 'Imperceptible' to 'Significant' (for a small number of residences in very close proximity). Given the adherence to the 4x tip height set -back distance to protect visual amenity, on balance, effects on residential receptors are mitigated and are therefore not significant.

14.7.3.2.5 *Visual Effects Relating to the Proposed Grid Connection*

Due to the nature and location of the Proposed Grid Connection, visual effects arising from this specific infrastructure will be very localised. Assessments determined that the greatest impact arising from the Proposed Grid Connection will occur for residential receptors in the townland of Cooldorragh to the northeast of the Proposed Project site. These receptors were discussed previously in the preceding subsections, where VP18 is of key reference to potential visual impacts. All impact assessments account for the effect of the Grid Connection in combination with the proposed turbines. However, focused analysis and discussion is provided below with respect to the two specific features of the Grid Connection which have greatest visual exposure, including the connection to the overhead line and the proposed substation.

Connection to the Existing Overhead Line

The overhead line is to be connected to four proposed end masts, 2 of which will be constructed at the proposed onsite 220kV substation, and 2 no. new steel masts will be constructed under the existing Shannonbridge-Maynooth 220kV OHL as discussed in Section 14.4.2.3 previously. VP17 and VP18 were captured to show how this proposed infrastructure is accommodated within the landscape, and to inform the assessment of visual effects of these electricity towers in combination with the proposed onsite 220kV substation and the proposed turbines. These viewpoints are fully assessed in Appendix 14-3. Due to the flat, heavily vegetated landscape that makes up much of the LVIA Study Area, visibility of these towers will be very localised, with greatest visual effects experienced by nearby residential receptors in the townland of Cooldorragh and a small section of the local road network. VP18 has a residual visual effect of 'Moderate'. Any visual effects are likely to be highly localised, 'Long-term', 'Negative' and will be 'Moderate'. On balance, these effects are not considered significant.

Proposed 220kV Substation

The proposed onsite substation and its compound are one of the larger and more visually prominent elements of the non-turbine infrastructure of the Proposed Project. As shown previously in Plate 14-21 the proposed onsite substation is located to the north of the proposed turbines. Photomontage viewpoints VP17 and VP18 shows that the proposed onsite substation is sited in a location enclosed by vegetation, reducing visibility from receptors in the surrounding landscape. The nearest residential receptor is located approx. 350m north of the proposed substation location. Due to a setback distance and screening from planting proposals as discussed in the Landscape Plan (Appendix 14-6), visibility of the proposed substation once constructed, and once the vegetation has reached maturity is to be limited from any nearby residential receptors. Users of the L7001 Cooldorragh

local road will have momentary views through roadside screening, these receptors are deemed to be Low sensitivity. Any visual effects are likely to be highly localised, 'Long-term', 'Negative' and will be 'Moderate'. On balance, these effects are not considered significant.

14.7.3.2.6 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 Project, 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) & (Nature Scot, 2021) 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 all Photomontage Assessment Tables found in Appendix 14-3. Whether a visual effect is deemed to be positive, negative, or neutral, this involves a degree of subjectivity.

There are seven other existing, permitted, and proposed wind farms within 25km of the proposed turbines as identified previously in Section 14.6 Cumulative Context. These wind farms are located to the south (existing Leabeg Wind Farm and permitted Lea Mor turbine), southwest (existing Cloghan, Derrinlough, Meenwaun, and permitted Cush Wind Farm), to the east (permitted singular Kilbeggan turbine), and to the north (proposed Bellair and proposed Umma More Wind Farms). A Cumulative ZTV in Section 14.6 shows that there are extensive areas, particularly to the east and northwest, where wind energy development may now be theoretically visible as a result of the Proposed Wind Farm (indicated in teal). However, as established throughout this chapter, views beyond 5km of the proposed turbines are limited throughout the LVIA Study Area due to the flat landscape and intervening vegetative screening. In this landscape type, photomontages are a superior tool for assessing potential cumulative impacts compared with cumulative comparative ZTV mapping.

As shown in the photomontages in Volume 2: Photomontage Booklet, most cumulative effects occur from elevated vantage points within the LVIA Study Area, such as Knockastia, Hill of Uisneach and the Slieve Bloom Mountains. For instance, VP10, captured from the Slieve Bloom Mountains, includes a wide horizontal spread of several existing wind energy developments, including the Derrinlough, Cloghan, Leabeg Wind Farms and permitted Lea Mor turbine. While the proposed turbines, located to the right of the existing wind farms, would extend the overall horizontal spread of wind energy developments visible within the expansive landscape view.

In relation to cumulative visual effects from Knockastia and the Hill of Uisneach, the significant setback distance—approximately 16km from Knockastia and 23km from the Hill of Uisneach—ensures that the proposed turbines, in combination with the existing Derrinlough, Meenwaun, and Cloghan Wind Farms, are effectively absorbed within the expansive, large-scale landscape setting. From both of these elevated vantage points (illustrated in VP19 and VP20), the proposed turbines are perceived within the same line of sight as these existing developments, occupying a similar horizontal extent of the panorama. In a future receiving environment, the permitted Cush Wind Farm would also contribute to this cluster of wind farms, while the existing Leabeg turbine and permitted Lea Mor turbine are discernible slightly to the left of the photomontage. Taken together, these developments are read as a coherent cluster within a relatively narrow field of view, limiting the potential for Significant cumulative visual effects.

The proposed Umma More Wind Farm may also be visible from these elevated vantage points (Knockastia and Hill of Uisneach) in a potential future receiving environment. The Umma More turbines would potentially be

perceived to the north-west, in an opposing field of view to that shown in the photomontages, resulting in potential combinational–successional cumulative effects. In such a scenario, a receptor would be required to turn their head to perceive both developments sequentially in differing fields of view. From these vantage points, there is a substantial degree of visual separation between the proposed turbines and the proposed Umma More Wind Farm, and these turbines are effectively accommodated within the expansive panoramic landscape views. It is relevant to highlight there is a degree of uncertainty to be considered when determining the potential for these cumulative effects to occur, reliant on the outcome of the consenting system.

Instances may also arise in other locations within the LVIA Study Area where the proposed turbines will be perceived in an opposing field of view to existing wind energy developments, resulting in potential combinational successional cumulative visual effects. This is discussed in Appendix 14-3 for VP03, where the turbines of the existing Derrinlough and Cloghan Wind Farms would be visible in the distant landscape to the south-west, in an alternative field of view to the one shown in the photomontage. However, given the separation distances involved, significant cumulative visual effects are not anticipated. In a general sense, such views are highly limited within the wider LVIA Study Area and are typically confined to elevated vantage points, such as bridges, which allow expansive open views across the wider landscape. There is a cumulative visual effect for recreational receptors in a journey scenario on the Grand Canal. This occurs where receptors travelling along the canal, either walking alongside it or using it as a waterway will experience visual effects of the Proposed Project, and then later the existing Derrinlough and Cloghan Wind Farms.

The proposed Bellair Wind Farm, which as discussed previously has no publicly available turbine dimensions or layouts, is located approximately 2.3km north of the Proposed Project. As such, Bellair Wind Farm **has not** been included in the photomontages produced for the Proposed Project, and it **has not** been used in the production of the cumulative comparative ZTV map. However, given the proximity of the proposed Bellair Wind Farm to the Proposed Project, the largest cumulative visual effects are anticipated to occur within 5km of the proposed turbines, where the proposed turbines and the proposed Bellair Wind Farm may potentially be viewed together in combination or in succession within an uncertain future receiving environment. As discussed throughout this chapter, views beyond 5km of the proposed turbines are limited due to intervening vegetation within the flat landscape, and the same is expected to apply to Bellair Wind Farm, given the similarities of the receiving landscape. Where the proposed turbines and the proposed Bellair turbines are visible together beyond 5km from elevated vantage points, given their close proximity, both developments would potentially be perceived as a single wind farm within the landscape.

Further detail on the cumulative visual effects from each photomontage viewpoint is detailed in Appendix 14-3. In a general sense, the landscape in which the proposed turbines are located in, and the entire LVIA Study Area is a large, flat and expansive landscape type with vegetation throughout the landscape, making it an acceptable area to absorb and accommodate a large number of wind turbines, eliminating cumulative visual effects from many receptors.

14.7.4 Decommissioning Phase Effects

The landscape and visual effects during the Decommissioning Phase 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 predominately involve cranes adjacent to the turbines during the dismantling process. Upon decommissioning of the Proposed Wind Farm, the wind turbines will be disassembled in reverse order to how they were erected. The turbines will be disassembled with a similar model of crane that was used for their erection. The turbine components will likely be removed from the Proposed Wind Farm using either the same transport methodology adopted for delivery to the site initially or in smaller sections and transported by standard methodologies.

Turbine foundations will remain in place underground and will be covered with earth and reseeded as appropriate. This naturalisation process will revert the landscape of the Proposed Project to a condition similar to the current landscape baseline. Removal of the turbines and ancillary infrastructure from the Proposed Project will result in a Short-term, Slight, Negative visual effect, which is not significant.

Site roadways could be in use for purposes other than the operation of the Proposed Project by the time the decommissioning of the Proposed Wind Farm is to be considered, and therefore it may be more appropriate to leave the site roads in situ for future use. It is envisaged that the roads will be widely utilised for amenity purposes by the local community and as part of the MTN.

The Proposed Grid Connection and proposed onsite 220kV substation will remain in place as it will be under the ownership and control of the ESB Networks and/or EirGrid and will form a permanent part of the national electricity grid.

14.8 Conclusion

This Chapter assesses the likely significant landscape and visual impacts arising as a result of the Proposed Project. Although all elements of the Proposed Project are assessed, the Chapter focusses upon the proposed turbines, as they are deemed to be the primary essential aspects of the proposal under assessment from a landscape and visual perspective. The Chapter also assesses the proposed 220kV GIS Substation and steel masts that form part of the Proposed Grid Connection. The Chapter describes the baseline landscape and assesses the direct effects on the landscape of the Proposed Wind Farm, as well as effects on landscape character and the impact on sensitive landscape receptors (Areas of High Amenity) and Landscape Character Areas (LCAs). Visibility of the proposed turbines was assessed from receptors within a study area extending 25km from the proposed turbines; and visual effects were determined from information gathered during multiple site visits as well as other tools such as ZTV mapping, photomontages and photowires.

The Proposed Project site is located within the flat lowland landscape of County Offaly, characterised by an extensive network of open peatlands that are typical of the Irish midland landscape. The character of these peatlands forming the Proposed Project site, is now strongly influenced by the industrial peat extraction practices historically conducted at the site, which now resembles a cutover peatland landscape, with limited scenic or aesthetic qualities pertaining to this landscape. The proposed turbines are located within an area designated with Moderate Sensitivity in the OCDP. Cutaway bogs, which comprise the majority of this landscape type and where majority of the turbines are located in area noted in the OCDP as appropriate for "sensitively designed and located developments including renewable energy (wind farms)." The Proposed Project site is not located within any protected landscapes within any local landscape policy, and no sensitive landscape designations (Areas of High Amenity) fall within the Proposed Project site itself.

On-site visibility appraisals, ZTV mapping, a Route Screening Analysis and photomontage viewpoint locations determined that visibility of the proposed turbines will be very limited from locations beyond 5 km from the Proposed Project site. Siting of the proposed turbines at low base elevation in an extensively flat landscape with highly vegetated working fields surrounding the Proposed Project site largely restricts visual exposure in the wider landscape. Visibility of the proposed turbines beyond the immediate landscape setting of the Proposed Project site is limited to localised areas of high elevation where open views across the flat and highly vegetated landscape are available from elevated vantage points, which is in general not a common occurrence in the LVIA Study Area. In terms of location, spatial extent, spacing and layout, the siting and design of the Proposed Project adheres to the guidance for the siting of wind farms in Flat Peatland Landscapes as set out in the DoEHLG 2006 Guidelines and the Draft DoHPLG 2019 Guidelines. As discussed in Section 14.7.3.1.1, residual effects upon the landscape of the proposed turbines are deemed to be 'Long-term', 'Negative' and 'Slight'. On balance, these effects are not considered significant.

Photomontages were used to assess the visual effects arising as a result of the Proposed Project from 20 No. viewpoint locations. The assessment concluded that no 'Profound' or 'Very Significant' effects occurred at any of the 20 photomontage viewpoints. Residual effects of 'Significant' occurred at one viewpoint location (VP11) as the turbines are in close proximity <1km to residential receptors. However, in all instances, the Proposed Project exceeds the recommended 500m set back distance in the DoEHLG 2006 Guidelines and also is in line with the 4 times tip height set-back distance set out for residential visual amenity prescribed by the DoHPLG 2019 Guidelines. Residual 'Moderate' effects occurred at 8 of the 20 No. viewpoints. All other viewpoints were assessed as resulting in 'Slight' residual effects (8), 'Not Significant' (2), or Imperceptible (1). Cumulative visual effects have greatest potential to arise with other existing, permitted, and proposed developments. However,

given the setting of the Proposed Project and limited visibility with the extensive flat landscape, cumulative effects are only mostly limited to elevated vantage points within the study area.

The Lemanaghan Monastic Site is the closest sensitive receptor to the Proposed Project (apart from residential receptors); however, as discussed throughout this Chapter and the accompanying appendices, the Proposed Project will not alter the physical fabric or key features of the monuments, and any change will be limited to the wider landscape setting, where the proposed turbines will be seen beyond the immediate visual context of the monastic site. Furthermore, the Proposed Project is set-back beyond the buffer specifically created to mitigate impacts on the Lemanaghan Monastic Site as set out in local planning policy through the 2021 amended Wind Energy Zoning (as per the Chief Executive's Report), with the exception of turbine T05, which is located on the boundary of an area designated 'not Deemed Suitable for Wind Energy Developments'.

In conclusion, this LVIA determined that the Proposed Project is located within a landscape that can effectively accommodate a wind energy development of this scale. Only one 'Significant' residual effect occurs at one viewpoint location (VP11) as the turbines are in close proximity <1km. The assessments have determined that the landscape of the Proposed Project site is capable of effectively accommodating the Proposed Project.

14.9 EIA Classification Summary

Please see the below table for a summary of all identified impacts for the Proposed Project relating to LVIA.

Table 14-24 Impact Assessment Classification Summary

Topic	Impact Assessment Discussion Section Reference	Residual Effect	Significance
Construction Phase			
Proposed Wind Farm	Section 14.7.2.1	Short-Term, Moderate, Negative	not significant
Nearby Visual Receptors	Section 14.7.2.2.1 Section 14.7.2.3 Section 14.7.2.4 Section 14.7.2.5	Short-Term, Negative effects, within the following range: Moderate, Slight, Not Significant	not significant
Operational Phase – Landscape Effects			
Proposed Project	Section 14.7.3.1.	Long-Term to Permanent, Slight, Negative	not significant
LCAs	Section 14.7.3.1.2	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant	not significant
Other Landscape Receptors (AHAs, Local Landscape Receptors, Tentative UNESCO Landscape Receptors)	Section 14.7.3.1.3 Section 14.7.3.1.4 Section 14.7.3.1.5	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant, Imperceptible	not significant

Operational Phase – Visual Effects			
Designated Scenic Routes, Views and Prospects	Section 14.7.3.2.3	Long-Term, Negative effects, within the following range: Slight, Not Significant, Imperceptible	not significant
Settlements	Section 14.7.3.2.3	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant, Imperceptible	not significant
Recreational Routes	Section 14.7.3.2.3	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant, Imperceptible	not significant
Recreational Destinations, Cultural Heritage and Tourism Destinations	Section 14.7.3.2.3	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant, Imperceptible	not significant
Major Transport Routes	Section 14.7.3.2.3	Long-Term, Negative effects, within the following range: Moderate, Slight, Not Significant	not significant
Residential Receptors	Section 14.7.3.2.4	Long-Term, Negative effects, within the following range: Significant, Moderate, Slight, Not Significant	Significant at 1 no. locations / not significant at all other assessed locations
Decommissioning Phase			
Proposed Wind Farm	Section 14.7.4	(same as construction phase effects)	not significant
Proposed Grid Connection	Section 14.7.4	(same as construction phase effects)	not significant